NATIONAL CENTER FOR EDUCATION STATISTICS

User's Manual October 1997

1993 National Study of Postsecondary Faculty (NSOPF-93)

Data File User's Manual Public-Use Institution File and Restricted-Use Faculty File

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October 1997

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Suggested Citation
U.S. Department of Education. National Center for Education Statistics. *[1993 National Study of Postsecondary Faculty (NSOPF-93)] Data File User's Manual Public-Use Institution File and Restricted-Use Faculty File*, NCES 97-466, by Lance A. Selfa, Natalie Suter, Sharon Myers, Shaun Koch, Robert A. Johnson, Daniel A. Zahs, Brian D. Kuhr, and Sameer Y, Abraham. Project Officer: Linda J. Zimbler. Washington, DC: 1997.

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A Note on Data Use and Confidentiality

The NSOPF-93 data files are released in accordance with the provisions of the Privacy Act of 1974 [5 U.S.C. 552a] and the National Education Statistics Act of 1994 [20 U.S.C. 9001 *et seq.*], for protecting the confidentiality of individually identifiable respondents. The National Center for Education Statistics (NCES) has released the NSOPF-93 data sets to be used for statistical purposes only.

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Acknowledgments

The authors wish to thank the many individuals who contributed to the success of the 1992-93 National Study of Postsecondary Faculty (NSOPF-93).

The NSOPF-93 National Technical Review Panel (NTRP) played an important role in advising the National Center for Education Statistics (NCES) and its contractor for NSOPF-93 - the National Opinion Research Center (NORC) at the University of Chicago - on questionnaire development and related design issues. A list of individual members can be found in Appendix N.

Additional support for NSOPF-93 was provided by the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH). Both agencies are co-sponsors of the study, and both have supported the field test and the full-scale study. Our special thanks are extended to NSF's **Larry Suter**, **Jim Dietz**, **Mary Golladay**, **Joan Burrelli** and **Roger Baldwin** (the latter currently at the College of William and Mary), and to NEH's **Jeff Thomas** for their unstinting efforts on behalf of NSOPF-93.

The study was overseen by NCES staff. **Paul D. Planchon** is the Associate Commissioner, Surveys and Cooperative Systems Group. **Roslyn Korb** and **Daniel Kasprzyk** provided additional oversight. **Linda Zimbler** is the NCES Project Officer responsible for NSOPF-93. Other NCES staff who assisted in various aspects of the study include **Sue Ahmed**, **Sam Barbette, Robert Burton**, **Michael Cohen**, **Steve Kaufman, Edith McArthur, Marilyn McMillen, Sam Peng, Mary Rollefson, Dennis Carroll,** and **Larry Bobbitt**.

Sameer Abraham was the Project Director for NSOPF-93 until April, 1996. **Natalie Suter**, the current Project Director, also served as Associate Project Director, Task Leader for Questionnaire Development, and Coordinator of Data Collection and Data File Preparation. Other principal members of the NSOPF-93 team include the following NORC staff: **Bruce Spencer**, Task Leader for Sampling; **Tracy Berckmans**, Task Leader for Faculty Data Collection; **Brian Kuhr**, Task Leader for Institution Data Collection; **Sharon Myers**, Coordinator of List Processing; **Robert Bailey**, Task Leader for Data Preparation; **Karen Grigorian** and **Belinda Willis**, Data Preparation Supervisors; **Suzanne Turner**, **David Kusinitz**, and **Marek Pietrzyk**, Data Processing Managers; **Shaun Koch**, Task Leader for Data Delivery; **Lance Selfa**, Task Leader for Survey Documentation; **Kirk M. Wolter**, Senior Vice President, Statistics and Methodology; **Robert Johnson**, Senior Survey Methodologist; **Daniel Zahs** and **Hee Choon Shin**, Survey Methodologists; **Jiahe Qian**, Statistician; **Terry Callier**, Programmer; **Hiroaki Minato**, **Kelly Daley, Patrick Smillie** and **Kristen Petzinger**, Research Assistants; **Jamie Friedman**, Telephone Center Supervisor; and **Daniel Sichelski** , **Meredith Roat**, and **Robert Dustin**, Budget Monitors. **Sally Murphy** and **Ezella Pickett** coordinated refusal conversion and locating efforts during data collection. **Jim Wolf** served as a consultant in the preparation of the institution data file. **Suzanne Erfurth** and **Karen Rosenthal** provided editorial assistance. Additional assistance and support was generously provided by: **Norman Bradburn**, **Patricia Green, Bernard Dugoni, Gloria Evenson, Marilyn Ford, Jay Goddard**, **Steven Ingels, Donald Kotecki, Richard Kulka**, **Kenneth Rasinski, Karen Sutherlin,** and **Lisa Thalji.**

Under a subcontract from the National Opinion Research Center (NORC), **Rita Kirshstein** of Pelavin Research Institute assisted in development of the questionnaires, designed and conducted most of the data analysis, and assisted in related project tasks. **Valerie Conley** of Synectics, Inc., provided technical guidance. **Steve Wenck** of Synectics, Inc., provided technical support. Additional support was provided by project consultants: **James Fairweather** of Pennsylvania State University, **Robert Blackburn** and **Janet Lawrence** of the University of Michigan, and **Kathryn Moore** of Michigan State University.

The authors wish to express their gratitude to NCES reviewers and other reviewers of this document. The following individuals served as the principal reviewers, and provided valuable feedback and helpful suggestions: **Daniel Kasprzyk, Roslyn Korb, Linda Zimbler, Marilyn McMillen, Michael Cohen,** and **Steve Kaufman,** all of NCES; **Valerie Conley,** Synectics, Inc.; and **Sam Bedinger,** Pinkerton Computer Consultants, Inc.

Finally, the authors would like to express their gratitude to the thousands of Institutional Coordinators, institution respondents, Chief Administrative Officers and individual faculty members who participated in the study. Without their cooperation, NSOPF-93 could never have been completed.

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1. Introduction

This manual provides guidance and documentation for users of the 1993 National Study of Postsecondary Faculty (NSOPF-93) restricted-use faculty data file and of the public-use institution data file. Information about the purpose of the study, the data collection instruments, the sample design, data collection and data processing procedures for NSOPF-93 are also contained in this manual.

1.1 Organization of the Data File User's Manual

This manual was prepared with the goal of providing NSOPF-93 analysts with the information necessary to use and to interpret NSOPF-93 data. Each chapter in this manual can be read as a stand-alone document.

Chapters 1 to 5 provide background to the study, information on questionnaire development, sampling and data collection and processing procedures. Users desiring more detailed and technical documentation on data collection procedures, sampling and variance estimation, unit and item nonresponse, validity and reliability, and poststratification should consult the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

Analysts desiring a practical discussion about how to use the data files can skip to Chapters 6 and 7. Chapter 6 provides a guide to the data files and codebooks. Chapter 7 discusses issues of comparability between NSOPF-93, NSOPF-88, and other data sets.

1.2 Background: NSOPF-88

The 1988 National Survey of Postsecondary Faculty (NSOPF-88)—whose successor survey was renamed the National *Study* of Postsecondary Faculty—was the first comprehensive study of higher education instructional faculty conducted by the National Center for Education Statistics (NCES) since 1963. The National Endowment for the Humanities provided additional support. NSOPF-88 generated immediate interest in the higher education community because prior to the release of these data there had been very little comprehensive information available on this topic. The survey provided a national profile of faculty in two-year, four-year, doctoral-granting, and other public and private non-proprietary institutions. Information was gathered on the professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes of both full- and part-time instructional faculty. In addition, data were collected from institutional representatives and department-level respondents on such issues as faculty composition, new hires, departures and recruitment, retention, and tenure policies.

The 1988 study, conducted by SRI International, involved both field test and full-scale survey components. The field test targeted a sample of 105 non-proprietary two-year and four-year institutions, 235 faculty, and 91 department chairpersons (from 51 four-year institutions and a supplement of 40 two-year and four-year institutions). Ninety-one percent of the institutions participated in the field test by returning their faculty lists. Questionnaire responses were obtained from 80 percent of institutional representatives (two and four-year institutions, excluding specialized institutions), 86 percent of the department chairpersons (four-year institutions only), and 68 percent of the faculty (two-year and four-year institutions).

The NSOPF-88 field test was conducted from July through October of 1987. It was designed primarily to test the relative effectiveness of two alternative data collection strategies, to determine the most effective procedures for obtaining lists of faculty, and to examine the adequacy of the questionnaires. The results of the field test informed the design of the full-scale NSOPF-88 study. A brief synopsis of the field test procedures and results can be found in the *National Survey of Instructional Staff: Field Test Methodology Report* (U.S. Department of Education, National Center for Education Statistics: Washington, D.C., March 8, 1988).

The NSOPF-88 full-scale study had three components: an institution-level survey of 480 colleges and universities in the United States; a survey of 3,029 eligible department chairpersons (or their equivalents) within the participating institutions; and a survey of 11,013 eligible faculty members within the same participating institutions. Data were collected for these three surveys between December 1987 and October 1988. Non-proprietary higher education institutions (two-year, four-year, or advanced degree) were stratified by size and assigned to strata adapted from the higher education institution classification system developed by the Carnegie Foundation for the Advancement of Teaching.[1] Institution size was defined by the number of full-time faculty. Within each stratum, institutions were randomly selected. Lists of faculty employed as of October 15, 1987 were requested from participating institutions, and of the 480 institutions selected, 449 (94 percent) agreed to participate and provided lists of their fall 1987 instructional faculty and department chairpersons. Within four-year institutions, faculty and department chairpersons were stratified by program area and selected; within two-year institutions, simple random samples of faculty and department chairpersons were selected; and within specialized institutions (religious, medical, etc.), only faculty were sampled. At all institutions, instructional faculty were stratified on the basis of employment status—full-time and part-time. Questionnaires that asked about activities during the 1987 fall term were mailed in 1988. Questionnaire responses were obtained from 424 institutions (88 percent), 2,427 department chairpersons (80 percent), and 8,383 instructional faculty (76 percent).

A discussion of the procedures and results of the 1988 full-scale study appears in *1988 National Survey of Postsecondary Faculty: Methodology Report* (U.S. Department of Education, National Center for Education Statistics: Washington, D.C., May 18, 1990). Four analytical reports were also prepared using NSOPF-88 data: *Faculty in Higher Education Institutions, 1988* [NCES 90-365]; *Institutional Policies and Practices Regarding Faculty in Higher Education* [NCES 90-333]; *A Descriptive Report of Academic Departments in Higher Education Institutions* [NCES 90-339]; and *Profiles of Faculty in Higher Education Institutions, 1988* [NCES 91-389].

1.3 Background: NSOPF-93

Like its predecessor, NSOPF-93 was designed to provide a national profile of faculty in two-year, four-year (and above), doctoral-granting, public and private non-proprietary institutions, and to gather information on the backgrounds, responsibilities, workloads, salaries, benefits, and attitudes of both full- and part-time faculty. NSOPF-93 was conducted by the National Opinion Research Center (NORC), a social science research center at the University of Chicago. NSOPF-93 was sponsored by the National Center for Education Statistics (NCES), with additional support from two co-sponsoring agencies, the National Endowment for the Humanities (NEH) and the National Science Foundation (NSF). NEH and NSF sponsored sample augmentations for both the field test and full-scale study, and provided support for the study in its entirety. The sample augmentations were designed to provide higher levels of precision for faculty overall and to provide oversamples of specific subgroups of faculty, particularly full-time females; black, non-Hispanics; Asian/Pacific Islanders; Hispanics; and faculty in the humanities.

The second cycle of the National Study of Postsecondary Faculty (NSOPF-93) was conducted in response to a continuing need for data on faculty and other instructional personnel, all of whom directly affect the quality of education in postsecondary institutions. Faculties determine curriculum content, performance standards for students, and the quality of students= preparation for careers. In addition, faculty members perform research and development work upon which the nation's technological and economic advancement depend. For these reasons, it is essential to understand who they are; what they do; and whether, how, and why the nation's faculty are changing.

[1]See *A Classification of Institutions of Higher Education*, The Carnegie Foundation for the Advancement of Teaching (Princeton, N.J., 1987).

Data collected for the second cycle of NSOPF expand the current information base about faculty in several important ways. First, the data allow for comparisons to be made over time. Second, more detailed comparisons can be made because of the increase in both the institutional and faculty sample sizes. Third, these data examine critical issues surrounding faculty that have developed since the 1988 study. Fourth, to get a clearer and more accurate picture of faculty and instruction, NSOPF-93 expanded the definition of faculty to include both non-instructional faculty and non-faculty instructional personnel in higher education institutions. Henceforth, the term Afaculty≅ will be used in its broadest sense to designate both non-instructional and instructional faculty and other instructional staff. Chapter 3 discusses the definitions of eligible faculty in greater detail.

1.4 NSOPF-93 Field Test

A field test of NSOPF-93 data collection instruments and survey procedures with a national probability sample of 136 institutions (54 core institutions, and 82 institutions selected to augment the core sample, funded by NSF) and 636 faculty was conducted between February and September 1992. The general purposes of the field test were to evaluate the adequacy of the faculty and institution questionnaires and to test key procedures to be used in the full-scale study.

Institutional cooperation was sought from all 136 institutions and a faculty list was solicited from each institution. The overall participation rate for faculty list collection was 89 percent (93 percent for the core sample and 87 percent for the augmented sample). The field test faculty sample consisted of 636 faculty selected from 53 participating core institutions. A total of 495 faculty participated, for a response rate of 82 percent. The institution survey was limited to the 120 participating institutions that had provided lists of faculty and/or confirmed their participation prior to September 1, 1992. Ninety-four of these institutions responded to the institution questionnaire for a response rate of 78 percent (82 percent for the core institutions and 78 percent for the augmented sample).

The results of the field test informed the design of the full-scale study. A detailed discussion of the procedures and results of the 1992 field test appears in the *1992-93 National Study of Postsecondary Faculty Field Test Report* (U.S. Department of Education, National Center for Education Statistics, Washington, D.C., February 1994 [NCES 93-390]).

1.5 NSOPF-93 Full-Scale Study

For the NSOPF-93 full-scale study, the sample sizes were increased from 480 institutions and 11,013 faculty (in 1988), to 974 institutions and 31,354 faculty. The larger sample sizes allowed for more detailed comparisons and higher levels of precision at both the institution and faculty levels. The sample was also augmented to provide data about faculty in the humanities; faculty in these disciplines were oversampled, as were black, non-Hispanic; Hispanic; Asian/Pacific Islander; and full-time female faculty. As in the 1988 study, the sample consisted of non-proprietary two- and four-year (and above) higher education institutions stratified by a modified Carnegie classification and by faculty size. Institutional recruitment for the full-scale study began in October, 1992, when recruitment packets were mailed to the Chief Administrative Officers of 789 institutions. A supplemental sample of 185 institutions was added to ensure adequate representation across all strata. Of the 974 institutions in the total sample, 12 were found to be ineligible. Of the 962 eligible institutions, 817 institutions (85 percent) agreed to participate in the study (i.e., to provide lists of faculty employed during the 1992 Fall Term, that is, the term in progress on October 15, 1992). The faculty sample was selected from these 817 institutions. In 1993, questionnaires that asked primarily about the 1992 Fall term were mailed to institutions and faculty. (Specific questionnaire items are discussed in Chapter 2.)

The target sample for the faculty survey consisted of 31,354 faculty selected from 817 participating institutions. Of these, 1,590 were found to be ineligible. Of the 29,764 eligible faculty, 25,780 (87 percent) completed questionnaires either by self-administration or by a computer-assisted telephone interview (CATI).

Institution questionnaires were mailed to institution representatives at all 962 eligible institutions, including those that did not supply a list of faculty. Of the eligible institutions, 872 (91 percent) completed an institution questionnaire.

A survey report summarizing key results from the faculty survey is available: *Faculty and Instructional Staff: Who Are They and What Do They Do?* [NCES 94-346]. Other reports based on data from the NSOPF-93 faculty survey include: *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992* [NCES 97-470] and *Characteristics and Attitudes of Instructional Faculty and Staff in the Humanities* [NCES 97-973]. Another report, *Institutional Policies and Practices Regarding Faculty in Higher Education* [NCES 97-080], is based on the NSOPF-93 institution survey. These and future publications will also be available on the Internet on NCES's World Wide Web site at: http://www.ed.gov/NCES.

1.6 Restricted-use Data File and Documentation

A restricted-use data file has been produced for the NSOPF-93 faculty component on magnetic tape and on CD-ROM. This data file user's manual accompanies the NSOPF-93 data files appearing on magnetic tape and on CD-ROM.

The restricted-use data file has been released through individual licensing agreements to analysts who require access to the complete NCES data files for their research. Users agree, under penalty of law, that they shall not release any information that may lead to disclosure of a respondent's identity. The restricted-use data file contains data for 25,780 respondents from 817 participating institutions.

1.7 Public-use Data Files and Documentation

Public-use institution and faculty data files are also available on diskette and CD-ROM. The institution file contains data from the 872 postsecondary institutions that completed an institution questionnaire.

The public-use faculty data file contains data for 25,780 respondents from 817 participating institutions. Because multi-level micro data carry some risk of statistical disclosure of institutional or individual identities, the faculty data were subjected to an extensive deductive disclosure analysis to determine which items, used alone, in conjunction with other key variables, or in conjunction with public external sources such as NCES's Integrated Postsecondary Education Data System (IPEDS) files, have significant disclosure potential. To minimize the possible risk of disclosure of individual respondents in compliance with the National Education Statistics Act, Public Law 103-382 [20 USC 9001 *et seq.*], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a], variables found to pose significant disclosure risks were modified or suppressed to remove or to substantially reduce such risks.

1.8 Derived Variables

For NSOPF-93, a total of 36 institution-level and 107 faculty-level derived variables were created in order to simplify access to standard queries useful to analysts as well as to enhance substantive analysis. Since research questions frequently require independent or control variables, this set of derived variables has been carefully constructed and added to the faculty and institution data files. The faculty restricted-use file includes all 143 derived variables. The institution file contains only the 36 institution-level derived variables. The public-use faculty file contains selected derived variables that were found not to pose significant disclosure risks. Multiple sources of data were used to create institution-level derived variables including: the 1991-92 IPEDS, the Carnegie classification system, and NSOPF-93 sampling information. Documentation for all derived variables appears in Appendix G.

1.9 Electronic Codebooks on CD-ROM and Documentation

In addition to hardcopy codebooks that accompany the various releases of NSOPF-93 data, three NSOPF-93 electronic codebooks (ECBs) are also available to users. One ECB consists of the public-use institution file, another consists of the restricted-use faculty data file, and the other consists of the faculty restricted-use file merged with the public-use institution file. The ECBs feature windows with unweighted frequencies and percentages. A README.TXT file on the CD-ROM describes how to install the ECBs. Extensive Ahelp≅ files and menus explain ECB features.

The ECB combines the convenience, simplicity, and cost efficiencies of personal computers (PCs) with CD-ROM technology. ECBs permit users to search for variables based on key words and names. The ECB displays full question text and unweighted frequencies for each variable in order to assist users in deciding which data elements may be useful for their analyses. The ECB can also be used as a tool for selecting variables for subsequent analysis, writing SAS or SPSS-PC code for file construction of the designated variables, and for generating a codebook of the chosen set of variables. More detailed information on the features of the NSOPF-93 ECBs appears in Chapter 6 and in the ECB help files and menus on the CD-ROM.

1.10 Data Analysis System on CD-ROM and Documentation

A NSOPF-93 faculty Data Analysis System (DAS) is also available. The DAS provides a convenient, menu-driven system allowing researchers to produce tables of frequencies and crosstabulations and correlation matrices. The NSOPF-93 sample is not a simple random sample. Therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. DAS software provides all information necessary for a user to set up and run a variety of analyses. Each DAS is self-documenting, with weighted data distributions and full descriptions for each variable. The DAS allows users to select variables for rows, columns, and subgroups for tables from the list of available variables, many of which have been computed to simplify analysis. Continuous variables, such as income, can be recoded into categories for rows, column percentages, or subgroup definitions. Categorical variables, such as race, can be grouped or Alumped≅ in various ways for analysis. Table titles as well as variable labels can be edited by the user, and DAS output is compatible with most spreadsheet software. In addition to the table estimates, the DAS calculates proper standard errors and weighted sample sizes for these estimates. If the number of valid cases does not meet the minimum requirement based on NCES statistical standards, the DAS prints the message "low-N." Users can also define variables for use in a correlation matrix, which can be imported into standard statistical packages for more complex analysis. More detailed information on the features of the NSOPF-93 DAS appears in the Ahelp≅ files and menus on the DAS/CD-ROM.

1.11 How to Obtain NSOPF-93 Products

Restricted-use faculty data are available at no charge on a restricted loan basis to organizations that obtain an approved licensing agreement from NCES. To request a licensing agreement, the individual and/or institution must provide the following information:

- The title of the survey to which access is desired.
- A detailed discussion of the statistical research project that requires accessing the restricted NCES survey data.
- The name and title of the most senior official who has the authority to bind the organization to the provisions of the licensing agreement.
- The name and title of the project officer who will oversee the daily operations.
- The name, telephone number, and title of professional and technical staff who will access the survey database. Each professional or technical staff member with access to the data is required to sign and to have notarized an Affidavit of Nondisclosure.
- The estimated loan period necessary for accessing the NCES survey database.
- The desired computer product specifications, such as medium (9-track tape, CD-ROM), code convention (ASCII, EBCDIC, SAS), etc.

To obtain further details and a licensing agreement form please write to:

Data Security Officer
Statistical Standards and Services Group
U.S. Department of Education
Office of Educational Research and Improvement
National Center for Education Statistics
555 New Jersey Avenue, N.W., Room 408
Washington, D.C. 20208
(202) 219-1831

Individuals who obtain restricted-use faculty data after signing a licensing agreement with NCES can receive the following products on one CD-ROM: the NSOPF-88 and NSOPF-93 faculty data files; the NSOPF-93 institution data file; the NSOPF-93 faculty ECB, the 1993 merged faculty and institution ECB; the user's manual for the institution and restricted-use faculty data files; and the faculty and institution questionnaires.

For those individuals who do not wish to obtain a licensing agreement, a public-use faculty data file (which contains a reduced number of variables to avoid disclosure) can be ordered from the National Education Data Resource Center at (see address below). The public-use institution file can also be ordered from the National Education Data Resource Center. Individuals who order the public-use faculty file on CD-ROM will receive the NSOPF-93 public-use faculty and institution data files, the institution ECB, a user's guide for the public-use faculty and institution files, and the faculty and institutional questionnaires.

The DAS can be accessed also through the Internet on NCES's World Wide Web site at http://www.ed.gov/NCES. DAS procedures can be performed over the World Wide Web. The DAS CD-ROM for PC use (in DOS and Windows versions) can also be ordered by contacting:

National Education Data Resource Center
c/o Pinkerton Computer Consultants, Inc.
1900 N. Beauregard Street, Suite 200
Alexandria, VA 22311-1722
Phone: (703) 845-3151
FAX: (703) 820-7465
E-mail: nedrc@inet.ed .gov.

Feedback and suggestions on the products and other features of NSOPF-93 are welcome. Please address your comments to:

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2. Data Collection Instruments

2.1 Overview

This chapter provides a brief description of the two survey instruments developed and used in NSOPF-93: the faculty questionnaire and the institution questionnaire. Both instruments were designed as self-administered questionnaires (SAQs). A CATI (computer-assisted telephone interview) version of the faculty questionnaire was also developed and used during the follow-up data collection effort. Copies of the NSOPF-93 self-administered instruments appear in Appendix A and Appendix B.

2.2 Development of Questionnaire Items

Several research and policy concerns guided questionnaire development. One of the overriding objectives was to preserve as many of the 1988 items as were relevant and feasible. But this goal had to be balanced with the need to address recent policy issues that had emerged since the previous study. In order to balance these aims, it was necessary to identify, to revise, or to eliminate some questionnaire items that were either problematic or were no longer relevant to the broader issues.

For both the field test and the full-scale study, questionnaire items were constructed based on input from several sources, including the 1988 questionnaires, other postsecondary education surveys, the NSOPF-93 National Technical Review Panel (NTRP), and project staff and consultants. Questionnaire items for the full-scale study were further revised (or deleted) based on the results of the 1992 NSOPF field test and recommendations from the NTRP.

The 1988 institution and faculty questionnaires were used as a point of departure in determining which items should initially be preserved, expanded, or revised for the NSOPF-93 field test and later for the full-scale study. One major change was the definition of faculty used in the 1993 cycle of NSOPF. While the 1988 survey collected data from full- and part-time faculty who provided instruction for credit, the 1993 sample was expanded to include non-instructional faculty, as well as instructional faculty and staff. The consensus resulting from the NTRP meetings was that the population of non-instructional personnel with faculty status was too important to exclude from the study. Deans, college and university administrators, librarians and directors of university resource centers are included in this population of non-instructional faculty.

In addition, NSOPF-93 eliminated the Departmental Chairperson survey (a major part of the 1988 cycle) in favor of larger faculty and institution samples.[2] Because the items in this survey were best addressed by the department chairperson, it was deemed advisable to incorporate only a few of the questionnaire items from this earlier survey into the NSOPF-93 faculty or institution questionnaire.

[2]The final status of the department chairperson survey has not been determined for future NSOPF cycles.

A variety of related postsecondary education studies were reviewed in the process of developing the questionnaires,[3] and some of their items were incorporated into the questionnaires for the field test and the full-scale study. Exhibits 2-1 and 2-2 describe the items in the faculty and institution questionnaires by content area and link specific questions to the 1988 instruments. Copies of the 1988 questionnaires appear in Appendices C-E.

2.3 Faculty Questionnaire

The faculty questionnaire was designed to address a variety of policy-relevant issues about higher education faculty and their institutions, including: (1) the background characteristics and current activities of instructional and non-instructional faculty; (2) the supply of, and demand for, faculty in postsecondary institutions; (3) faculty as both a resource and a consumer of resources; and (4) faculty attitudes and behaviors about key aspects of the higher education environment.

Given the changed definition of faculty, questions were added about research-only and other non-instructional faculty members to an instrument that had previously sought information only about instructional faculty. The faculty questionnaire was also revised to emphasize behavioral rather than attitudinal questions in order to collect data on who the faculty are; what they do; and whether, how, and why the composition of the nation's faculty is changing. The questionnaire addressed:

- background characteristics and academic credentials;
- workloads and time allocation between classroom instruction and other activities such as research, course preparation, consulting, public service, doctoral or student advising, conferences, and curriculum development;
- compensation, and the importance of other sources of income, such as consulting fees, royalties, etc., or income-in-kind;
- roles and differences, if any, between full- and part-time faculty in their participation in institutional policy-making and planning;
- faculty attitudes toward their jobs, their institutions, higher education, and student achievement in general;
- changes in teaching methods, and the impact of new technologies on teaching techniques;
- career and retirement plans;
- differences between those who have instructional responsibilities and those who have no instructional responsibilities, such as those engaged only in research; and

[3]Institute of Social Research, York University, *The Academic Profession in Canada* (York, Ontario: Institute of Social Research, 1986); Harvard University, *1967 Survey of Faculty* (Cambridge, Mass.: Harvard University, 1967); Higher Education Research Institute, *1989 Faculty Survey* (Los Angeles: Higher Education Research Institute, 1989); National Center for Research to Improve Postsecondary Teaching and Learning, *Faculty at Work: A Survey of Motivations, Expectations, and Satisfactions* (Ann Arbor, Mich.: University of Michigan, 1987); Carnegie Foundation for the Advancement of Teaching, *National Survey of Faculty* (Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching, 1984 and 1989).

- differences between those with teaching responsibilities but no faculty status and those with teaching responsibilities and faculty status.

The design of the full-scale study questionnaire required input from NCES, the National Science Foundation (NSF), the National Endowment for the Humanities (NEH), and the NSOPF-93 National Technical Review Panel (NTRP), as well as an analysis of the data collected using the field test questionnaire. Respondent comments collected during the field test were reviewed and a debriefing was held with field test interviewers. Respondent and interviewer comments are summarized in the *1992-93 National Study of Postsecondary Faculty Field Test Report* [NCES 93-930]. Many questions, or subparts of questions, were deleted from the field test questionnaire based on high nonresponse or low reliability. Questions which were retained were sometimes modified to be clearer or more understandable. Some new items were added based on NTRP recommendations.

2.4 Institution Questionnaire

The institution questionnaire for the full-scale study was divided into three major sections, dealing with full-time instructional faculty and staff, part-time instructional faculty and staff, and full-time non-instructional faculty, respectively. As noted above, the inclusion of non-instructional faculty was new to NSOPF-93. Because institutional definitions of faculty vary widely, a question asked each institution for its own definitions of full- and part-time faculty, both instructional and non-instructional. The institution questionnaire obtained information on:

- the numbers of full- and part-time instructional and non-instructional faculty, as well as instructional personnel without faculty status, and their distributions by employment status (i.e. full-time, part-time) and tenure status (based on the definitions provided by the institution);
- institutional tenure policies and changes in policies on granting tenure to faculty members;
- the impact of tenure policies on the influx of new faculty and on career development;
- the growth and promotion potential for existing non-tenured junior faculty;
- the benefits and retirement plans available to faculty; and
- the turnover rates of faculty at the institution.

The institution questionnaire used in the full-scale study was quite different in content from the field test questionnaire. The results of the field test were reviewed by NCES, the NSOPF-93 NTRP and members of the Association for Institutional Research (AIR) in order to revise the questionnaire to capture as much data as possible while minimizing respondent burden. One of the major changes between the field test and the full-scale study was the elimination of items that asked for counts of minority and female faculty. Based on field test results and discussions with the NTRP, it was apparent that many institutions could not provide accurate information. Others refused to respond. In addition, the full-scale questionnaire included a glossary to highlight the operational definitions being used in the survey (e.g., instructional faculty versus non-instructional faculty) but also asked for the respondent to provide institutional definitions of permanent, temporary, full- and part-time faculty. Separate benefits questions were added for temporary full-time faculty and instructional staff. Another set of questions on institution subsidization of benefits was added as well.

Other changes between the field test and full-scale study included the addition of items asking about institutional downsizing. These items were included because of recommendations from NTRP and AIR members, and because institutions were reporting the loss of faculty due to fiscal constraints. Another recommendation of the NTRP was to collect data on the percentage of full- and part-time faculty represented by a union for purposes of collective bargaining. For more discussion of the field test, see the *1992-93 National Study of Postsecondary Faculty Field Test Report* [NCES 93-390].

Exhibit 2-1: NSOPF faculty questionnaire: content and linkage of items between 1988 and 1993 NSOPF cycles

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Instructional duties	1	1	
Instructional duties	1A Revised	2	**Change in order of response categories.** **New response choice:** 1. All of your instructional duties related to credit courses. **Wording changes:** Question shortened. Added: "A...or advising or supervising academic activities" to response categories 2 and 3. "At least..." eliminated from response category 2.
Principal activity	2 New	3	**Question expanded**: Asks for "principal activity at this institution," and lists "sabbatical from another institution "as one of eight response categories. NSOPF-88 asks only if respondent is on sabbatical from this institution ("yes" or "no"≅).
Faculty status	3 New		
Full-time/part-time status	4 4A New	4	**Question expanded:** A new sub-question at Q.4a asks for reasons respondent worked part-time; provides six response categories (a-f) to be answered yes or no. Change in order of response categories at Q.4 (full-time = category 1 and part-time = category 2 in 1988) to facilitate approach to Q.4a.
Responsibilities	5	7	
Year job at institution began	6 New		
Tenure status	7 Revised 7A New	9, 10	**Order of response categories changed.** **Question reformatted:** If respondent selects category 1 (tenured), then respondent answers 7A about the year tenure was achieved (Q.10 in the NSOPF-88 questionnaire).
Length of contract	8 Revised	11	**Wording changes:** Response category 3 changed from: "two or more academic/calendar years" to: "A limited number of years (i.e., two or more academic/calendar years)." "OTHER" category for open-ended answer added.
Academic rank	9 Revised	12	**Question expanded:** Asks for academic rank, title, or position. **Response category eliminated:** "Distinguished/Named Professor."
Year achieved academic rank	10	13	

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Type of appointment	11 Revised	14	**Wording change:** From: "A…Did you hold any of the following kinds of appointments at this institution?"≅ To: "…which of the following kinds of appointments did you hold at this institution?≅ **New response categories:** 5. Clinical (WRITE IN TITLE OR POSITION). 6. Research (WRITE IN TITLE OR POSITION).
Principal teaching discipline	12	16	
Principal area of research	13 New		
Undergraduate academic awards	14 Revised	27	**Change in order of response categories:** Response category 6 was 0 in 1988.
Graduate financial assistance	15	28	**Change in wording in 1993:** Phrase "forms of financial assistance" added. **New response choice:** "Other loan" added to response category choices.
Academic degrees	16 Revised	26	**Response categories reordered and changed for degree code:** Categories reordered from highest to lowest degree and category "Graduate work not resulting" in a degree≅ eliminated. **Other changes:** Name of field added. Number of degrees asked about reduced from seven to four.
Other current employment	17 Revised 17A New	5	**Wording change:** From: "Please include outside consulting or other self-owned business…" To: "… or did you also have other employment including any outside consulting or other self-owned business, or private practice?" **New question asks:** "How many different jobs, other than your employment at this institution, did you have…(WRITE IN NUMBER)"

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Main other current employment	18 Revised 18C Revised 18A New 18B New	6	**Wording changed to apply only to main other job:** From: "Other than this institution, in which of the following ways were you employed during the...Fall Term…" To: "Not counting any employment at this institution, what was the employment sector of the main other job you held during Fall 1992?" Other changes: First two NSOPF-88 response categories combined into one category; two-year or less postsecondary combined into one category; two consulting categories combined into one; two government categories combined into one. Definition of full- and part-time deleted (35 hours). Minor changes in phrasing ("On staff of" deleted from response categories). **New questions:** 18A. What year did you begin that job? 18B. What was your primary responsibility in that job? 1. Teaching 2. Research 3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.) 4. Clinical service 5. Community/public service 6. Administration 7. Other 18C. Was that job full-time or part-time? 1. Full-time 2. Part-time
Previous employment	19 Revised	29	**Question reformatted to pre-coded response categories.** **Wording changes:** From: "Please begin with your current job, and work backward" (up to 15 jobs) to: Athe three most recent and significant main jobs that you held during the past 15 years.≅ Added: "...at one place of employment" To: "Do not list promotions in rank...as different jobs."≅ **Changes in response categories:** Employment sector and primary responsibility categories changed to match categories at Q.18 and Q.18B.
Presentations/ publications	20 Revised	30	**Wording changes:** NSOPF-93 response categories 1-2 refer to articles published; categories 3-4 refer to creative works; 1988 question refers to articles or creative works published for all four categories. **Added phrase:** "...Count multiple presentations/publications of the same work only once." **Format change:** Reversed response category columns to ask about total career before asking about past 2 years.

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Thesis/ dissertation committees	21 Revised	31	**Wording change:** "…or examination or certificate committees" added to question. **Changes to response categories:** Not applicable code added. **Question reformatted:** For each category, asks: A. Number served on B. Of that number, how many did you chair? **Response categories added:** Examination/certification committees. Separates categories into 3 undergraduate and 3 graduate categories.
Number of classes taught (Fall 1992)	22 New 22A New		Added to identify total classes and, or those, number for-credit.
Classroom responsibilities (for-credit)	23 Revised	32	**Question reformatted into one column per class, categories pre-coded for level and instructional methods.** **New instructions:** Main question, 1st sentence, 2nd clause shortened to "please answer the following items." Second and 3rd sentences of NSOPF-88 main question eliminated. **Added/revised response categories:** Added "CODE FOR ACADEMIC DISCIPLINE OF CLASS."≅ 1st to 3rd and 6th NSOPF-88 response categories become sub-categories for NSOPF-93 Q.23(2), which has two new sub-questions, "Number of weeks the class met," and "Number of credit hours." 2nd NSOPF-88 response choice split into two sub-questions for Q.23(2), "Was this class team taught?" and "Average # hours per week you taught the class." 4th NSOPF-88 question becomes Q.23(3). NSOPF-88 primary level of students response codes 1 to 3 become 1st three sub-categories for Q.23(3). Primary level of students, codes 4 to 6, incorporated into one category at Q.23(3) "All other students." Primary setting≅ item changed to "Primary instructional method used." 2nd primary setting code split into sub-categories 2 and 3 for Q.23(4) "Seminar" and "discussion group" or "class presentation." Primary setting response codes 7 and 8 replaced with new categories "Group projects" and "Cooperative learning groups."
Undergraduate courses taught for credit/tools and methodology used	24 New 24a New		

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Individual instruction	25 Revised	33	**Wording change:** Additional definitions offered in text: "independent study or one-on-one instruction, including working with student in a clinical or research setting" Additional instructions: "Do not count regularly scheduled office hours." **Response categories:** Multiple response categories collapsed into "all other students."
Weekly scheduled office hours	26 New		
Informal student contact	27 New		
Research/creative works	28 New		
Primary research/creative work	29 New		
Any funded research/creative work	30 New		
PI or Co-PI: funded research/ creative work	31 Revised	34	**Wording change:** "principal investigator (PI) or project director" changed to "principal investigator (PI) or co-principal investigator (Co-PI)" phrase deleted: "...including service contracts or internal awards"
Individuals supported by funded research/creative work	32 New		
Funded research/creative work	33 Revised	35	**Question introduction changed.** 1988 question asked about grants and contracts for which respondent was principal investigator. 1993 questionnaire asks about all grants and contracts for which respondent was a principal investigator, a Co-PI or a staff member. **Question expanded (Parts C and E are new):** A. Funding source (re-ordered) B. Number of grants/contracts C. Work done as... 1. PI 2. Co-PI 3. Staff D. Total funds for 1992-93 academic year E. How funds were used... 1. Research 2. Program/curriculum development 3. Other
Quality of available resources	34 New		
Internal funds for professional development	35 New		

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Faculty activities/ workload	36 Revised	36	**Wording changes:** "work" replaced by "activities" **Category added:** Paid activities at institution asked separately from unpaid activities at institution. Number of categories expanded from three to four.
Faculty activities/ workload	37 Revised 37A Revised 37B New	37	**Wording change:** From: "Please estimate the percentage of your total working hours...spent on each of the following activities…" To: "In column A we ask you to allocate your total work time ...into several categories." **New instructions added:** "We realize they are not mutually exclusive categories…" **Instruction change:** **"**We know that this is tedious…"deleted from request that percentages add up to 100% of total time. **Change in response categories, question added, questions reformatted:** Two responses asked for each category: A. % of Work Time Spent, B. % of Work Time Preferred. a. Teaching (incorporates 1st 3 categories from NSOPF-88). b. Research (incorporates 5th to 7th NSOPF-88 categories). c. Professional Growth (incorporates 8th and 9th NSOPF-88 categories d. Administration (matches 4th 1988 category). e. Outside consulting or freelance work (matches 11th 1988 category). f. Service/Other Non-Teaching Activities (incorporates 10th, 12th and 13th NSOPF-88 categories).
Union membership	38 Revised	17,18	**Response categories expanded, two questions combined into one:** 1. Union is available, but I am not eligible. 2. I am eligible, but not a member. 3. I am eligible, and a member. 4. Union is not available at this institution.
Job satisfaction	39 Revised 40 Revised	19	**Wording changes:** Replaced "do you personally feel about" with "How satisfied or dissatisfied...?" at Q.39, changed "Ayour job"≅ to "your instructional duties." **Category changes:** Q.39 asks about six instructional duties categories and Q.40 asks about nine general job satisfaction categories. Some categories were modified or deleted, and new categories added. NSOPF-88 had 29 categories.

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Faculty mobility	41 Revised	20	**Wording change:** From: "How likely is it you will leave this job to do the following" To: "How likely is it that you will leave this job to..." **Categories modified/added/reordered:** "Seek or accept" changed to "accept." Two categories added to differentiate"...postsecondary institution" from "...not at a postsecondary institution." Retirement asked about last, instead of first.
Faculty retirement age	42 Revised	24	Question reformatted to ask for verbatim response to age respondent expects to retire.
Job satisfaction: Reasons for accepting new position	43 Revised	22	**Wording change:** From: "this job" To: "your current position in academia," "...inside or outside of academia" added after "to accept another position." **Category changes:** Some categories were reordered, six were deleted and three were added.
Retirement options	44 New 45 New		
Projected age of retirement	46 New		
Compensation from institution	47 Revised	40	**Wording changes:** "Earnings" is replaced by "compensation." Response category headers replace "Income" with "Compensation." **Changes to response categories:** "Other sources of earned income" becomes a header. Two response categories added for verbatim responses. b. Type of appointment (e.g., 9 months) added. Instruction added to non-monetary compensation items: "Do not include employee benefits, such as medical, dental, or life insurance."
Household enumeration	48 New		
Total household income	49 New		
Number of dependents	50 New		
Sex (male/female)	51 Revised	41	NSOPF-88 asks "Your gender" and NSOPF-93 question asks "Are you..." with response categories
Date of birth	52 Revised	42	**Wording change:** From: "In what year were you born?" To: "In what month and year were you born?"
Race/ethnicity	53	44	"African-American/black" replaces "black."
Race/ethnicity	53A New	44	Added to allow categorization of Asian/Pacific Islander ethnic groups.

Content area	NSOPF-93 faculty questionnaire question	Source question from NSOPF-88	How NSOPF-93 question differs from NSOPF-88 question
Race/ethnicity	54	43	
Race/ethnicity	54A New	43	Added to allow categorization of Hispanic ethnic groups.
Current marital status	55 Revised	45	**Response category added:** "Living with someone in a marriage-like relationship."
Country of birth	56 New		
Citizenship status	57 Revised	46	**Wording changes** **From:** "Of what country are you currently a citizen?" **To:** "What is your citizenship status?" **Question reformatted:** 1. United States citizen, native, 2. United States citizen, naturalized, 3. Permanent resident of the United States (immigrant visa), 4. Temporary resident of United States (non-immigrant visa). Categories 3 and 4 each ask for country of present citizenship.
Parents' education	58 Revised	47	Revised question does not ask about spouse.
Academic interests and values	59 Revised 60 Revised	48 49	**Category changes:** Some categories were modified or deleted, and new categories were added. Categories also reordered. Five of the 1988 categories were retained at Q.59 and eight were deleted; two new categories were added. Four of the 1988 categories were retained at Q.60 and two were deleted; five new categories were added.

Exhibit 2-2: NSOPF institution questionnaire: content and linkage of items between 1988 and 1993 NSOPF cycles

Content area	NSOPF-93 institution questionnaire question	Source question from 1988 institution questionnaire	Source question from 1988 department questionnaire	How NSOPF-93 question differs from NSOPF-88 question
Institutional definitions of faculty	New			
Numbers of full/part- time faculty/staff, Fall 1992	1 Revised	4,5,19		Combined questions from NSOPF-88 into one question. Omitted asking specifically for "full-time faculty with visiting, acting, or adjunct appointments"
Section I: Full-time instructional faculty/staff Changes in total of permanent staff 1991-92	2 Revised	6		**Wording changes:** From: "How many full-time instructional faculty did your institution have in each of the following categories?" To: "Please provide the following information about changes in the number of permanent full-time instructional faculty/staff between the 1991 and 1992 Fall Terms." **Change in response categories:** Reordered sub-items, added "d. Number...who left because of downsizing..."
Number of permanent staff institution sought to hire	3 Revised		13	**Wording change:** From: "For how many unfilled full-time instructional faculty positions in your department were candidates being hired?" To: "How many permanent full-time instructional faculty/staff did your institution seek to hire for the 1992 Fall Term?"
Number of permanent instructional positions not filled	4, 4A New			
Tenure system	5 Revised	3		Deleted "for any of your"
Number of tenured/ tenure track staff 1991/1992	6 Revised	8	9	Reformatted answer matrix
Number of tenured staff who left between 1991-92	7 Revised	9	10	Slight change in question wording. **Change in response categories:** Deleted "to assume another position," "formally removed for cause," and "dismissed because of institutional budget pressures or program closure" Added "downsizing"
Number of staff considered for/granted tenure	8	7	8	

Content area	NSOPF-93 institution questionnaire question	Source question from 1988 institution questionnaire	Source question from 1988 department questionnaire	How NSOPF-93 question differs from NSOPF-88 question
Maximum number of years on tenure track	9 Revised	10, 12	11	**Wording change:** From: "Is there a maximum number of years an instructional faculty member can be on tenure track and not receive tenure at your institution?" To: "Fill in the following information about the maximum number of years..." **Change in response categories:** Added "9b. If maximum number of years has changed..." from NSOPF-88 question 12.
Changes in tenure policy in last 5 years	10 Revised	12		**Change in question wording:** From "three years" to "five years" **Change in response categories:** Deleted "offered optional early or phased retirement"; asked separately in question 11. Deleted "changed the upper limit on the percentage of full-time faculty who may be tenured" and "changed the maximum number of years a person can be on tenure track..."
Early or phased retirement policy (permanent staff)	11 Revised	12		See note for question 10.
Retirement plans available to permanent staff	12 Revised	15		Reformatted question wording slightly; deleted asking for approximate number of faculty participants; reformatted response matrix **Change in response categories:** Reordered categories, added "b. Other 403B plan" and "d. 401K or 401B plan" from "401(k) or 403(b) plan"
Employee benefits (permanent staff)	13 Revised	14, 16		**Changes in question wording:** Added "permanent" to question, added "If available, indicate whether the benefit is subsidized or not subsidized by your institution." **Change in response categories:** Reordered categories, added k. Transportation/parking n. Medical insurance for retirees o. Cafeteria-style plan...
Percent of salary contributed to benefits by institution	14 Revised	17		**Changes in question wording:** Added "permanent" to question text

Content area	NSOPF-93 institution questionnaire question	Source question from 1988 institution questionnaire	Source question from 1988 department questionnaire	How NSOPF-93 question differs from NSOPF-88 question
Availability of benefits to temporary faculty	15 *New	14		**Changes in question wording:** Added "temporary" to question text
Employee benefits (temporary faculty)	16 *New	14		See changes for question 13; added "temporary" in question text
Percent of undergraduate instruction by full-time staff	17 New			
Teacher assessment	18 Revised		19	**Changes in question wording:** From: "In which of the following ways, if any, is the teaching performance of full-time faculty assessed in your department?" To: "Are any of the following used in assessing teaching performance of full-time (permanent or temporary) instructional faculty/staff at this institution?" **Change in response categories:** Changed c. from "student placement or honors" to "student career placement"
Collective bargaining	19, 19A	13	17	**Changes in question wording:** Added "with this institution"
Section II: Full-time non-instructional faculty Changes in total of permanent staff 1991/92	20 *New	6		See note for question 2
Tenure system	21 *New	3		See note for question 5
Number of tenured/ tenure track staff 1991/1992	22 *New	8	9	See note for question 6
Number of tenured staff who left between 1991-92	23 *New	9	10	See note for question 7
Number considered for/granted tenure	24 *New	7	8	See note for question 8

Content area	NSOPF-93 institution questionnaire question	Source question from 1988 institution questionnaire	Source question from 1988 department questionnaire	How NSOPF-93 question differs from NSOPF-88 question
Maximum number of years on tenure track	25 *New	10	11	See note for question 9
Changes in tenure policy in last 5 years	26 *New	12		See note for question 10
Early or phased retirement policy (permanent staff)	27 *New	12		See note for question 11
Retirement plans avail-able to permanent staff	28 *New	15		See note for question 12
Employee benefits (permanent staff)	29 *New	14		See note for question 13
Percent of salary contributed to benefits by institution	30 *New	17		See note for question 14
Availability of benefits to temporary faculty	31 *New	14		See note for question 15
Employee benefits (temporary faculty)	32 *New	14		See note for question 16
Collective bargaining	33,33A *New	13	17	See note for question 19, 19A
Section III: Part-time instructional faculty/staff Availability of retirement plans	34 New			
Retirement plans: subsidized/non-subsidized	35 Revised	23		See note for question 12
Employee benefits	36 New			
Employee benefits available	37 *New	24,14		See note for question 13 Also added p. "other"
Percent of salary contributed to benefits by institution	38 Revised	25		Question wording slightly revised
Eligibility criteria for benefits	39 New			
Eligibility requirements for benefits	40 New			

Content area	NSOPF-93 institution questionnaire question	Source question from 1988 institution questionnaire	Source question from 1988 department questionnaire	How NSOPF-93 question differs from NSOPF-88 question
Percent of undergraduate instruction by part-time staff	41 New			
Teacher assessment	42 Revised		32	See note for question 18
Collective bargaining	43, 43A	22	29	See note for question 19, 19A

* Not asked in 1988 for this faculty type though asked for other types

3. Sample Design and Implementation

This chapter describes the sample design and procedures used for selecting institutions and faculty for NSOPF-93. It also provides information on the calculation of sample weights and the relative efficiency of the sample design.

3.1 NSOPF-93 Sample Design

NSOPF-93 sought to create a nationally representative sample of instructional faculty and staff and non-instructional faculty at two-year and above, non-proprietary or public postsecondary institutions. To achieve this, a two-stage sample design was used, with a sample of 974 postsecondary institutions in the first stage, and a sample of 31,354 faculty from these institutions in the second stage.

3.2 Institution Universe

The definition of the institution universe for NSOPF-93 was identical to the one used in NSOPF-88. It was defined as those institutions in the traditional sector of postsecondary education whose accreditation at the college level is recognized by the U.S. Department of Education. Institutions were included in the universe if they:

- were classified as two-year, four-year (and above), or doctoral-granting institutions;
- were public or private nonprofit;
- offered an educational program designed for persons who have earned a traditional four-year high school diploma or a high school graduate equivalency diploma;
- offered programs that are academically, occupationally, or vocationally oriented;
- made programs available to persons other than those employed by the institution;
- offered some courses other than correspondence courses; and
- were located in the 50 states or the District of Columbia.

Institutions were excluded from the universe if they:

- were not recognized as accredited at the college level by the U.S. Department of Education;
- were classified as for-profit, or less-than-two-year institutions;
- provided only avocational, recreational, basic adult education, or remedial courses (e.g., driver training institutions, real estate courses, dance institutions, tax preparation institutions, and the like);
- provided only in-house business courses or training; and
- were not located in the 50 states or the District of Columbia.

3.3 Faculty Universe

Unlike NSOPF-88, which was limited to instructional faculty, the faculty universe for NSOPF-93 was expanded to include all who were designated as faculty, whether or not their responsibilities included for-credit instruction. Under this definition, researchers and administrators and other institutional staff who held faculty positions, but who did not instruct, were included in the sample. Instructional staff without faculty status were also included. Teaching assistants and teaching fellows were excluded in both NSOPF-88 and NSOPF-93.

Eligibility criteria for faculty. The eligible universe of postsecondary faculty was defined to include:

- full- and part-time personnel whose regular assignment included instruction;
- full- and part-time individuals with faculty status whose regular assignment did not include instruction;
- permanent and temporary personnel with any instructional duties, including adjunct, acting, or visiting status; and
- faculty and instructional personnel on sabbatical leave.

Excluded from the NSOPF-93 universe of faculty were:

- faculty and other personnel with instructional duties outside the U.S. (but not on sabbatical leave);
- temporary replacements for faculty and other instructional personnel;
- faculty and other instructional and non-instructional personnel on leave without pay;
- graduate teaching assistants;
- military personnel who taught only ROTC courses; and
- instructional personnel supplied by independent contractors.

3.4 Sampling Frame

An explicit or an implicit list of the elements to be sampled can be used in designing a sampling frame. Creating an explicit list of all faculty and staff working at every institution in the frame of eligible institutions would have been an impossible task. Therefore, NCES elected to use an implicit list of faculty—a comprehensive list of faculty constructed from lists provided by the *sampled* postsecondary institutions. This list of faculty from sampled institutions needed to be comprehensive, accurate, and able to provide complete data for variables to be used in the subsequent stratification of the faculty sampling list.

The most appropriate and readily accessible source for a complete and accurate frame of institutions is the Integrated Postsecondary Education Data System (IPEDS),[4] a recurring set of surveys developed and maintained by NCES. IPEDS defines postsecondary education as "the provision of a formal instructional program whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent." This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education. IPEDS encompasses all institutional providers of postsecondary education in the United States and its outlying areas. The final IPEDS universe for 1991-92 consisted of 10,144 known entities: 4,390 nonproprietary or public higher education (two-year and four-year) institutions, 932 proprietary higher education institutions and 4,822 less than two-year institutions. The NSOPF sample frame was drawn from IPEDS higher education nonproprietary or public institutions, following the institutional eligibility criteria described above. After eliminating 1,077 unaccredited nonproprietary or public higher education institutions and an additional 57 accredited nonproprietary or public higher education institutions located outside of the 50 states and the District of Columbia, the first-stage NSOPF-93 sampling frame was limited to a subset of 3,256 1991–92 IPEDS institutions: all accredited nonproprietary or public higher education institutions in the 50 states and the District of Columbia.

The NSOPF-93 universe of institutions was stratified using a modified Carnegie classification system,[5] based on the highest degree institutions offer and the amount of federal research dollars they receive. For NSOPF-93, there were two levels of control, public and private, and nine types of institutions, based on 1987 Carnegie classifications, as follows:

- *Research universities* : This is a combination of the categories Research Universities I and II. Carnegie defines Research Universities I as those institutions which "offer a full range of baccalaureate programs, are committed to graduate education through the doctorate degree, and give high priority to research. They receive annually $33.5 million or more in federal support and award at least 50 or more doctoral degrees each year." The definition of Research Universities II is identical to that of Research Universities I except for the condition that they "receive annually between $12.5 million and $33.5 million in federal support for research and development…"

- *Other Ph.D.*: This is a combination of the categories Doctorate-Granting Universities I and II. Doctorate-Granting Universities I is defined as including institutions "offering a full range of baccalaureate programs [and] the mission of these institutions includes a commitment to graduate education through the doctorate degree. They award at least 40 Ph.D. degrees annually in five or more disciplines." The definition of Doctorate-Granting Universities II is identical to that of Doctorate-Granting Universities I, except that these institutions "award annually 20 or more Ph.D. degrees in at least one discipline or 10 or more Ph.D. degrees in three or more disciplines."

[4]For more information on IPEDS data used in this study, see National Center for Education Statistics, *IPEDS Manual for Users* (Washington, D.C.: National Center for Education Statistics, 1991 [NCES 95-724]). This manual is also distributed with IPEDS data on CD-ROM.

[5]See *A Classification of Institutions of Higher Education*, The Carnegie Foundation for the Advancement of Teaching (Princeton, N.J., 1987), pp. 7-8.

- *Comprehensive colleges and universities*: Offer liberal arts and professional programs. Masters degrees are the highest degrees offered. This is a combination of the categories Comprehensive Universities and Colleges I and II. Carnegie defines Comprehensive Universities and Colleges I as institutions that Aoffer baccalaureate programs and, with few exceptions, graduate education through the masters degree. More than half of their baccalaureate degrees are awarded in two or more occupational or professional disciplines such as engineering or business administration. All of the institutions in this group enroll at least 2,500 students.≅ The definition of Comprehensive Universities and Colleges II is identical to that of Comprehensive Universities and Colleges I, except for the qualification that they enroll between 1,500 and 2,500 students.

- *Liberal arts colleges*: Smaller and generally more selective than comprehensive colleges and universities. Primarily offer bachelors degrees, although some offer masters degrees. This definition combines the categories Liberal Arts Colleges I and II. Carnegie defines Liberal Arts Colleges I as Aprimarily undergraduate colleges that award more than half of their baccalaureate degrees in arts and science fields.≅ The definition of Liberal Arts Colleges II is identical to Liberal Arts Colleges I, except it also Aincludes a group of colleges that award *less* than half of their degrees in liberal arts fields but, with fewer than 1,500 students, are too small to be considered comprehensive.≅

- *Independent medical institutions*: Those not considered as part of a four-year college or university. Includes medical institutions and medical centers.

- *Religious colleges*: Includes theological seminaries, bible colleges and other institutions offering degrees in religion. There are no public religious colleges in the U.S.

- *Non-profit, two-year colleges*: Offer certificate or degree programs through the Associate of Arts level and with few exceptions, offer no baccalaureate degrees.

- *Other*: A wide range of professional and other specialized degree-granting colleges and universities. Includes other separate health professional institutions, institutions of law, institutions of engineering and technology, institutions of business and management, institutions of art, music, and design, teachers colleges, and other specialized institutions.

- *Unknown*: Carnegie classification was unknown at the time of sample selection.

Exhibit 3-1 compares the 1993 and 1988 NSOPF sample designs. It also provides a comparison with the 1991–92 IPEDS frame used for NSOPF-93.

Exhibit 3-1: Institutional sample
1988 design, 1993 design, and NSOPF-93 frame

Institution type	Total		
	1988 design	**1993 design**	**NSOPF-93 frame****
Research*	70	104	104
Percent of sample	14.6	10.7	
Percent of frame	66.7	100.0	3.2
Other Ph.D.-granting*	50	109	109
Percent of sample	10.4	11.2	
Percent of frame	45.9	100.0	3.5
Comprehensive	115	242	578
Percent of sample	24.0	24.8	
Percent of frame	19.9	41.9	17.8
Liberal arts	40	71	578
Percent of sample	8.3	7.3	
Percent of frame	6.9	12.3	17.8
Medical	20	35	52
Percent of sample	4.2	3.6	
Percent of frame	38.5	67.3	1.6
Religious	20	20	309
Percent of sample	4.2	2.0	
Percent of frame	6.5	6.5	9.5
Two-year	120	328	1,107
Percent of sample	25.0	33.7	
Percent of frame	10.8	23.0	34.0
Other	45	33	222
Percent of sample	9.4	3.4	
Percent of frame	20.3	14.9	6.8
Unknown	0	31	197
Percent of sample	0.0	3.2	
Percent of frame	0.0	15.7	6.0
Total	480	974	3,256
Percent of sample	100.0	100.0	
Percent of 1993 frame	14.7	29.9	100.0

* The "other Ph.D.-granting" stratum represented 100 percent of the frame because: 1) all public doctoral granting institutions were selected with certainty, and 2) all private doctoral granting universities were selected in the initial sample or added to the sample later when 185 supplemental institutions were selected to compensate for institutions determined to be ineligible or for institutions that were unlikely to have participated in the study. All institutions in the research stratum were selected with certainty. See sections 3.6 and 3.7 for further discussion.
****** Represents a subset of the IPEDS universe. Only those higher education IPEDS institutions that are nonproprietary, are located in the 50 states or the District of Columbia, and are accredited by the U.S. Department of Education were included in the frame.

3.5 First Stage Sampling: Institution-Level

At the time of sample selection, 278 (8.5 percent) of the 3,256 institutions in the sample frame could not be classified using the 1987-88 Carnegie crosswalk file. Updates were supplied for 81 of these institutions by Carnegie staff, leaving 197 institutions unclassified. This remaining group of unclassified institutions was designated as "unknown" in the sample frame. In addition, NCES requested that 25 institutions be transferred from the "Other" Carnegie classification into "Liberal Arts." These institutions included Teachers' Colleges (Carnegie code=58) and Institutions of Art, Music, and Design (Carnegie code=56) whose highest level of offering was a Bachelor's degree. This adjustment was made under the assumption that these institutions more closely approximated Liberal Arts colleges than other specialized institutions.

Institutions were stratified according to a cross-classification of control by type. There were two levels of control, public and private, and nine types, as discussed in section 3.4: research, other Ph.D., comprehensive, liberal arts, medical, religious, two-year institutions, other, and unknown. Since there are no public religious institutions, the cross-classification has 17 cells. The desired sampling rates for three of the cells, public research, private research, and public "other Ph.D.," were so close to 100 percent that it was appropriate to sample all of the institutions in those cells. A separate sampling stratum was constructed for these institutions, "stratum 15"; all institutions in this stratum were selected (i.e. selected with certainty). Grouping the institutions together in stratum 15 makes sense from a sampling design and selection standpoint, although this stratum does not comprise a grouping of analytical interest. Institutions in the other 14 strata are referred to as noncertainty institutions. The 15 sampling strata are described below:

Stratum 1 = Private, other Ph.D.
Stratum 2 = Public, comprehensive
Stratum 3 = Private, comprehensive
Stratum 4 = Public, liberal arts
Stratum 5 = Private, liberal arts
Stratum 6 = Public, medical
Stratum 7 = Private, medical
Stratum 8 = Private, religious
Stratum 9 = Public, two-year
Stratum 10 = Private, two-year
Stratum 11 = Public, other
Stratum 12 = Private, other
Stratum 13 = Public, unknown
Stratum 14 = Private, unknown
Stratum 15 includes all Public, research; Private, research; Public, other Ph.D. institutions

The stratum sample sizes for the noncertainty institutions, determined by a preliminary pass through the 14 strata, were allocated proportional to the total estimated number of faculty and instructional staff in each stratum. In those strata, the first-stage selections were made using stratified sampling with probabilities within each stratum proportional to the expected numbers of faculty and instructional staff. Various combinations of first-stage (institution) sampling rates and second-stage (faculty) sampling rates may be used to achieve equal selection probabilities for faculty. However, under reasonable assumptions, such as constant intraclass correlation within institutions in a stratum, setting first-stage probabilities proportional to the number of faculty in the institution and choosing a constant sized cluster of faculty from each selected institution is optimal in the sense of minimizing variance of sample means.

The sampling requirements for NSOPF-93 were developed using a dynamic standard error model that simulated various sampling scenarios at the institution and faculty levels. After numerous simulations of the model were performed, it was determined that acceptable levels of precision for most faculty subgroups could be obtained with an institutional sample of 789 institutions. To meet the study's analytical objectives, the sample design also required oversampling certain subgroups of faculty including: full-time females; black, non-Hispanics and Hispanics; Asian/Pacific Islanders; and faculty in four disciplines of particular interest (philosophy/religion, foreign language, English language and literature, and history). An average cluster size of 41.5 faculty was targeted for each institution. Systematic probability proportional to size (PPS) sampling with a measure of size (MOS) equal to 41 or the estimated number of faculty, whichever was larger, was used to select institutions.

MOS was defined as the total number of faculty as specified in the most recent IPEDS available at the time (the 1991 Fall Staff survey). Of the 3,256 institutions listed on the sample frame, 3,106 had a MOS available. For the remaining 150 (4.6 percent) institutions for which faculty data were missing, MOS was imputed using one of two methods. After imputation, the MOS was available for each institution in the frame, whether selected or not.

The first imputation method involved 123 of the 150 institutions for which only student enrollment data were available from the most recent IPEDS file. A student-faculty (S-F) ratio was first calculated for the 3,106 institutions for which information on both variables was available. The S-F ratio was then arrayed by type and control for these institutions. A MOS for the 123 institutions was determined using the following formula: (number of students)/(S-F ratio for that institution's cell). The second method of imputation involved the 27 remaining institutions for which neither student nor faculty enrollment data were available. The average number of faculty for the 3,106 institutions was calculated by type and control and the 27 institutions were given an imputed MOS based on the average number of faculty for their respective cells.

In systematic sampling, the order in which the institutions are listed on the frame is important because it reflects an implicit stratification. Within each stratum the institutions were sorted by MOS in a "serpentine" manner, i.e., if one stratum was sorted in ascending order by MOS, the next was sorted in descending order, the one after that was sorted in ascending order, and so on. This procedure helped to balance the sample with respect to institution size (based on number of faculty). A total of 789 institutions was initially selected and later supplemented with 185 institutions for a total of 974 selected in the first stage (see section 3.6 below).

Institutions were selected in two replicates. The first replicate, "Pool 1," contained the initial sample of 789 noncertainty and certainty institutions. The second replicate, "Pool 2," was sorted into random order within strata and contained 606 noncertainty institutions. Pool 2 provided a source of institutions available so that like institutions could be selected to replace nonparticipating Pool 1 institutions.

3.6 Institution Nonresponse

Nonresponse is likely to increase sample variance by causing departures from strict PPS selections. Nonresponse is also likely to cause some bias, the extent of which is difficult to measure. Nonresponse rates were used to serve as simple indicators of the magnitude of nonresponse.[6] Institutions that were determined ineligible or which could not be recruited after extensive follow-up were replaced at random by institutions within the same explicit stratum in Pool 2.[7] Since, by definition, all institutions in stratum 15 were selected, they did not have replacements within stratum 15.

However, research institution non-participation posed a problem with attaining sufficient samples of some of the important faculty groups targeted for oversampling. Thus, a decision was made to include additional institutions from similar strata. "Private, other Ph.D." "Public comprehensive" and "Private comprehensive" sampling strata were used for this purpose. Sixteen nonresponding certainty institutions were compensated for in this manner. More on nonresponse rates can be found in Chapter 4.

[6]Nonresponse rates were calculated separately for Pool 1 selections and for the combined selections from Pool 1 and Pool 2 (excluding nonselections from Pool 2).

[7]The first replicate, "Pool 1," contained the original sample. If 100 percent response could be achieved, the second replicate, "Pool 2," would not have been used at all. The response rate was not 100 percent, however. Pool 2 was sorted into random order within stratum. When a nonresponse was encountered in stratum x ($1 \leq x \leq 14$) in Pool 1, the first nonselected institution from stratum x in Pool 2 was selected as a replacement institution.

The sampling plan assumed an institutional participation rate of 95 percent and a faculty response rate of 85 percent, for a yield of approximately 750 institutions and 27,750 faculty. However, the final institution participation rate (i.e., provided faculty lists) was 85 percent, based on the total institution sample (the original sample plus 185 supplemental institutions). The lower-than-anticipated institutional participation rate did not, however, noticeably hamper the representativeness of the sample. NCES performed a discriminant analysis comparing faculty characteristics reported on a sample of the NSOPF-93 faculty sampling lists with the faculty characteristics detailed in the IPEDS universe. The analysis showed no significant differences between the NSOPF-93 sampling lists and the IPEDS universe.

3.7 Institution Replacements

Based largely on the field test experience, it was initially anticipated that 20 to 25 percent of the sampled institutions would ultimately refuse to participate in the full-scale study. Between October 1992 and early March 1993, 26 institutions in the original sample were replaced by randomly selected comparable institutions (from Pool 2): five because they were ineligible and 21 because they were determined to be final refusals. After trying to gain cooperation from the initial sample of 789 institutions for almost six months, it was determined that a certain number of other institutions were unlikely to participate in the study. These institutions were identified in March 1993 and 159 additional institutions were randomly selected within the relevant strata (from Pool 2). Thus, a total of 185 institutions, representing 23 percent of the initial sample (n=789), was selected to compensate for institutions determined to be ineligible or for institutions that were unlikely to participate in the study. Replacement selections were made to achieve two objectives: to assure adequate representation across strata, and to achieve an institution participation rate of 85 percent. Project staff tried to gain cooperation from both the original and replacement samples simultaneously. The final participation rate for list collection was 85 percent for both the original sample and the additional sample.

Typically, an institution that initially refused to participate was recontacted by key members of the project staff, usually by one of the project supervisors. After determining the reasons for their refusal, a specific plan was proposed to respond to the institution's concerns. In some instances, this meant providing compensation to prepare the list; in other instances, it required accepting a list without some of the requested sampling or address information. If the proposed plan proved unacceptable to the institution, other senior members of the project staff or the NCES project officer recontacted the institution to try once again to win their participation. If following these repeated attempts the institution still decided not to participate, the institution was considered a final refusal.

3.8 Second Stage Sampling: Faculty-Level

At the second stage of sample selection, the NSOPF-93 sampling frame consisted of lists of faculty and instructional staff obtained from 817 participating institutions. The sampling of faculty was handled by a multi-step program developed specifically for NSOPF-93. The program was designed to ensure the adequate representation in the sample of particular faculty groups, according to NSF and NEH analytical objectives. These faculty groups were: full-time females; black, non-Hispanics and Hispanics; Asian/Pacific Islanders; and faculty in four NEH-designated disciplines: philosophy/religion, foreign languages, English language and literature, and history. The sampling program proceeded through the following steps in sampling an institution's faculty:

(1) Each institution was randomly assigned a target total sample size, say n, of either 41 or 42 to yield the desired average cluster size of 41.5. Whenever an institution employed fewer than 42 individuals, all faculty were selected.

(2) Depending on the composition of an institution's faculty, the program oversampled to achieve the following average oversample sizes[8] per institution:

Black, non-Hispanic/Hispanic	5.6081
Full-time female	3.3649
Faculty in NEH disciplines	2.2432
Asian/Pacific Islander	1.1216
None of the above	0.0000 (no oversampling)

The oversample sizes in each institution were randomly rounded to integers; the rounding was independent across institutions.

(3) Some faculty belonged to more than one of the oversampled groups—termed "multi-group" members. For example, a full-time faculty member who was a Hispanic female would belong to two of the groups. To use stratified sampling to select the faculty, it was necessary to classify each faculty member into just one of the groups. Once this was accomplished, the groups would be exhaustive and mutually exclusive and hence they would be true strata. Although simple randomization could have been used to assign multi-group members to a single group, alternative methods of assignment can lead to more efficient samples. Thus, it was decided to make the assignments so as to minimize the oversampling rates.[9] Specifically, the faculty lists were processed sequentially, so that in a given institution a multi-group member was assigned to the group for which the oversampling rate (defined as the oversample size divided by the number of individuals in that institution which could qualify for the group) was largest. As the program proceeded through the list, the oversampling rates varied depending on how many multi-group members there were and how they were classified into single groups. At the end of this step, each faculty member was classified into one group. The oversample size for each group was then checked to ensure that it did not exceed the number of members of the group; any oversample sizes that did were reduced accordingly.

(4) The final sampling rate for a group was set equal to the sum of the oversampling rate and the rate that would have been used if no oversampling was done. Using these final sampling rates, stratified sampling was performed with the groups as strata.

(5) The residual sample size (n minus the sum of the oversample sizes) was allocated across the five strata in proportion to the number of faculty in the strata. Then the total sample in each stratum (consisting of the oversample size plus the proportionally allocated residual) was specified by simple random sampling without replacement, with the sampling independent from one faculty stratum to the next.

[8]The oversample size for a group is the difference between the expected sample size for the group and the expected sample size that would have been attained if all faculty had been sampled at the same rate, i.e., in the absence of oversampling.

[9]The oversampling rate is the ratio of the oversample size to the size of the group. Increasing the size of the group decreases the oversampling rate. The lower the oversampling rate, the smaller the design effect due to unequal weighting. Oversample sizes were not affected.

Among the 789 initial sample institutions, it was determined that 48 (6.1 percent) institutions overlapped with the NSOPF-93 field test sample. Six of the institutions from the replacement pool also overlapped with the field test sample for a combined overlap (initial and replacement) of 54 institutions or 5.5 percent of the 974 selections. Faculty who were selected into both the field test and the full-scale study samples were excluded from the latter in accordance with OMB requirements.

3.9 Subsampling of Faculty

As a cost-saving measure, 2,000 faculty were subsampled from the overall sample of faculty in August, 1993. This reduced the sample size for the NSOPF-93 faculty sample from 33,354 to 31,354. These faculty were subsampled at random. First, all completed cases were excluded from the subsample. Second, all remaining cases were assigned a "wave" indicator, taking integer values from 1 to 6, indicating which of the six survey waves the case belonged to. Because all faculty in any institution belonged to the same wave, subsampling then proceeded according to the following specifications. (For further explanation of the fielding of the faculty survey in waves, see sections 4.3 and 4.4.)

For wave j, let N_j denote the number of faculty selected, let n_j denote the number of faculty cases completed, and let $A_j = N_j - n_j$ denote the number of cases not yet completed. Let A_+ denote the sum of the A_j terms, i.e., $A_+ = A_1 + A_2 + \ldots + A_6$. Subsampling proceeded in two steps. First the number of cases to be excluded (subsampled out) of wave j, say m_j, was calculated. Second, these cases were subsampled out.

Set $m_j = 2000(A_j / A_+)$ for each wave j. For each wave j, $1 \le j \le 6$, A_j noncompleted cases from wave j were sorted by institution. Thus, all faculty in an institution appeared consecutively in the file. Then a random start was chosen and systematic sampling taking every kth record from stratum j was performed. This yielded a sample of m_j records. These cases were removed from the sample.

The $A_j - m_j$ cases in wave j that were not excluded by this sampling received a flag indicating that they were eligible for exclusion at this point but were not excluded. Their raw sampling weights were inflated by a factor equal to $1/(1 - m_j/A_j)$.

3.10 Calculation of Weights

The sample was weighted to produce national estimates of institutions and faculty by using weights designed to adjust for differential probabilities of selection and nonresponse at the institution and faculty levels. After excluding ineligible institutions from the institution sample, the adjusted weights for institutions sum to 3,188.[10] Likewise, after excluding ineligible members from the faculty sample, the adjusted weights for faculty sum to 1,033,966, the estimated total number of faculty in the target population. This number includes instructional staff who did not have faculty status and whose instructional duties related only to noncredit courses or advising, or to supervising noncredit academic activities.

Three weights were computed for the NSOPF-93 sample: a first-stage institution-level weight and final institution and faculty weights. The first-stage institution-level weights accounted for the institutions that participated in the study by submitting a faculty sampling list and permitted faculty members to be sampled. The two final weights—weights for the sample faculty, and institution-level weights for those institutions that returned institution questionnaires—were adjusted for nonresponse. The final faculty weights were poststratified to the "best" estimates of the number of faculty, a procedure which is described in section 3.13.

[10]Twelve institutions in the sample were found to be ineligible. When ineligible institutions were excluded from the sample, the sum of weights for eligible institutions was 3,188, rather than the 3,256 institutions specified in the sampling frame.

A poststratification adjustment to the IPEDS population was not calculated. The IPEDS and NSOPF-93 faculty population definitions and estimates, although similar in many respects, are not identical nor are they intended to correspond directly. IPEDS defines as Faculty (Instruction/Research) "all persons whose specific assignments customarily are made for the purpose of conducting instruction, research or public service as a principle activity (or activities) and who hold academic-rank titles of professor, associate professor, assistant professor, instructor, lecturer, or the equivalent of any of these academic ranks. If their principle activity is instructional [this category also includes] deans, directors, or the equivalent, as well as associate deans, assistant deans and executive officers of academic departments…" While NSOPF-93's definition of instructional faculty parallels the IPEDS definition, many of the job titles that NSOPF considers non-instructional faculty are classified in IPEDS under other non-faculty categories. For example, in its instructions to IPEDS respondents, NCES lists "librarians' as an example of a "Professional Non-Faculty" position. Yet, NSOPF-93 institution questionnaire respondents listed "librarians" as the largest single group of non-instructional *faculty*. Because of these definitional differences between the NSOPF and IPEDS populations, a poststratification adjustment to IPEDS estimates was ruled out.

3.11 First-Stage Institution Weights

The first-stage institution weights for the NSOPF-93 faculty survey were constructed in three steps. First, the institution's base weight was calculated as the reciprocal of its selection probability. Second, the initial base weights were adjusted for institutions that had merged and so were effectively listed multiple times in the sampling frame. Finally, nonresponse adjustment factors were applied to the weights to compensate for institution-level nonresponse.

Base weights. The selection probability for an institution's selection into the sample, P^*_{hi}, was calculated by dividing the institution's MOS by the product of the total number of faculty members in the institution sampling stratum which included that institution and the reciprocal of the desired sample of institutions for that stratum. The first-stage base weight for institution i in stratum h, $W_{1.hi}$, is the reciprocal of the first-stage selection probability, P^*_{hi}. These initial weights reflect the several steps used to select the institutions. In the first step, a stratified sample was drawn, with extra selections from each stratum. The selections were then sorted into two groups, Pool 1 and Pool 2, so that (i) all certainty selections were put into Pool 1, and (ii) the noncertainty selections within each stratum were systematically randomly allocated to Pool 1 or Pool 2. The Pool 1 institutions were those selected for initial fielding in the survey, and the Pool 2 institutions were extra institutions to compensate for nonresponse among Pool 1 institutions. Thus, although all of Pool 1 institutions were selected for the sample, most of the Pool 2 selections were not selected. Within each stratum, Pool 2 institutions were sorted into random order and then selected as needed for inclusion in the survey.

For institution i, in stratum h, with a desired sample size of n_h, the selection probability is

$$P^*_{hi} = \frac{MOS_{hi}}{\frac{\sum_{i=1}^{n_h} MOS_{hi}}{n_h}}$$

For institution i, in stratum h, the first-stage base weight is

$$W_{1.hi} = 1/P^*_{hi},$$

with P^*_{hi} representing the probability that institution i in stratum h was selected for fielding. The selection probability for institution i in pool g and in stratum h was 1 for certainty institutions and $P_{hi}(b_{1h} + a_{2h})/b_h$ for noncertainty institutions, with

a_{gh} = number of noncertainty selections in Pool g, stratum h that were actually fielded
b_{gh} = total number of noncertainty selections in Pool g, stratum h
b_h = the total number of noncertainty selections in either pool (= $b_{1h} + b_{2h}$)
P_{hi} = probability that institution i in stratum h was selected into either Pool 1 or Pool 2.

Note that $a_{1h} = b_{1h}$. The probability that noncertainty institution i in stratum h was selected into Pool 1 and fielded is $P_{hi}b_{1h}/b_h$ (all Pool 1 institutions were fielded); the probability for a certainty institution is 1. The probability that institution i in stratum h was selected into Pool 2 and surveyed is $P_{hi}a_{2h}/b_h$. The probability that institution i in stratum h was selected for fielding is the sum of these two probabilities.

Adjustment for multiplicity. After the sample had been selected and institutions were contacted, it was learned that a few of the institutions in the sample had merged with other institutions on the sampling frame. Since a merged institution would be in the sample if either listing of the institution was selected from the frame, its sampling weight had to be reduced. Let A denote the listing of the institution that was selected and let B denote the other listing. If P^*_A and P^*_B denote the respective selection probabilities, the probability of surveying either institution was approximately $P^*_A + P^*_B - P^*_A \times P^*_B$. (This approximation rests on the assumption of independence of selection, which has a trivial numerical effect.) Thus, the weights for such an institution were modified accordingly. Specifically, the base weight for institution A was changed to

$$W'_{1.A} = W_{1.A} \times W_{1.B} / [W_{1.A} + W_{1.B} - 1]$$

if institution A was identified with institution B, and $W'_{1.A} = W_{1.A}$ otherwise. We will use the notation $W'_{1.hi}$ to denote the weight for institution i in stratum h after modifications of the weights for multiplicity.

Adjustment for nonresponse. Prior to computing the nonresponse adjustment, two indicators were created to flag cooperating and eligible institutions. The first indicator, I_{hi}, was given the value of 1 if institution i in stratum h cooperated in the survey and 0 if the institution did not cooperate. Similarly, the second indicator variable, J_{hi}, was set to 1 if the surveyed institution i in stratum h was found to be eligible and to 0 if it was found to be ineligible. Institutions that turned out to be ineligible as cooperators were classified; thus, it is possible that $I_{hi} = 1$ and $J_{hi} = 0$. Institutions were classified according to the following exhibit, in which h_{ab} denotes a weighted number of institutions in the sample (weighted by $W'_{1.hi}$).

Exhibit 3-2: Classification of institutions by eligibility and cooperation

	Eligible	Not eligible	Total
Respondents	η_{11}	η_{12}	η_{1+}
Nonrespondents	η_{21}	η_{22}	η_{2+}
Total	η_{+1}	η_{+2}	η_{++}

The desired response rate for the weighting adjustment is η_{11}/η_{+1}, based on eligible institutions. However, direct estimates are available for only η_{11}, η_{12}, η_{1+}, η_{2+}, and η_{++}. If a surveyed institution was ineligible for the survey, that fact would have been established during the contacting process, i.e., $\eta_{22} = 0$.[11] This implies that h_{+1} can be calculated as $\eta_{+1} = \eta_{++} ? \eta_{12}$ and estimate the desired response rate by $\eta_{11}/(\eta_{++} - \eta_{12})$. In calculating nonresponse adjustments, it was possible to estimate the first-stage response rate for stratum *h*, $R_{1.h}$, using data only from institutions not found to be ineligible as indicated below:

$$R_{1.h} = \frac{\sum_{i=1}^{b_h} W'_{1.hi} I_{hi} J_{hi}}{\sum_{i=1}^{b_h} W'_{1.hi} J_{hi}}$$

In adjusting the institution-level weights, the original sampling strata were used to define nonresponse adjustment cells. (The response rates did not vary widely across other subgroups of institutions.)

The first-stage nonresponse-adjusted weight, $W''_{1.hi}$, was then calculated as:

$$W''_{1.hi} = W'_{1.hi}/R_{1.hi}.$$

[11]The contacting process was extensive and served two related goals, gaining cooperation and determining eligibility. The field staff were trained to be able to determine the eligibility of an institution. Since all nonresponding institutions were contacted, the eligibility rate is a known quantity for all institutions, both responding and nonresponding. Of the 974 institutions in the total sample, 12 (1.2 percent) were found to be ineligible. Ineligible institutions included those which had closed or which had merged with other institutions, satellite campuses that were not independent units, and institutions that did not grant any degrees or certificates.

3.12 Calculation of Faculty Weights

Weights for the faculty sample were computed in four steps. First, the base conditional selection probabilities were calculated; these reflected the selection rates for faculty members given that their institutions were sampled. In this step, the initial selection probabilities also were adjusted to reflect the exclusion of a random subsample of faculty. Then the reciprocals of these selection probabilities were calculated to yield conditional base weights. Second, these faculty base weights were multiplied by the first-stage nonresponse-adjusted weights to yield second-stage sampling weights adjusted for institutional nonresponse. Third, a second-stage nonresponse adjustment factor was applied to these latter weights to compensate for nonresponse by faculty members. Fourth, the nonresponse-adjusted weights were poststratified to the best estimates of total, full-, and part-time faculty by sampling stratum.

Second-stage weights. Faculty members in the surveyed institutions were selected by stratified random sampling within five strata per institution. The strata were based on classification of faculty as (i) black, non-Hispanic/ Hispanic (ii) full-time female faculty, (iii) faculty in one of the NEH disciplines, (iv) Asian/Pacific Islander faculty, and (v) all other faculty. The classification was unique, so that any faculty member on the institution's roster was assigned to only one stratum. Letting N_f denote the number of faculty on the roster who were assigned to stratum f, and n_f denote the number of faculty in stratum f in the institution who were sampled, the *initial* second-stage raw conditional selection probability weight for faculty member k in stratum f was calculated as n_f/N_f.

Each faculty member in the sample was classified into one of six "waves," denoted by the subscript j, and each faculty member was identified as being a respondent (or "initial respondent") or not by that point in the fielding of the sample. The first wave consisted of faculty who were contacted early on in the survey, and second wave faculty were contacted somewhat later, and the sixth wave faculty were contacted last. Thus, S_{kj} was set to 1 if faculty member k in wave j was an initial respondent and was 0 otherwise. If T_j denotes the number of initial nonrespondents in wave j, then

$$T_j = \sum_{k \in wave\ j} (1 - S_{kj}).$$

As discussed in section 3.9, 2,000 of the selected faculty were deliberately dropped from the sample during fielding of the sample. The exclusions were made randomly but the exclusion probabilities were not constant. Overall, 2,000 initial nonrespondents were dropped after subsampling. Let m_j denote the number of such excluded nonrespondents in wave j. The conditional probability that a faculty member was retained in the sample (i.e., not excluded), given that he or she was in wave j, equaled 1 if the faculty member was an initial respondent in that wave (i.e., if $S_{kj} = 1$), and it equaled $(1 - m_j/T_j)$ if the faculty member was an initial nonrespondent ($S_{kj} = 0$).

Thus, for initial respondents in each wave, the second-stage base weight ($W_{2.fk}$ for faculty member k in faculty-stratum f) was given by

$$W_{2.fk} = N_f / n_f .$$

For initial nonrespondents in wave j, the base weight was

$$W_{2.fjk} = N_f / [n_f(1 - m_j / T_j)].$$

Adjustment for institution-level selection and nonresponse. The second-stage weights were adjusted for institutional sampling and nonresponse by multiplying the raw second-stage faculty weight by the final

institution-level weight. Thus, for faculty member k in faculty stratum f in institution i in institution-level stratum h, the adjusted weight ($W'_{2.fkhi}$) is given by

$$W'_{2.fkhi} = W_{2.fk}W''_{1.hi} \text{ or } W_{2.fjk}W''_{1.hi},$$

depending on whether the respondent was classified as an initial respondent or initial nonrespondent.

Adjustment for faculty nonresponse. Response rates for part-time faculty differed significantly from those for full-time faculty. The nonresponse adjustment for faculty weights accounts for this. The following three variables were cross-classified to create the cells for nonresponse adjustment: institution stratum (15 categories), part-time/full-time status (two categories),[12] and race/ethnicity (two categories).[13] In principle, there should not be any missing values on the three classification variables. However, faculty lists for some institutions reported missing values for full-time/part-time status and for race/ethnicity, as illustrated in Exhibit 3-3.

Exhibit 3-3: Profile of faculty sampling lists

Total number of faculty sampling lists	31,354
Race/ethnicity present on sampling lists	22,715
Race/ethnicity missing on sampling lists	8,639
Available from faculty questionnaire	6,235
Not available from faculty questionnaire: Imputed	2,404
Full/part-time status present on sampling lists	27,659
Full/part-time status missing on sampling lists	3,695
Available from faculty questionnaire	2,824
Not available from faculty questionnaire: Imputed	871

Most of the missing data was directly imputed from the faculty questionnaire. The remainder of missing data for part-time/full-time status and for race/ethnicity was imputed using the sequential hot-deck method within the 15 institution strata.

To calculate nonresponse adjustment factors, let $W_{1.ijkl}$ be the base weights for lth faculty with jth part-time/full-time status and kth race/ethnicity background in ith institution stratum. And let corresponding indicator I_{ijkl} be the response indicator, i.e., $I_{ijkl} = 1$ if the sampled faculty member responded to the survey and $I_{ijkl} = 0$ if the sampled faculty member did not respond to the survey. The response rate, R_{ijk}, for faculty members with jth part-time/full-time status and kth race/ethnicity background in ith institution stratum is

[12] 1=Full-time, 2=Part-time, as determined by faculty list.

[13] 1=White; 2=non-White.

with the summation over *eligible* faculty selected within *ijk*th cell for the full-time faculty and with the

$$R_{ijk} = \frac{\sum_l W_{1.ijkl} I_{ijkl}}{\sum_l W_{1.ijkl}}$$

summation over *all* faculty selected within *ijk*th cell for part-time faculty, where this full-time/part-time status and race/ethnicity is obtained largely from the faculty list. It is assumed that all the ineligible cases for full-time faculty have been identified, and that the same ineligibility rate applies between respondents and nonrespondents among part-time faculty. This means that it is assumed that all nonrespondents coded as full-time are eligible, while nonrespondents coded as part-time are partly eligible and partly ineligible in the same ratio as among respondents coded as part-time.

The faculty weight adjusted for the nonresponse, $W_{2.ijkl}$, was

$$W_{2.ijkl} = \frac{W_{1.ijkl}}{R_{ijk}}$$

Within each cell, if there were at least 15 cases and the weighted response rate was not less than two-thirds of the overall weighted response rate, the nonresponse adjustment factor was computed. When a given cell did not meet these criteria, it was collapsed with a neighboring cell. Collapsing on race/ethnicity occurred first, followed by collapsing on part-time/full-time status. Such collapsing is intended to limit the large increase in variability that could be associated with large adjustment factors (i.e., large R^{-1}).

3.13 Poststratification to "Best Estimates"

In comparing the weighted estimates based on the lists of faculty and instructional staff provided by institutions with those based on the institution questionnaires, several patterns emerged that were contrary to expected results. Although some variance in the estimates based on the lists and the institution questionnaires was expected, the magnitude of the difference was larger than anticipated. This, in and of itself, was not seen as a problem since the estimates were from two different sources. What was less plausible were the trends in the estimates of part-time faculty between NSOPF-88 and NSOPF-93. The institution survey showed a 5 percent increase in the estimate of part-time faculty between the fall of 1987 and the fall of 1992. The faculty survey, based on the lists of faculty and instructional staff provided by the institution, showed no change in the percentage of part-time faculty between the two points in time. The weighted estimates based on the lists also showed a 37.5 percent decrease in the number of health sciences faculty and instructional staff from the fall of 1987 to the fall of 1992. Institution recontact was necessary to resolve these discrepancies and to determine the "best estimates" of total, full- and part-time faculty and instructional staff. Preliminary analysis of the faculty data file took place in Fall 1995. Institution recontact and reconciliation took place in January-March, 1996.

The best estimates were derived following a reconciliation and verification recontact with a subset of institutions which had discrepancies of 10 percent or greater between the total number enumerated on the faculty list used for sampling and the total number reported on the institution questionnaire. The recontact effort also included 120 institutions identified by NCES as medical schools or hospitals.

Of the 760 "matched" institutions[14] (i.e., institutions which provided both a completed institution questionnaire and a list of faculty and instructional staff), 450 (59 percent) had a discrepancy of 10 percent or more between the questionnaire and the list, and 61 of the 450 had health sciences faculty.

Of the 817 institutions which provided lists of faculty and instructional staff, 509 institutions (450 with 10 percent or greater discrepancies plus an additional 59 institutions identified as medical schools or hospitals) were recontacted. Before recontacting each institution, each discrepancy was reviewed to eliminate obvious clerical or list posting errors. A best estimate was obtained for 492 (or 96.7 percent) of these institutions.

It is important to point out that 118 of the reconciled institutions were unable to provide a specific reason for the discrepancies. For the 374 that provided reasons, the most commonly cited reason was the omission of some part- or full-time faculty from the list provided for sampling faculty. This occurred for 107 institutions. Some institutions included certain types of medical faculty in one set of estimates, but not in the other. Downsizing affected faculty counts at several institutions. Another factor in the discrepancies was the time interval (in some instances a year or more) between the time the list of faculty and instructional staff was compiled and the time the institution questionnaire was completed. The list did not always include new hires for the fall term, which were counted in the institution questionnaire. Some institutions provided "full-time equivalents" (FTE's) on the institution questionnaire rather than the actual headcount of part-time staff that was requested. In some instances, however, where part-time faculty and instructional staff were over reported (on either the list or the questionnaire) the reason involved confusion between the pool of part-time or temporary staff employed by, or available to, the institution and the number actually employed during the fall term.

NORC used data gathered in the recontacting effort to adjust the original list of faculty and instructional staff to incorporate recontacted institutions' best estimates into the final estimates. This process used as its starting point the original list, which reported totals for full-, part-time, and total faculty and instructional staff for each of the 817 participating institutions. However, in some cases, institutions which supplied a total number did not supply a breakdown of the total number into full- and part-time components.[15] For these institutions, NORC used a two-step procedure of deriving best estimates: first, deriving "best total estimates" and, second, deriving "best full-time estimates." Best estimates for part-time staff were simply calculated by subtracting the number of full-time staff from the total number at each institution.

Calculating best total estimates involved, first, the substitution of the verified counts from the 492 institutions NORC recontacted. If an institution verified the counts from its original faculty list or was unable to confirm other estimates, the original list estimate was retained as the best estimate. If the institution verified the institution questionnaire data as a more accurate estimate, questionnaire data were substituted for original list data as the best estimate. If the institution provided a different set of estimates, the new estimates were substituted for counts based on original list data.

Institutions which were nonrespondents in the verification effort and which had discrepancies of 10 percent or greater between the estimates of faculty and instructional staff based on the lists provided by institutions and

[14]A total of 929 of the 962 eligible institutions (96.6 percent) participated in the survey in some way—either by completing an institution questionnaire or by submitting a faculty list. A total of 872 institutions completed institution questionnaires and 817 institutions provided faculty lists. Of the 817 institutions which submitted faculty lists, 760 of them also completed an institution questionnaire. Therefore, "matched" data—counts of the total number of faculty at the institution drawn from the faculty list and from the institution questionnaire—are available only for these 760 institutions.

[15]Ninety-nine of the 817 institutions did not specify the employment status (i.e., full- or part-time) of faculty and instructional staff on their original lists.

those based on the institution questionnaire were adjusted by multiplying the original list count by the ratio of verified counts to original counts for the 492 recontacted institutions. Original list data were used for the institutions which were not selected for recontact. For all 817 institutions, the source of the final best estimates was as follows:

460 (56.3 percent) used original list data;
280 (34.3 percent) used questionnaire data;
61 (7.5 percent) used new estimates (other than questionnaire or original list data); and
16 (1.9 percent) were ratio-adjusted.

During the reconciliation effort, some ineligible faculty and instructional staff were excluded from the institution-level totals. This happened if recontacted institutions reported that the original faculty list had included ineligible faculty. This information was supplied by 23 institutions. It is assumed that faculty population estimates derived from the best estimate calculations include only eligible faculty. For more discussion of the verification process and calculation of best estimates, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

To create the final faculty weights, nonresponse-adjusted faculty weights were poststratified to "best estimates" of the national population of full-time and part-time faculty. Let $\hat{T}_{ij}$ be the best estimate for the total number of faculty with jth part-time/full-time status in ith institution stratum. The post stratified weights, $W_{3.ijkl}$, are

$$W_{3.ijkl} = W_{2.ijkl} \frac{\hat{T}_{ij}}{\sum_k \sum_l W_{2.ijkl}}$$

with the summation over all respondents within ijth cell. These poststratified final faculty weights produce the weighted national population estimates for the NSOPF-93 faculty questionnaire dataset.

The poststratification adjustment reduces sampling variability, and more importantly, it reduces reporting biases and bias due to undercoverage of the faculty sampling frame. Poststratification provides a means of weighting the faculty respondents to represent all faculty on the original faculty sampling frame as well as faculty missed on the frame. The method is entirely analogous to the nonresponse adjustment, where faculty respondents are weighted up to represent themselves as well as faculty nonrespondents. While the nonresponse adjustment is based upon the assumption that the means of respondents and nonrespondents are similar, the poststratification adjustment is based upon the assumption that the means of covered faculty and missed faculty are similar. Neither assumption is perfect, but the resulting estimates are thought to be more accurate than they would be in the absence of the adjustments.

Health sciences faculty estimates. Problems with estimates of health sciences faculty could only be partly rectified by the creation of new best estimates. The reconciliation effort helped to identify some institutions that failed to list health sciences faculty on their original faculty lists. Estimates for the national population of health sciences instructional faculty increased on the revised NSOPF-93 faculty data file. Yet, the revised NSOPF-93 estimate still remained below the NSOPF-88 estimate. Moreover, because faculty list data recorded faculty members' disciplines only for faculty in the four NEH disciplines, it was impossible to poststratify to best estimates for health sciences faculty. Estimates for health sciences faculty are discussed further in section 7.2.

3.14 Calculation of Weights for Institution Questionnaires

The weights for institution questionnaires were calculated in the same manner as the first-stage weights for institutions from which faculty were selected (see section 3.11), the only difference being the definition of "respondent." For calculating the weights for institutions with institution questionnaires, a respondent was defined as any institution from which an acceptable institution questionnaire was received. For most institutions, the response classification was identical under the two criteria. As a result, the weighting cells for the first-stage weights were used without change for the weights for institution questionnaires. Exhibit3-4 provides summary statistics of the faculty and institution weights.

Exhibit 3-4: Summary statistics for NSOPF-93 faculty and institution weights

Statistic	Faculty	Institution
Mean	40.11	3.66
Variance	1,605.92	16.68
Standard Deviation	40.07	4.09
Minimum	1.28	1.15
Maximum	710.75	27.11
Skewness	4.21	2.47
Kurtosis	33.95	5.8
Sum of Weights (rounded to whole number)	1,033,966	3,188

3.15 Design Effects and Approximate Standard Errors

Statistical estimates calculated using NSOPF-93 survey data are subject to two sources of error: sampling errors and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population. Sampling errors can be quantified using statistical procedures in which a variance estimate is calculated. NSOPF-93 analytical reports provide each estimate's standard error, which measures the variability of the sample estimator in repeated sampling, using the same sample design and sample size. It indicates the variability of a sample estimator that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a mean or proportion would include the true population parameter in about 95 percent of the samples. In general, for large sample sizes (n greater than or equal to 30) and for estimates of the mean or the proportion, the intervals described above provide a 95 percent confidence interval. If sample sizes are too small, or if the parameters being estimated are not means or proportions, then these intervals may not correspond to the 95 percent confidence level.

Sample estimates also are subject to bias from nonsampling errors. It is more difficult to measure the magnitude of these errors. They can arise for a variety of reasons: nonresponse, noncoverage, differences in the respondent's interpretation of the meaning of questions, memory effects, misrecording of responses,

incorrect editing, coding, and data entry, time effects, or errors in data processing. For example, noncoverage or incomplete lists (in which institutions did not provide a complete enumeration of eligible faculty) and listing of ineligible faculty necessitated the "best estimates" correction to decrease measurement error in the NSOPF-93 faculty population estimates. For a more detailed discussion of the noncoverage problem, see Chapter 10 of the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467] and Appendix R to that report. The NSOPF-93 field test, discussed in Chapter 1, tested the faculty and institution questionnaires (as well as the sample design, data collection, and data processing procedures) to minimize the potential for nonsampling errors.

Because the sample design involved stratification, disproportionate, and clustered probability sampling, the calculation of exact standard errors for survey estimates can be difficult. While popular statistical analysis packages such as SPSS or SAS can often accommodate unequal selection probabilities in the calculation of standard errors and other statistics by allowing for the use of weights, they do not calculate standard errors by taking into account complex sample designs. Because of NSOPF-93's complex sample design, standard errors generated by SPSS and SAS will usually underestimate the sampling variability of statistical estimates such as population means, percentages, and more complex statistics such as correlations and regression coefficients. Several procedures are available for calculating precise estimates of sampling errors for complex samples. Procedures such as Taylor series approximation, balanced half-sample replication (BHS), and jackknife repeated replication (JRR) produce similar results.[16] Consequently it is largely a matter of convenience which approach is taken. For BHS, 32 replicate weights are provided on the NSOPF-93 faculty and institution data files.

The institution sampling stratum variable, ISTRATUM, and the primary sampling unit variable, PSU, are provided on the data files to facilitate calculation of standard errors using the Taylor series approximation method.[17] This method was used to calculate standard errors reported in NSOPF-93 analytical reports and in the NSOPF DAS. Standard errors reported in the NSOPF-93 institution report, *Institutional Policies and Practices Regarding Faculty in Higher Education* [NCES 97-080] were produced with SUDAAN software using a "without replacement" design to handle the certainty stratum and the large sampling fractions in certain strata. These variance estimates assume a zero variance for the stratum of institutions selected with certainty. Section 3.16 discusses in greater detail variance estimation for institutions selected with certainty. In using the Taylor-series approximation method to calculate variances for the faculty report *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992* [NCES 97-470], based on the NSOPF-93 faculty dataset, a "with replacement" design was utilized.

The impact of departures from simple random sampling on the precision of sample estimates is often measured by the design effect. For any statistical estimator (for example, a mean or a proportion), the design effect is the ratio of the estimate of the variance of a statistic derived from consideration of the sample design to that obtained from the formula for simple random samples.

Exhibit 3-5 presents the average of the square roots of the DEFFs ("DEFT") for a randomly selected set of 30 dichotomized items in the NSOPF-93 faculty questionnaire. These 30 items, which were calculated using SUDAAN's Taylor series approximation method's "with replacement" design, appear in Exhibit 3-6 in

[16]Frankel, M., *Inference from Survey Samples: An Empirical Investigation* (Ann Arbor: Institute for Social Research, 1971).

[17]Two widely available variance estimation software packages, SUDAAN and CENVAR, use the Taylor series approximation method to calculate variances. For more information on SUDAAN, see Shah, Babubhai V., Beth G. Barnwell and Gayle S. Bieler, *SUDAAN User's Manual Release 6.4* (Research Triangle Park, N.C.: Research Triangle Institute, 1995). For information on CENVAR, see U.S. Bureau of the Census, *CENVAR IMPS Version 3.1* (Washington D.C.: U.S. Bureau of the Census, 1995).

Appendix O. Exhibit 3-5 presents mean DEFFs and mean DEFTs not only for total respondents, but also 30 subgroups: two genders (male and female), five racial/ethnic groups, and subgroups based on tenure status, faculty rank, employment status and type and control of institution. The design effects take into account the features of the sampling design: 1) stratification in the selection of institutions; and, 2) clustering (i.e., the use of institutions as first-stage sampling units, with clusters of 41 or 42 faculty sampled from each institution). Because of the small sample sizes within each Carnegie classification stratum in the institution sample, a similar exhibit of mean DEFFs and DEFTs was not produced for the institution sample. However, DEFFs and DEFTs for 30 randomly selected dichotomized institution questionnaire items appear in Exhibit 3-7 in Appendix O.

Exhibit 3-5: Mean design effects (DEFF) and root design effects (DEFT) for NSOPF-93 faculty subgroups

Faculty sample strata	DEFF	DEFT
Total	3.52	1.82
Gender		
Male	2.90	1.66
Female	2.53	1.57
Race/ethnicity		
American Indian/Alaskan Native	1.44	1.17
Asian/Pacific Islander	2.00	1.40
Black, non-Hispanic	2.33	1.50
Hispanic	2.52	1.56
White, non-Hispanic	3.21	1.74
Tenure status		
Tenured	2.62	1.59
On tenure track, but not tenured	2.23	1.47
Not on tenure track	2.29	1.50
No tenure system for R's faculty status	2.24	1.48
No tenure system at institution	3.34	1.78
Faculty rank		
Not applicable	2.21	1.46
Full professor	3.03	1.69
Associate professor	2.43	1.53
Assistant professor	2.45	1.54
Instructor	2.57	1.57
Lecturer	1.75	1.31
Other ranks	2.93	1.61
Type and control of institution		
Public research	1.80	1.32
Private research	2.39	1.51
Public Ph.D. and medical	2.42	1.53
Private Ph.D. and medical	3.85	1.90
Public comprehensive	2.43	1.53
Private comprehensive	2.74	1.57
Private liberal arts	2.62	1.55
Public two-year	3.05	1.69
Other	2.93	1.61
Employment status		
Part-time	2.57	1.58
Full-time	3.03	1.69

Researchers who do not have access to software for computing estimates of standard errors can use the mean design effects presented in Exhibit 3-5 to approximate the standard errors of statistics based on the NSOPF-93 data. Design-corrected standard errors for a proportion can be approximated from the standard error computed using the formula for the standard error of a proportion based on a simple random sample and the appropriate mean root design effect (DEFT):

$$SE = DEFT \times [\ ((p\ (1\text{-}p)/n)]^{1/2} \quad (1)$$

where p is the weighted proportion of respondents giving a particular response, n is the size of the sample, and DEFT is the mean root design effect.

Similarly, the design-corrected standard error of a mean can be approximated from the standard error based on simple random sampling and the appropriate mean DEFT:

$$SE = DEFT \times (Var/n)^{1/2} \quad (2)$$

where Var is the simple random sample variance, n is the size of the sample, and DEFT is the mean root design effect. Exhibit 3-5 makes clear that the design effects and root design effects vary considerably by subgroup. It is therefore important to use the mean DEFT for the relevant subgroup in calculating approximate standard errors for subgroup statistics.

Standard error estimates may be needed for subgroups that are not tabulated here. One rule of thumb may be useful in such situations: design effects will generally be smaller for groups that are formed by subdividing the subgroups listed in the tables. This is because smaller subgroups will be less affected by clustering than larger subgroups. Estimates for minority respondents, for example, will generally have smaller design effects than the corresponding estimates for all respondents. For this reason, it will usually be conservative to use the subgroup mean DEFT to approximate standard errors for estimates concerning a portion of the subgroup. This rule applies only when the variable used to subdivide a subgroup crosscuts institutions. Gender is one such variable, since most institutions include faculty of both sexes. It will not reduce the average cluster size to form groups that are based on subsets of institutions.

Standard errors may also be needed for other types of estimates than the simple means and proportions that are the basis for the results presented here. A second rule of thumb can be used to estimate approximate standard errors for comparison between subgroups. If the subgroups crosscut institutions, then the design effect for the difference between the subgroup means will be somewhat smaller than the design effect for the individual means. The variance of the difference estimate will be less than the sum of the variances of the two subgroup means from which it is derived:

$$Var(b\text{-}a) \leq Var(b) + Var(a) \quad (3)$$

in which Var(b-a) refers to the variance of the estimated difference between the subgroup means, and Var(a) and Var(b) refer to the variances of the two subgroup means. It follows from equation (3) that Var(a) + Var(b) can be used in place of Var(b-a) with conservative results.

A final rule of thumb is that some complex estimators show smaller design effects than simple estimators.[18] Thus, correlation and regression coefficients tend to have smaller design effects than subgroup comparisons, and subgroup comparisons have smaller design effects than means. This implies that it will be conservative to use the mean root design effects presented here in calculating approximate standard errors for multiple regression coefficients. The procedure for calculating such approximate standard errors is the same as with simpler estimates. First, a standard error is calculated using the formula for data from a simple random sample; then, the simple random sample standard error is multiplied by the appropriate mean root design effect. This rule of thumb may not apply to other complex estimators,[19] and analysts should use caution in applying it to complex estimators other than regression coefficients.

3.16 Calculating Estimates for Institutions Selected with Certainty

All 168 institutions in the certainty stratum were selected into the institution sample. One hundred fifty-two (152) of them returned faculty sampling lists and 144 of them responded to the institution questionnaire. Thus, aside from a small nonresponse variance, the variability associated with this stratum in the institution questionnaire dataset is essentially zero.

Analysts should take note of two cautions about calculating estimates of sampling variability from the NSOPF-93 *institution questionnaire dataset*. First, if a comparison is to be made between the class of institutions in the certainty stratum and other classes of institutions, then (as an approximation) either the variance of the estimator for the certainty stratum should be set equal to zero, or a without-replacement type variance formula should be used for the certainty stratum with an appropriate finite population correction factor to account for random nonresponse variance. The former recommendation is equivalent to setting the variance of the estimated difference equal to the variance of the estimator for the noncertainty class.

Second, if analysis calls for certainty and noncertainty institutions to be combined, then appropriate standard errors should be calculated. For example, in most tables in NSOPF-93 analytical reports, noncertainty institutions are divided into seven (out of nine) modified Carnegie strata, and institutions selected with certainty are divided into three strata: "Public Research," "Private Research," and "Public Doctoral."[20] The two research strata include *only* certainty institutions, and thus any estimators of variance for these strata should follow the recommendations presented above. Standard errors must be calculated for estimators for the public doctoral stratum, however, because it includes both certainty and noncertainty institutions (i.e., medical institutions).

Even in the case of the 14 noncertainty strata, many of the sampling fractions are important. Thus, a without-replacement type variance formula—incorporating appropriate finite population correction factors—should be used for these strata also.

[18]Kish, L., and Frankel, M., AInference from Complex Samples,≅ *Journal of the Royal Statistical Society: Series B* (Methodological), 36 (1974): 2-37.

[19]Skinner, C.J., Holt, D., and Smith, T.F.M., eds., *Analysis of Complex Surveys* (Chichester, England: Wiley, 1989): 70.

[20]In the institution stratum variable used in most NSOPF-93 analytical reports, the stratum labeled "Public Doctoral" is not equivalent to the set of "Public, Other Ph.D." institutions which form part of the certainty stratum in the sampling variable, since the "Public Doctoral" stratum includes medical institutions.

3.17 Using Replicate Weights with the NSOPF-93 Datasets

Both the NSOPF-93 institution and faculty datasets include 32 replicate weights for variance estimation. These weights implement the balanced half-sample (BHS) method of variance estimation.[21] Two widely available software packages, WesVarPC®,[22] and PC CARP,[23] have capabilities to use replicate weights to estimate variances.

Analysts who use either the faculty file or the institution file should be cautious about cross-classifying data so deeply that the resulting estimates are based upon a very small number of observations. Analysts should interpret the accuracy of NSOPF-93 statistics in light of estimated standard errors and in light of the number of observations used in the statistics. Analysts should also be cautious about use of BHS-estimated variances that relate to one stratum or to a group of two or three strata. Such variance estimates may be based upon far fewer than 32 replicates, and thus the variance of the variance estimator may be large.

3.17.1 Faculty File Replicate Weights

To achieve NCES standards, $k = 32$ half-sample replicates were employed in both the restricted-use faculty data file and the public-use faculty data file. The 15 sampling strata were subdivided to form 31 pseudo-strata. Let w_j denote the full-sample weight for the jth faculty respondent, and let w_{ja} denote the weight corresponding to the a-th half-sample for the same respondent. Using $k = 32$ half-sample replicates, 33 (or 1 + 32) sets of weights were created. Nonresponse weighting adjustments and poststratification were performed within each half-sample replicate.

Define the real-valued function $G(\bullet)$ as

$$G(w) = +1, \quad \text{if } w > 0,$$

$$= -1, \quad \text{if } w \ ? \ 0,$$

and define $\mathbf{G}_j = (G(w_{j1}), G(\ w_{j2}\ ), \ldots, G(w_{jk}))$.

The 32 replicate weights provided for variance estimation on the NSOPF-93 faculty data file did not incorporate finite population correction factors. The finite population correction factor (fpc) is omitted, because the faculty population being much larger than the NSOPF-93 sample, the sampling fraction (i.e., the ratio of the sample to the total population) tends to zero and the fpc approaches 1.

[21]For a discussion of the balanced half-sample (BHS) method of variance estimation, see Wolter, Kirk M., *Introduction to Variance Estimation* (New York: Springer-Verlag, 1985), pp. 110–152.

[22]Westat, Inc., *A User's Guide to WesVarPC®, Version 2.0* (Rockville, Md.: Westat, Inc., 1996).

[23]Fuller, Wayne C., *et al., PC CARP IV*. (Ames, Iowa: Statistical Laboratory, Iowa State University, 1986).

3.17.2 Institution File Replicate Weights

Institution dataset replicate weights incorporate finite population correction factors. This is important because several of the institution sampling strata sampled large proportions of institutions listed on the frame. As the number of sampled units in each strata approaches the finite number of possible units that could be sampled in that strata, the standard errors for estimates incorporating these units correspondingly decrease. Therefore, to account fully for the proportion of the frame of institutions in each sampling strata, finite population correction factors (fpc) have been incorporated into the replicate weights. For the purposes of these calculations, the approximate finite population correction factor is:

$$fpc = 1 - [\frac{1}{n} \sum_i \frac{1}{w_i}]$$

where n is the number of responding institutions in each stratum and w_i is the final institutional weight adjusted for nonresponse. Finite population correction factors for each stratum are reported in Exhibit 3-8 in Appendix O.

Replicate weights for the NSOPF-93 institution dataset proceeded from three assumptions. First, random nonresponse was assumed in each stratum. For purposes of variance estimation, the 144 institutions in the certainty stratum were treated as a random sample from a population of 168 institutions. Therefore, the replicate weights calculate a variance for the certainty stratum despite the fact that all certainty institutions were selected into the sample with a probability of one.

Second, all replicate weights incorporate finite population correction factors for each stratum reported in Exhibit 3-8 in Appendix O. This approach reflects the Anear-certainty≅ (144 out of 168 institutions) status of the certainty stratum in the NSOPF-93 institution survey. It also includes the important fpc in stratum 1 ("Private, Other Ph.D.") and other noncertainty strata. Standard errors calculated using these replicate weights are smaller than standard errors calculated by other means, such as Taylor series standard errors presented in NCES's report, *Institutional Policies and Practices Regarding Faculty in Higher Education* [NCES 97–080].

To incorporate finite population corrections in variance calculations, a half-sample estimator was used:

$$\hat{Y}^*_a = \sum U_{ia} Y_i \qquad (a = 1, \ldots k),$$

where the u-weights are defined by

$$U_{ia} = W_i + \sqrt{l_i} \qquad (W_{ia} - W_i),$$

λ_i is the approximate finite population correction factor for the stratum in which institution i was sampled, and the summation is over all respondents in the full sample. The u-weight can be rewritten as

$U_{ia} = W_i(1 - \sqrt{l_i})$, for institutions not in the α-th half sample

$\doteq W_i(1 + \sqrt{l_i})$, for institutions in the α-th half sample.

Thus, the final replicate weights, i.e., the u-weights, are larger than the full-sample weights for institutions in the half sample and smaller for institutions not in the half sample.

The standard BHS (balanced half-sample) formula for variance calculations applies here, namely

$$v(\hat{Y}) = \frac{1}{k}\sum(\hat{Y}_a^* - \hat{Y})^2,$$

and $\hat{Y}$ is equal to the mean of the $\hat{Y}_a^*$ across the *k* half samples. For NSOPF, *k* = 32 for both the institution and the faculty files.

Third, to produce the NCES-required 32 replicate weights, institutions in each pseudo-stratum were separated into two random groups and specified 32 balanced half samples. Replicate weights for each half sample and a set of weights for the full sample were then calculated. Nonresponse weighting was performed independently within each half-sample.

4. Data Collection

4.1 Overview

Institutions were recruited for NSOPF-93 from an initial sample of 974 postsecondary institutions. (See Chapter 3 for a discussion of sample selection and eligibility.) Of these 974 institutions, 962 were eligible and 817 agreed to participate in the study by supplying a list of their faculty. The NSOPF-93 faculty questionnaire collected data from a sample of full- and part-time faculty, both instructional and non-instructional, and other staff with instructional duties at participating institutions. The final sample of faculty was 31,354 (the original sample of 33,354 less the subsample of 2,000) drawn from lists supplied by the 817 participating institutions. The NSOPF-93 institution questionnaire collected data from eligible institutions. The institution sample consisted of the 817 institutions who supplied faculty lists and 145 who did not provide lists. Exhibit 4-1 contains the final schedule for all three NSOPF-93 study components: list collection, faculty questionnaires and institution questionnaires.

Exhibit 4-1: Chronology of NSOPF-93 data collection

YEAR	Institution List Collection	Faculty Questionnaire	Institution Questionnaire
1992	*October:* Recruitment packets mailed to 789 institutions *November:* Telephone follow-up begins		
1993	*January:* Follow-up packets mailed *March:* Recruitment packets mailed to supplemental sample of 185 *April:* Revised data collection plan submitted to NCES *June:* Institution list collection completed	*January:* Wave 1 mailing *February:* Wave 2 mailing *March:* Wave 3 mailing *April:* Wave 4 mailing *April-December:* Telephone prompting of faculty *May-December:* Follow-up conducted by Institutional Coordinator *July:* Waves 5 and 6 mailings *November-December:* Faculty refusal conversion, use of abbreviated questionnaire *November-December:* Follow-up with specific faculty subgroups; faculty questionnaire data retrieval	*September:* Institution questionnaire mailing *October:* Second institution questionnaire mailing; Institution questionnaire data retrieval begins *November:* Telephone prompting begins for non-responding institutions
1994		*January:* Faculty questionnaire data retrieval completed	*February:* Third institution questionnaire mailing *February-March:* Interviewer-assisted data collection *May:* Institution questionnaire data collection and retrieval completed

The Department of Education Information Management Compliance Division/Office of Management and Budget (OMB) list collection clearance package for the full scale study was submitted to OMB on September

4, 1992, with a request for expedited review. On September 14, 1992 an amendment to the list collection OMB package was submitted, providing an analysis of the discrepancies in field test faculty counts. A second amendment described the sampling requirements for the study and the NEH and NSF sample augmentations. OMB clearance of the list collection process was given on October 5, 1992.

A supplemental memorandum describing changes to the faculty questionnaire was submitted to OMB on December 18, 1992 and OMB approval was received on January 7, 1993. A multi-modal data collection design was used. This involved a mailed, self-administered questionnaire, followed by mail and telephone prompting, and supplemented by computer-assisted telephone interviewing (CATI) for nonresponding faculty. The self-administered faculty questionnaire took about 45 minutes on average to complete. A commercial software package called AutoQuest was used to program the CATI version, which involved minor wording and format changes to the self-administered instrument in order to facilitate interviewing by telephone. The CATI version also took about 45 minutes to complete.

A supplemental memorandum describing changes to the institution questionnaire, along with respondent cover letters, was submitted to OMB on June 28, 1993 with a request for expedited approval. OMB approval was received on July 30, 1993. Revisions to the institution questionnaire were finalized in consultation with NCES at the request of OMB. The NSOPF institution questionnaire was mailed to institutional representatives at all 962 eligible institutions, including those that did not supply a list of faculty for the study. Data were collected principally by self-administered questionnaires, although a small number of cases were completed with interviewer assistance.

The Chief Administrative Officer (CAO) of each institution named the Institutional Coordinator as institution respondent for the institution questionnaire at 44.2 percent of the sampled institutions. The number of institution staff required to complete the self-administered institution questionnaire varied from a low of one to a high of five, with an average of slightly fewer than two respondents (1.78) per institution. Over one-half (460) of the institutions had a single representative complete the questionnaire; over one-quarter (229) were completed by two respondents; 116 by three respondents; 47 by four respondents; and 20 by five respondents.

For the faculty and institution questionnaires, the response rate is defined as the ratio of the number of completed questionnaires to the number of sample units minus the number of ineligible units. For faculty, the response rate is calculated as 25,780/(31,354 - 1,590 ineligibles) = 86.6 percent (84.4 percent, weighted). The response rate for the institution questionnaire is: 872/(974 - 12 ineligibles) = 90.6 percent (93.5 percent, weighted). The overall faculty response rate (institution list participation rate multiplied by faculty questionnaire response rate) was 73.5 percent, and 70.4 percent, weighted.

4.2 Pre-Data Collection Activities

4.2.1 Institution Recruitment

The field period for institution recruitment extended from October, 1992 to June, 1993. Initial recruitment packets were sent to all 974 sampled institutions via first-class mail on October 7, 1992. (Subsequent remails and recruitment packets were sent via two-day priority mail.) The mailing was directed to the institution's Chief Administrative Officer (CAO) as identified in the 1991-92 IPEDS database, the most recent available. A cover letter signed by Emerson J. Elliott, the Commissioner of NCES at the time, requested that the CAO designate two individuals: an Institutional Coordinator, who would act as a liaison to the project and assume responsibility for preparing the faculty list; and an institution respondent, who would be responsible for completing the NSOPF-93 institution questionnaire. In many instances, the institution designated the same individual to act as both the coordinator and respondent, although more than one individual usually assisted in preparing the list and responding to the institution questionnaire. A confirmation form was provided to the CAO for this purpose.

Each packet contained an informational brochure about the study, and a folder of materials to be forwarded to the Institutional Coordinator. This packet included a cover letter addressed to the coordinator, a set of instructions for preparing the list of faculty (both hardcopy and machine readable versions of the list were requested) and a documentation form, on which the Coordinator was to provide information about the format of the electronic list and supply the names of individuals who assisted in its preparation. The mailing also included an NCES Affidavit of Nondisclosure (see Appendix H) for the coordinator to sign and have notarized. The affidavit was intended to enable the coordinator to forward questionnaires to nonresponding faculty, and to prompt faculty to complete their questionnaires and return their completed questionnaires to the NSOPF-93 contractor. A separate postcard was mailed to the Office of Admissions, requesting a course catalog and faculty directory to supplement the lists of faculty provided by each institution.

A fax number was provided on the cover letter and all other materials directed to the CAO and coordinator to expedite the return of forms and list documentation materials. Because fax legibility varies, institutions who faxed materials were also encouraged to mail the original hardcopy. A toll-free NSOPF-93 telephone number was prominently displayed on all forms and informational materials to ensure that institution staff had timely access to project staff to answer questions and to resolve problems encountered in preparing the lists.

Mail follow-up consisted of a postcard reminder mailed two weeks after the initial mailing, and a remail of the initial recruitment packet, which was sent to nonresponding institutions in January 1993. Telephone follow-up was coordinated with mail follow-up to minimize unnecessary calls to the CAOs and coordinators. Telephone prompting began in November, 1992 and continued through June, 1993 at which time the follow-up effort focused on schools in strata with the lowest participation rates.

The progress of list collection efforts within and across strata was monitored on a weekly basis. Based on this review, project staff were able to focus their efforts on under represented subgroups, as well as schools in the ?certainty? stratum.

4.2.2 List Collection

After the institution's cooperation had been secured, follow-up continued with the designated Institutional Coordinator. Interviewers were trained to answer any coordinator questions about the study or questions about how to prepare the faculty lists.

Institutions were asked to provide several types of information on the lists of faculty. The data requested were to serve two objectives:

> ***Sampling***. To sample faculty from lists, it was necessary to obtain the faculty member's name, employment status (full/part-time status), race/ethnicity, and gender. Academic discipline and department/program affiliation were collected to permit oversampling of faculty in disciplines of interest to the National Endowment for the Humanities (NEH). Employee IDs were also requested in order to check the accuracy of the lists by eliminating possible duplicates.
>
> ***Data collection***. Faculty campus and home mailing addresses and telephone numbers were requested to assist in data collection and follow-up.

Data were requested in both hardcopy and machine readable form. A list documentation form was provided for the coordinator to specify the format of the list, and to provide the names of personnel instrumental in collecting the data for further contact, as necessary. More details on list processing are discussed in section 5.2. Forms sent to institutions to aid in list preparation appear in Appendix H.

4.2.3 Results of Institution Recruitment

As shown in Exhibit 4-2, faculty lists were collected from 817 schools, an overall participation rate of 85 percent.[24] However, the data collection period was significantly longer than in the 1992 field test and the 1988 study. Exhibit 4-3 provides faculty list collection rates by type of institution.

Exhibit 4-2: Institutional participation rates for NSOPF cycles

NSOPF cycle	Institutional sample	Number participating	Participation rate (percent)	Length of effort
1987 Field test	103	94	91	9 weeks[a]
1988 Main study	480	449	94	24 weeks
1992 Field test				
Core	54	50	93	28 weeks
Revised core	54	53	98	16 weeks
Augmentation	82	71	87	28 weeks
Combined	136	121	89	28 weeks
1993 Main study				
Initial eligible sample	780	663	85	34 weeks
Supplemental eligible sample	182	154	85	16-24 weeks[b]
Combined eligible sample[c]	962	817	85	34 weeks

[a] Does not include time expended by NCES staff in recruiting institutions before this task was transferred to the previous contractor.

[b] Range includes institutions drawn on a flow basis.

[c] Twelve institutions (9 in the initial sample and 3 in the supplemental sample) were deemed ineligible for NSOPF-93.

[24] Of the 974 schools in the total sample, 12 were deemed ineligible during the list collection process, reducing the eligible sample to 962.

Exhibit 4-3: NSOPF-93 institution participation rates by type of institution

Institution type	CONTROL					
	Public		Private		Total	
	Total	Participating (percent)	Total	Participating (percent)	Total	Participating (percent)
Research	71	66 (93.0)	33	30 (90.9)	104	96 (92.3)
Other Ph.D.-granting	63	56 (88.9)	46	40 (87.0)	109	96 (88.1)
Comprehensive	159	141 (88.7)	82	67 (81.7)	241	208 (86.3)
Liberal arts	3	3 (100.0)	68	57 (83.8)	71	60 (84.5)
Medical	25	21 (84.0)	10	10 (100.0)	35	31 (88.6)
Religious	0	0	18	14 (77.8)	18	14 (77.8)
Two-year	317	258 (81.4)	10	8 (80.8)	327	266 (81.3)
Other	7	6 (85.7)	24	18 (75.0)	31	24 (77.4)
Unknown	19	17 (89.5)	7	5 (71.4)	26	22 (84.6)
Total	**664**	**568 (85.5)**	**298**	**249 (83.6)**	**962**	**817 (84.9)**

Although emphasis was placed on collecting faculty lists from institutions, Exhibit 4-4 provides information on the collection of other requested materials, such as course catalogs and faculty directories, which were used to crosscheck and to supplement information provided on faculty lists. Of the 817 institutions participating in NSOPF-93, 83 percent also submitted a confirmation form. While 75 percent of these institutions provided a course catalog as requested, only 33 percent sent a faculty directory. Exhibit 4-4 also shows the types of faculty lists provided. The majority (67 percent) of the lists were provided in some type of electronic format.

Exhibit 4-4: Lists and other items provided by participating institutions

Item	Number of participating institutions providing item	Percent of 817 participating institutions
Confirmation forms	679	83.1
Signed affidavits	549	67.2
Course catalog	611	74.8
Staff directory	273	33.4
Faculty lists provided as:		
Hardcopy	263	32.2
Diskette	31	3.8
Tape	8	1.0
Combination hardcopy & electronic	510	62.4
Other	5	0.6

Exhibit 4-5 examines the content of the faculty lists provided. The list preparation instructions asked the institution to supply several types of data concerning their faculty: sampling information, such as full-or part-time status, discipline, gender, and race/ethnicity; and locating information, such as campus address, home address, and employee ID.

Exhibit 4-5: NSOPF-93 faculty list content

Data item	Number of participating institutions providing data	Percent of 817 participating institutions
Sampling information:		
Gender	731	89.5
Race-ethnicity	608	74.4
Discipline	717	88.8
Full/part-time status	718	88.8
Locating information:		
Home address	512	62.7
Campus address	734	89.8
Employee ID	437	53.5

4.3 Data Collection: Faculty Survey

Faculty data collection extended from January to December, 1993 with a two-month hiatus in July and August. At that time data collection was temporarily suspended as most faculty were on summer break. Because of the difficulty in reaching faculty during the summer months, no telephone follow-up was performed during these two months. Faculty questionnaires were mailed in waves as faculty lists were received and processed. Mailings were sent to the home address of the respondent whenever it was provided by the institution.

Mail follow-up included reminder postcards, periodic questionnaire remails, and follow-up targeted to specific populations, including racial and ethnic minorities, research faculty, part-time faculty, faculty who initially refused to participate, and faculty who had specific concerns (such as confidentiality). All initial mailings and scheduled follow-up were sent by third class bulk mail; first class and two-day priority mail were utilized for targeted follow-up mailings to ensure that mail would be promptly forwarded to faculty.

Initial telephone calls to faculty asked for prompt return of the self-administered questionnaire by mail. After the second prompting call, interviewers were trained to conduct a telephone interview. Locating and refusal conversion was performed by specially trained interviewers. An abbreviated version of the questionnaire was also used to convert respondents who initially refused to complete the questionnaire citing lack of time as their principal reason for refusing. The abbreviated questionnaire obtained information at questions NCES deemed "critical items" as well as at questions, which, if left unanswered, would be difficult to impute. For purposes of data entry and imputation, the 636 completed abbreviated questionnaires were treated like all other questionnaires. Items excluded from the abbreviated questionnaire were considered missing data. A copy of the abbreviated questionnaire appears in Appendix A.

Telephone interviewing was conducted using a CATI (computer-assisted telephone interviewing) system. The CATI version of the faculty questionnaire was programmed in AutoQuest, a commercially available software package. Telephone follow-up activities were coordinated with mail follow-up. Cases were activated for telephone follow-up in waves, according to their initial mailing date. Interviewers were instructed to conduct a CATI interview only after the second telephone prompt. Interviewers were given greater discretion to conduct a telephone interview for cases mailed late in the field period.

Institutional Coordinators who signed and had the NCES' Affidavit of Nondisclosure notarized were asked to forward questionnaires to nonresponding faculty, and to prompt them to complete and return the questionnaire. Although follow-up mailings to nonresponding faculty were made by coordinators—usually in cases where home addresses were not supplied by the institution—respondents (and coordinators) were instructed to return their completed questionnaires directly to NORC. Coordinators were prompted to carry out these follow-up activities on two occasions, once in April 1993 and again in August 1993. Of coordinators in 817 participating institutions, 549 (67 percent) signed Affidavits of Nondisclosure, allowing them to participate in this effort.

4.4 Data Collection Results: Faculty Questionnaire

Exhibits 4-6 through 4-9 provide a summary of the NSOPF-93 data collection results for the faculty questionnaires. Exhibits 4-6 through 4-9 report unweighted response rates. Exhibits 4-10 and 4-11 report weighted response rates and weighted overall response rates.

Exhibit 4-6 illustrates the faculty response rates for each wave of questionnaires by initial mailing date. As faculty lists were received and processed, faculty were sampled, and questionnaires were assembled into large batches for mailing. (See section 5.2 for a discussion of list processing.) The initial questionnaire packets were followed by at least two follow-up questionnaire mailings. Telephone prompting and interviewing followed for nonrespondents. As indicated, the response rates varied from a high of 90.1 percent for Wave 1

to a low of 77.9 percent for Wave 6. These data suggest that faculty who received their questionnaires early in the field period—usually when classes were still in session—had a greater likelihood of responding than faculty who received a later mailing.

Exhibit 4-6: Faculty response rates by initial mailing date

Initial mailing date (by wave)	Eligible sample	Completed questionnaires		Total completed questionnaires	Faculty response rate (unweighted percent)
		Self-administered	Telephone interview		
1. January 29, 1993	9,691	7,536	1,193	8,729	90.1
2. February 26, 1993	6,635	4,986	899	5,885	88.7
3. March 27, 1993	3,034	2,160	502	2,662	87.7
4. April 24, 1993	3,337	2,239	590	2,829	84.8
5. July 2, 1993	5,769	3,229	1,435	4,664	80.8
6. July 16, 1993	1,298	635	376	1,011	77.9
Total	**29,764**	**20,785**	**4,995**	**25,780**	**86.6**

Exhibit 4-7 illustrates the unweighted response rates for faculty by institution level and control. As the exhibit depicts, faculty at private two-year schools returned completed questionnaires at the highest rate (90.3 percent, compared to an unweighted average response rate of 86.6 percent). Faculty at private four-year institutions responded to the faculty questionnaire at the lowest rate. Response rates for faculty at private four-year institutions were nearly 6 percentage points lower than those of faculty at private two-year schools. Faculty at both types of public institutions (two-year and four-year) completed questionnaires at higher rates than did faculty at private four-year institutions. But response rates for public institution faculty did not attain the level that faculty at private two-year institutions attained (response rates of 87.8 percent and 87.2 percent, respectively, compared to 90.3 percent). While response rates at private institutions varied widely by type (two-year or four-year), there was hardly any difference in response rates for faculty from different types of public institutions.

Exhibit 4-7: Faculty response rates by level and control of institution

Level and control of institution*	Total sample	Sample		Faculty response rate (unweighted percent)
		Eligible	Complete	
Public four-year	11,494	11,029	9,682	87.8
Public two-year	10,525	9,913	8,646	87.2
Private four-year	8,982	8,483	7,146	84.2
Private two-year	353	339	306	90.3
Total	**31,354**	**29,764**	**25,780**	**86.6**

*The "level and control" classification does not match sampling strata classification (Exhibit 4-8) because institutions sampled in the "unknown" categories in NSOPF-93 were reclassified after data collection was complete.

Exhibit 4-8 displays the unweighted faculty response rates across the 15 strata used to sample institutions. Faculty at public liberal arts institutions (with a 96.7 percent response rate) and faculty at private two-year institutions (92.5 percent) returned questionnaires at the highest rates. Faculty at private medical institutions (73.5 percent) and faculty at other private institutions (72.1 percent) returned questionnaires at considerably lower rates than faculty at other types of institutions. Twelve of the 15 strata represented pairs of institution types, differing only by their public or private status (i.e., public comprehensive vs. private comprehensive; public medical vs. private medical). In five of the six pairs, faculty at public institutions returned questionnaires at higher rates. The gap in faculty response rates between public institution faculty and private institution faculty was widest (13.7 percentage points) in the paired strata for "other" institutions. Only faculty working at private two-year institutions returned questionnaires at higher rates (92.5 percent) than their colleagues working at public two-year institutions (87.3 percent). The difference in faculty response rates between public and private institutions was smallest in comprehensive institutions (a difference of 1.6 percent) and in "unknown" institutions (a difference of 1.5 percent).

Exhibit 4-8: Faculty response rates by institution sampling stratum

Institution stratum	Total sample	Sample		Faculty response rate (unweighted percent)
		Eligible	Complete	
Private other Ph.D.	1,523	1,422	1,141	80.2
Public comprehensive	5,518	5,308	4,718	88.9
Private comprehensive	2,627	2,510	2,191	87.3
Public liberal arts	91	90	87	96.7
Private liberal arts	2,370	2,281	2,067	90.6
Public medical	800	764	633	82.9
Private medical	380	321	236	73.5
Private religious	317	291	244	83.8
Public two-year	9,955	9,382	8,187	87.3
Private two-year	276	268	248	92.5
Public other	232	219	188	85.8
Private other	540	509	367	72.1
Public unknown	638	597	509	85.3
Private unknown	151	136	114	83.8
Research/public other Ph.D.	5,936	5,666	4,850	85.6
Total	**31,354**	**29,764**	**25,780**	**86.6**

Exhibit 4-9 reports unweighted faculty response rates by faculty sampling characteristics. For purposes of this table, individual characteristics were obtained from lists provided by participating institutions. As indicated, white faculty had the highest unweighted response rate (89.1 percent) and Native Americans the lowest (81.3 percent), although the difference between these groups was relatively small—only 8 percent. Females were higher responders (88.5 percent) than males (86.4 percent); full-time faculty (88.8 percent) were more likely to respond than part-time (83.5 percent) faculty. The unweighted response rate for faculty in the four NEH-selected disciplines (4,216/4,861 or 86.7 percent) matched almost identically the response rate for the entire sample (86.6 percent). Non-NEH faculty responded at a slightly higher rate than average.

Exhibit 4-9: Faculty response rates by faculty sampling characteristics

Individual characteristic*	Subgroup	Total sample	Sample		Faculty response rate (unweighted percent)
			Eligible	Complete	
Gender	Unknown	1,979	1,857	1,416	76.3
	Male	16,707	15,879	13,720	86.4
	Female	12,668	12,028	10,644	88.5
Race	Unknown	8,639	7,967	6,507	81.7
	American Indian/ Alaskan Native	99	96	78	81.3
	Asian/Pacific Islander	1,185	1,132	993	87.7
	Hispanic	1,264	1,199	1,033	86.2
	Black/non-Hispanic	2,577	2,458	2,097	85.3
	White/non-Hispanic	17,590	16,912	15,072	89.1
Full/part time	Unknown	3,695	3,380	2,824	83.6
	Full-time	17,996	17,596	15,618	88.8
	Part-time	9,663	8,788	7,338	83.5
Discipline	Unknown	1,814	1,647	1,316	79.9
	Non-NEH	24,480	23,256	20,248	87.1
	History	941	904	804	88.9
	Foreign language	1,043	995	829	83.3
	English	2,458	2,379	2,069	87.0
	Philosophy/religion	618	583	514	88.2
	All respondents	**31,354**	**29,764**	**25,780**	**86.6**

*As reported by institutions on faculty lists.

4.5 Summary: An Assessment of NSOPF-93 Faculty Response Rates (Weighted and Unweighted)

This section disaggregates faculty response rates in two ways: first, it explores if characteristics of faculty respondents' institutions affected response rates, and second, it explores if individual/demographic characteristics of the faculty respondents affected response rates. Exhibits 4-10 to 4-11 also show the "overall response rates." For NSOPF-93 faculty members, the "overall response rate" is computed by multiplying the institution list participation rates by faculty level response rates. The weighted overall response rate for the faculty survey is 70.4, or the product of the survey's weighted list participation rate and the weighted overall faculty response rate (83.4 percent $\times$ 84.4 percent = 70.4 percent). In other words, NSOPF-93 achieved a response rate of 70.4 percent for the estimated universe of all faculty and instructional staff in U.S. higher education institutions.

Exhibit 4-10 presents response rates disaggregated by two institutional characteristics: by level/control, a category that combines both level of offering and control, and by institution sampling strata. As the exhibit shows, faculty questionnaire response rates were nearly identical for public institutions. However, there was wide variation for private institutions. Private two-year institution faculty responded at a rate of 91.8 percent (with a 67.3 percent overall response rate), compared to 81.2 percent (66.2 percent overall response rate) for private four-year institution faculty. Faculty at private medical and private "other" institutions (including a wide array of professional and specialized degree-granting institutions) responded to the faculty questionnaire at the lowest rates (67.9 percent and 64.3 percent, respectively) of all faculty.

Exhibit 4-10 indicates that NSOPF-93 achieved above-average overall response rates among institutions in the largest strata (research/other Ph.D., public comprehensive, and public two-year strata), where the majority of postsecondary faculty are to be found. Lowest overall response rates were found among institutions which account for small numbers of postsecondary faculty (public and private "other" institutions and private unknown institutions). Yet, with the exception of faculty in the private "other" stratum, which showed the lowest overall response rate (43.8 percent), faculty questionnaire response rates exceeded 85 percent in these strata. Therefore, the low institution faculty list participation rates explained the low overall response rates in the public other and private unknown strata.

Exhibit 4-11 indicates how specific individual-level characteristics (gender, race/ethnicity, academic discipline, and employment) affected response rates. In interpreting these data, two points should be kept in mind. First, categorization of individual faculty members depended on information each participating institution provided on the faculty sampling lists. Second, overall faculty response rates are calculated by multiplying the overall weighted institution faculty list participation rate (83.4 percent) by weighted response rates for each faculty-level category. Therefore, no adjustment to overall faculty response rates is made for institution-level variables such as institutional level and control or institutional sampling strata.

Female faculty members were slightly more likely to respond to the questionnaire than male faculty members. Whites showed the highest response rates among the racial and ethnic groups: 86.7 percent of white faculty members surveyed responded to the questionnaire, followed by Asians or Pacific Islanders (85.5 percent), Hispanics (84.5 percent), non-Hispanic blacks (83.9 percent) and American Indians/Alaskan Natives (70.2 percent).

Academic disciplines were divided between non-National Endowment for the Humanities (NEH) disciplines and four NEH disciplines: History, Foreign Languages, English, and Philosophy/Religion. Faculty members in the NEH disciplines responded to the survey at a slightly higher rate than faculty in the non-NEH disciplines (85.1 percent, compared to 84.7 percent). Therefore, the response rate for faculty members in the four NEH disciplines slightly exceeded the response rate for all faculty members in the sample. Faculty members in the History discipline responded at 88.2 percent, nearly four percentage points higher than the average response rate for all faculty. Foreign language faculty responded at a lower-than average rate of 81.8

percent, 2.6 percentage points less than the average response rate for all faculty. Finally, full-time faculty members were more likely to respond to the questionnaire than part-time faculty members.

As the exhibit also points out, respondents whose gender, race, and discipline were unknown showed the lowest response rates among each of those subgroups. Respondents whose employment status was unknown responded at about the same rate as part-time faculty. Overall response rates followed the patterns set in faculty questionnaire response rates. All categories of faculty attained a 70 percent or higher overall response rate except faculty members whose individual characteristics were unknown, American Indians/Alaskan Natives, foreign language faculty, and part-time faculty.

Exhibit 4-10: Faculty questionnaire and overall response rates by institutional characteristics

Institutional characteristic	Faculty list participation rate (weighted percent) (1)	Faculty Eligible	Faculty Complete	Faculty questionnaire response rate (weighted percent) (2)	Overall response rate (weighted percent) (1) ? (2)
Institutional level/control					
Public four-year	88.2	11,029	9,682	85.7	75.6
Public two-year	85.2	9,913	8,646	85.6	72.9
Private four-year	81.5	8,483	7,146	81.2	66.2
Private two-year	73.3	339	306	91.8	67.3
Institutional sampling stratum					
Private other Ph.D.	87.0	1,422	1,141	79.6	69.2
Public comprehensive	88.5	5,308	4,718	87.2	77.2
Private comprehensive	78.3	2,510	2,191	85.6	67.0
Public liberal arts	100.0	90	87	96.0	96.0
Private liberal arts	89.4	2,281	2,067	89.5	80.0
Public medical	84.1	764	633	78.0	65.7
Private medical	100.0	321	236	67.9	67. 9
Private religious	77.1	291	244	83.0	63.9
Public two-year	84.8	9,382	8,187	85.6	72.6
Private two-year	71.1	268	248	92.6	65.8
Public other	62.5	219	188	87.0	54.4
Private other	68.3	509	367	64.3	43.8
Public unknown	92.8	597	509	85.0	78.9
Private unknown	67.4	136	114	85.1	57.3
Research/public other Ph.D.	90.5	5,666	4,850	83.1	75.2
Total respondents	**83.4**	**29,764**	**25,780**	**84.4**	**70.4**

*Sampling stratum classification does not match the "level and control" classification because institutions sampled in the "unknown" categories were reclassified after data collection was complete.

Exhibit 4-11: Faculty response rates by individual characteristics

Individual characteristic, identified on faculty list	Subgroup	Eligible	Completed	Faculty questionnaire response rate (weighted percent)	Overall faculty response rate (weighted percent)
Gender	Unknown	1,857	1,416	76.0	63.4
	Male	15,879	13,720	84.0	70.1
	Female	12,028	10,644	87.0	72.6
Race/ethnicity	Unknown	7,967	6,507	79.1	66.0
	American Indian/Alaskan Native	96	78	70.2	58.6
	Asian/Pacific Islander	1,132	993	85.5	71.4
	Hispanic	1,199	1,033	84.5	70.5
	Black, non-Hispanic	2,458	2,097	83.9	70.0
	White, non-Hispanic	16,912	15,072	86.7	72.4
Discipline	Unknown	1,647	1,316	79.9	66.6
	Non-NEH	23,256	20,248	84.7	70.7
	History	904	804	88.2	73.6
	Foreign language	995	829	81.8	68.2
	English	2,379	2,069	85.1	71.0
	Philosophy/religion	583	514	85.7	71.6
Employment	Unknown	3,380	2,824	82.6	68.9
	Full-time	17,596	15,618	86.6	72.2
	Part-time	8,788	7,338	81.6	68.1
Total respondents		**29,764**	**25,780**	**84.4**	**70.4**

4.6 Data Collection: Institution Survey

Data collection for the institution questionnaire extended from September 1993 to May 1994. A self-administered questionnaire was mailed to all 962 eligible institutions, both participating and nonparticipating institutions. The questionnaire was mailed directly to the individual designated by the institution as the institution respondent. If an institution respondent was not specifically named, the questionnaire was sent to the institution's Institutional Coordinator (if formally identified by the institution). For nonparticipating institutions, or institutions which did not formally name a coordinator, the questionnaire was sent to the Chief Administrative Officer. Separate cover letters were prepared and mailed to participating and nonparticipating institutions along with the questionnaire and an informational brochure.

Mail follow-up consisted of two postcard prompts and two remails of the questionnaire to nonresponding institutions. The third questionnaire mailing was necessitated by the interruption of Christmas break and adverse weather conditions (including earthquakes on the West Coast and severe snowstorms and below-zero temperatures in the Midwest and East Coast) which had caused some institutions to close for extended periods of time, further exacerbating the conditions at some schools where understaffing was reported as a problem.

Telephone prompting began in November 1993 and continued until the end of the field period. In March 1994, interviewers were trained to collect some data from institutions over the telephone (and in a small number of cases, in person). Collecting data over the telephone was considered likely to be more problematic for larger institutions—particularly those with large numbers of research faculty or varying types of faculty. Therefore, only small-to-medium sized institutions from the nonresearch strata were targeted for telephone data collection. Within this group, institutions from strata with comparatively low response rates were specifically targeted, including public two-year and private religious institutions. Refusals and nonparticipating institutions were targeted as well. Four nonresponding institutions clustered in the same city were selected for in-person field visits to collect data. Overall, 99 of the 872 questionnaires (11.4 percent) were completed with the assistance of an interviewer, 95 by telephone and 4 in-person.

4.7 Data Collection Results: Institution Survey

Exhibits 4-12 to 4-14 provide a summary of the NSOPF-93 data collection results for the institution study component. These exhibits report unweighted response rates.

Exhibit 4-12 illustrates the unweighted institution questionnaire response rates by institution stratum and by type (two-year or four-year) and control of institution. In general, the response rate of institutions to the institution questionnaire was quite high, with an unweighted response rate of 90.6 percent for all institutions. All eligible private two-year, private religious and public "other" institutions completed the questionnaire. Public institutions responded to the institution questionnaire at lower rates than did private institutions. The lowest response rate (66.7 percent), found in the public liberal arts stratum, affects so few schools as to have little impact on the overall rate of response to the questionnaire. The stratum that included the largest number of institutions, the public two-year stratum (with 316 eligible institutions) also showed one of the highest rates of response (94.3 percent) among the 15 strata.

Exhibit 4-12: Institution questionnaire response rates by institution sampling stratum

Institution stratum	Total sample	Sample		Institution response rate (unweighted percent)
		Eligible	Complete	
Private other Ph.D.	46	46	39	84.8
Public comprehensive	159	159	144	90.6
Private comprehensive	83	82	71	86.6
Public liberal arts	3	3	2	66.7
Private liberal arts	68	68	66	97.1
Public medical	25	25	20	80.0
Private medical	10	10	9	90.0
Private religious	20	18	18	100.0
Public two-year	317	316	298	94.3
Private two-year	11	10	10	100.0
Public other	7	7	7	100.0
Private other	26	24	19	79.2
Public unknown	23	19	18	94.7
Private unknown	8	7	7	100.0
Research/public other Ph.D.	168	168	144	85.7
Level and control of institution*	**Total sample**	**Sample**		**Institution response rate (unweighted percent)**
		Eligible	**Complete**	
Public four-year	332	331	292	88.2
Public two-year	337	333	314	94.3
Private four-year	290	284	252	88.7
Private two-year	15	14	14	100.0
Total	**974**	**962**	**872**	**90.6**

*Sampling stratum classification does not match the "level and control" classification because institutions sampled in the "unknown" categories in NSOPF-93 were reclassified after data collection was complete.

Exhibit 4-13 breaks down the institution response rate by mode of administration. Ninety-nine questionnaires were completed with the assistance of an interviewer. This figure represents 10.3 percent of the total eligible institution sample and 11.4 percent of completed questionnaires.

Exhibit 4-13: Institution questionnaire response rates by mode of administration

Mode of administration	Faculty list participating	Faculty list non-participating	Total responding
Self-administered questionnaires (percent of total sample)	688 (84.2)	85 (58.6)	773 (80.3)
Field data collection (percent of total sample)	72 (8.8)	27 (18.6)	99 (10.3)
Total completed (percent of total sample)	760 (93.0)	112 (77.2)	872 (90.6)
Total sample	817	145	962

Exhibit 4-14 compares the institution questionnaire response rate on the NSOPF-93 full-scale study with the NSOPF-93 field test and the 1987-88 field test and full-scale study. As the exhibit shows, there was a nearly 3 percentage-point improvement in the response rate of the NSOPF-93 institution survey.

Exhibit 4-14: Institution response rates by cycle

NSOPF Cycle	Number Eligible	Completed Questionnaires	Response Rate (Percent)
1987 Field Test	50	40	80.0
1988 Main Study	480	424	88.3
1992 Field Test (Expanded Core) (Augmentation)	120 (49) (71)	94 (40) (54)	78.3 (81.6) (76.1)
1993 Main Study (Participating) (Non-participating)	962 (817) (145)	872 (760) (112)	90.6 (93.0) (77.2)

The data collection period for NSOPF-93 lasted 10 weeks longer than the data collection period for NSOPF-88 (34 weeks, compared to 24 weeks). This reflects the larger sample size as well as the impact of severe weather conditions previously described. But the data collection effort also revealed that institutions feel increasingly burdened by research requests. In some instances, institutions have downsized the institutional staff that would normally process such requests. The 91 percent response rate achieved for NSOPF-93—significantly higher than both the 1992 field test and the 1988 main study—would not have been possible without the direct involvement of interviewing staff in data collection, and other efforts to minimize institutional burden.

5. Data Control and Data Processing

5.1 Overview

This chapter describes the procedures used to process and to prepare faculty list data for sampling and to transform responses from the faculty and institution questionnaires into computerized data files. A total of 872 institution questionnaires (all hardcopy) and 25,780 faculty questionnaires were processed, including 20,785 self-administered and 4,995 computer-assisted telephone interviews. NORC used commercially-available software, AutoQuest, for all data capture.

The procedures to be discussed include: receipt control and processing of faculty list data for sampling, monitoring the receipt of completed questionnaires, preparing self-administered questionnaires for data entry, editing self-administered questionnaires for overall adequacy and completeness, data entry, flagging cases with missing or inconsistent data through automated consistency checks, retrieving missing data, coding responses, quality control of data entry, and preparing documents for archival storage.

5.2 Faculty List Processing and Preparation for Sampling

The sampling frame for the faculty survey was drawn from faculty lists provided by 817 participating institutions. Each participating institution was asked to provide a hard-copy list, a machine-readable list, documentation of the list format, and the names of institution staff involved in preparing the list. Upon receipt, each list was subjected to a cursory review for completeness and adequacy. Project staff were trained expressly to recontact institution staff to retrieve missing information and to resolve list discrepancies. These staff used the Faculty List Documentation Form (see Appendix H) provided by the institution to contact those persons involved in preparing the faculty list. If the institution did not provide this form, staff recontacted the Institutional Coordinator. In the event that the faculty list was incomplete—that is, some level of locating or sampling information was missing—staff explained the importance of these data to the sampling design and handled any concerns or questions which arose regarding release of these data. Special efforts were made to describe confidentiality procedures and the sampling methodology used. The missing information was then retrieved in the way most accommodating for the Institutional Coordinator (through the mail, fax, or via the Internet).

Once the list of faculty (and supporting documentation about the format and preparation of the list) was reviewed, it was receipted as complete into the NSOPF contractor's Survey Monitoring System (SMS), a microcomputer-based system used to track all sampled institutions and their status. A folder that contained all of the relevant materials was prepared for each institution. Processing of hardcopy lists required more effort than processing electronic faculty lists. If an institution provided a hardcopy list only, sampling staff followed these steps to create an electronic file in the required format:

1. Each line (or each faculty member listed) was numbered sequentially. Lists were inspected to see if all sampling variables were included. If not, other materials in the sampling folder were inspected to see if any information could be gleaned from them and included on the hardcopy list.

2. All sampling variables were then coded to match specifications for sampling (e.g., gender was coded as 1=male/2=female; race/ethnicity was coded numerically). The coding specifications followed the same specifications in the list preparation instructions sent to the institution. In addition, faculty discipline was coded numerically to indicate NEH and non-NEH status.

3. The sampling variables, along with faculty names, addresses, and telephone numbers, were data-entered into an electronic file for that institution. (If addresses were not already on the hardcopy file, but were available elsewhere, this information was not entered until the sampling step had been completed and then only for the sampled faculty.)

If an institution provided an electronic file, sampling staff inspected the file on-line to ensure that all coding specifications were followed for the sampling variables and that the file layout was correct. Programming staff created utilities which enabled the automated reformatting of those files with incorrect layouts, and the recoding of sampling variables when necessary. In addition, an automated utility was employed to streamline the coding of NEH/non-NEH teaching disciplines, although this step still required more detailed effort on the part of sampling staff. This utility searched the electronic file for the verbatim entry for teaching discipline, and created a codeframe of each unique discipline along with the number of occurrences (or, number of faculty in each discipline). Sampling staff then inspected the codeframe and assigned a numerical code to each unique teaching discipline to indicate its NEH/non-NEH status. Once the collapsed frame was coded in this way, the utility then assigned these numerical codes to each faculty member on the faculty list.

When all sampling data were coded, an automated program captured list counts and entered them into a discrepancy module of the SMS. Sampling staff then reviewed discrepancy reports, comparing the faculty totals from the lists with data from the 1991-92 IPEDS Fall Staff Survey, the most recent data available. In some instances, the numbers of faculty on the list differed greatly from those from the IPEDS. The discrepancy reports allowed sampling staff to investigate possible areas of discrepancy by breaking down the faculty totals by gender and full- or part-time status. In this way, it was easy to identify, for example, institutions which had left part-time staff completely off of their list, or those which had reversed the gender code. Resolution of list discrepancies also involved recontacting the list preparer or Institutional Coordinator. If the source of the discrepancy was identified by sampling staff, an attempt was made to confirm the diagnosis of the source of the discrepancy and to retrieve from the institution corrected sampling information. On the other hand, if no obvious source of error was identified, the staff explained the problem to the Institutional Coordinator and attempted to find a reason for the discrepancy.

Machine-readable lists (whether data-entered from hardcopy or provided on diskette or tape) which had passed through discrepancy review were uploaded directly into an electronic sampling program, which selected the sample members based on programmed selection algorithms. Lists of sampled faculty at participating institutions in the field test were cross-checked against lists of field test participants at those institutions to ensure that they were not selected again. To minimize respondent burden, OMB restrictions prohibited NSOPF-93 from resampling and reinterviewing individuals who participated in the 1992 field test.

Sampling and data collection information for sampled respondents was uploaded into an AutoQuest program, which then generated respondent tracking files for coordinated mail and telephone follow-up. The program assigned a unique identification number to each sampled record. All pertinent information was also uploaded into the SMS—faculty IDs, names and locating data, and sampling information—for purposes of tracking and case management.

5.3 Receipt Control and Monitoring of Institution and Faculty Questionnaires

When completed faculty and institution self-administered questionnaires (SAQs) were received, receipt control staff checked each document for completeness and assigned a disposition code indicating that the case was complete. If a questionnaire was returned as undeliverable, faculty directories and/or address information supplied by each institution were reviewed for an alternate address. If none was available, it was forwarded to telephone staff for locating. If a package was returned as undeliverable with a forwarding address, the new address was entered into the SMS tracking and monitoring system for future follow-up.

Case dispositions for the faculty questionnaire were updated directly into the TNMS (Telephone Number Management System) component of AutoQuest, which delivered pending cases to interviewers for telephone prompting and interviewing. Respondents who had completed self-administered questionnaires (SAQs) were, therefore, removed from the queue for telephone follow-up once the questionnaire was receipted. Case

dispositions were updated to indicate whether the questionnaire was complete or contained items that required retrieval. The TNMS was linked through weekly updates to the SMS tracking and monitoring system.

Computer-assisted telephone interviewing was not used for the institution questionnaire; therefore, institution questionnaire dispositions were entered directly into the SMS tracking and monitoring system.

5.4 Data Entry and Coding

5.4.1 Data Entry

Both CADE (computer-assisted data entry) and CATI (computer-assisted telephone interviewing) were performed using AutoQuest. Separate CADE programs were developed for the self-administered faculty and institution questionnaires. A CATI program, equivalent to CADE, was also developed for the faculty questionnaire, allowing online data entry of telephone interviews by interviewers. The CADE/CATI systems were designed to:

- ensure that all entries conformed to valid ranges of codes defined for the particular question stem;
- enforce skip patterns automatically;
- conduct inter-item consistency checks where appropriate; and
- display the full question and answer texts for verbatim responses.

As part of the statistical quality control program, 100 percent verification was conducted of a randomly selected subsample of 10 percent of all faculty and institution questionnaires entered in CADE. These cases were randomly pre-selected before each set of questionnaires was data-entered. When a questionnaire was flagged for verification, it was then re-keyed by a different data entry operator than had originally keyed the data. A data entry supervisor then independently reviewed and compared the results of both data entry events; any discrepancies were resolved by referring to the hardcopy questionnaire and making corrections to the final questionnaire data. The error rate was less than one-half of one percent for all items keyed.

Quality assurance for faculty interviews entered in CATI consisted of random online monitoring by supervisors. On a daily basis, a set of times for monitoring and stations to be monitored was automatically generated for each monitor. The program for creating these lists took as inputs the IDs of active prompting, retrieval, and CATI stations; the duration of each monitoring session; the sampling rate; and the total length of time to schedule. The monitor station allowed the supervisor to listen to the interview and to view the data the interviewer entered on screen. Any errors or omissions (including deviations in reading questions, failure to probe or follow instructions, or errors in recording of data) were recorded. The outcome of each monitoring event was entered into the system via an AutoQuest application.

5.4.2 Faculty Questionnaire Coding

Coding of faculty questionnaires was conducted using a computer-assisted coding (CAC) system, which also used AutoQuest software. Coding of academic discipline was performed online during interviewing or data entry. All other faculty questionnaire coding was performed as a post-processing step.

Three kinds of coding were performed for the faculty questionnaire:

Academic discipline. Coding of academic discipline for the respondent=s principal teaching field, principal area of research, degree fields, and courses taught (Questions A12, A13, B16C, and C23A-E) was performed online during interviewing or data entry. Online coding for the self-administered questionnaires took place *only* if the respondent had not already provided a code, but had written some sort of codable text. In these cases, the data entry clerk was prompted to enter verbatim the name of the discipline and follow the same procedure as telephone interviewers who performed online coding of academic discipline.

A two-step coding process was designed so that interviewers and data entry staff would not have to page down through the entire list to find an appropriate code. The first step was to select the major category or area. Categories included were those shown in upper case letters on the hardcopy questionnaire, many of which have subcategories. After the major category was selected, the second step was to select the specific discipline from the subcategories displayed in the second screen. The appropriate code was then selected and entered next to the verbatim entry.

Quality assurance checks for coding of academic discipline were performed as part of the regular quality control procedures for CADE and CATI. However, coding of academic discipline for CADE cases in which the respondent had not supplied a code was subjected to a 100 percent verification. Erroneous codes were recoded to a valid code after examination of the case and its verbatim entry. Cases in which the respondent (or interviewer) had selected a code of A900≅ (AOther≅) were also reviewed and coded to a more specific value whenever possible.

IPEDS codes. Coding of institution names from which respondents received their academic degrees was a multi-stage process performed after data entry in CADE or CATI was complete. Institution names were reported at Question B16E, where respondents had the opportunity to report as many as four academic degrees received. Coding was performed using an electronic file of the 1991-92 IPEDS directory, which included IPEDS code, city, two-letter state abbreviation, and institution name for 10,258 less-than-two-year, two-year, and four-year or more institutions. After both CADE and CATI production had been completed, a file of responses to institution name and location was created for each of the four opportunities to report on an academic degree. These files contained a total of 61,759 institution name mentions. The respondent data file from the first line of Question B16, highest degree, was electronically compared to the IPEDS directory file and all exact matches on both institution name and city were automatically coded. Thirty-four percent of the institutions in this file were matched and automatically coded.

A combination of techniques was used to code the remaining institutions. First, the uncodable institutions were sorted by state and institution name, and obvious variations of institution names, for which IPEDS codes were available, were identified and coded. In addition, an automated system was designed for coders to access IPEDS data by city or by institution name. The coders entered a search string at each level, and the program searched each database for possible matches. This combination of techniques enabled the coding of an additional 61 percent of the highest degree institutions, bringing the total to 95 percent. Finally, the remaining five percent of highest degree institution mentions were reviewed individually and coded when possible. The final total coding rate was 97.8 percent (weighted). Therefore, 2.2 percent (weighted) of highest degree institutions remained uncoded and were noted as "non-U.S. unknown" or as "U.S. unlisted."

After confirming the accuracy of coding in this file, the verbatim responses and their selected IPEDS codes were added to the IPEDS directory. The expanded frame was used to code the remaining responses (Question B16, lines 2-4). This increased the frequency of finding exact matches for the automated coding of the remaining files. After all four degree files had been coded, the remaining institution names that had not yet been coded were examined individually and coded when possible.

If respondents reported the name of a multi-campus university system without specifying the particular branch from which the degree was obtained, the flagship institution of that system was coded. For example, for respondents who wrote "University of Wisconsin" without specifying a branch campus, their institution

was coded as the University of Wisconsin at Madison. If respondents reported the name of a graduate or professional institution without specifying the name of the larger IPEDS institution of which it was a part (e.g. "John F. Kennedy School of Government" rather than "Harvard University"), other means were employed. Staff consulted reference books, university catalogs and cross-checked respondents' answers to find the name of the institution to which to assign the answer. NCES materials were consulted to check for institutions which had closed or had changed their names.

The file was then sorted by IPEDS code and checked against an NCES-supplied electronic master list of IPEDS codes. The file was scanned to find discrepancies between verbatims and expected IPEDS codes. Discrepancies were reconciled by attaching the correct IPEDS code to the verbatim naming the institution. After the entire coding effort was completed, all institution data were exported and sorted by IPEDS code. All institutions were checked in this manner and corrected whenever errors were encountered. The final product contains a negligible error rate of 0.2 percent or less.

Coding of foreign institutions was also handled automatically. During the coding process described above, institutions outside the U.S. were identified as uncodable using the IPEDS frame and flagged as foreign institutions in the database. The verbatim text for the name of country was then electronically compared to the list of codes for countries in the NSOPF-88 faculty data file. Nearly all non-U.S. institutions were automatically coded in this manner. The remaining uncodable institutions were manually coded after hardcopy inspection by coding staff. The weighted proportions of respondents who received degrees from non-U.S. institutions were as follows: 5.3 percent for the highest degree listed, 6.3 percent for the second highest degree, 10.9 percent for the third highest degree, and 19.9 percent for fourth highest degree.

Country. Country was coded at Question B16E(1-4) when the institution reported was foreign and could not be coded within the IPEDS codeframe and at Questions F56 and F57, which asked for the respondent?s country of birth and/or citizenship. Geo-coding of foreign countries was also performed automatically after data entry of the questionnaire in CADE or CATI was complete. The codeframe was constructed using the codes compiled for NSOPF-88, with additional codes added as necessary. A few foreign institutions were manually coded based on city (for example, Moscow) or institution name (for example, The Sorbonne).

"Other specify" and verbatim text. Coding of text entered at Questions A2, A9, E47P, was performed after CADE and CATI were complete. In most cases, the text was coded to the existing codes. For Questions A2, A9, and E47P, the codeframes were expanded to accommodate verbatim responses that could not be coded to the existing options.

- Question A2?codes added for administrative titles or positions listed as respondent's principal activity during the 1992 Fall Term are:

9. Dean, acting/interim/associate/assistant dean
10. Chair, acting/associate/assistant chair
11. Director/head/coordinator (of a program, group, field of study)
12. President, chief
13. Assistant to the president
14. Vice president, associate/assistant vice president
15. Administrator, manager
16. Chancellor, provost
17. Chaplain
18. Advisor, counselor
19. Librarian, library director
20. Registrar
21. Secretary, miscellaneous clerical

23. Athletic director, coach
24. Other

- Question A9—respondent's academic rank, title, or position during the 1992 Fall Term. Codes added to the codeframe are:

7. Visiting faculty/teacher/unspecified
8. Professor emeritus
9. Dean
10. Chairperson
11. Director, head, coordinator, executive
12. Administration, administrator
13. Management, supervisor
14. Postdoctoral
15. Research fellow/scientist/professor
16. President, chancellor
17. Chaplain
18. Counselor, mentor, advisor
19. Librarian, curator
20. Research associate/assistant
21. Secretary, miscellaneous clerical
22. Adjunct faculty/teacher/unspecified
23. Coach
24. Other

- Question E47P—respondents recorded income from two additional "other" sources. All verbatim entries were then reviewed and additional codes were created:

P1. Grants/fellowships (local/state/federal)
P2. Retirement/pension/Social Security/unemployment
P3. Military/pension/retirement/other military
P4. Alimony/child support/spouse income
P5. Dividends/annuities/trust fund/stocks
P6. Government (local/state/federal)
P7. Loans
P8. Real estate, rental properties
P9. Other income

An additional 28 items with "other specify" response choices were eligible for coding based on verbatim responses, but were not coded. Several of these items retained only a small percentage of codable items. Others had key data missing, making them impossible to code. The chart in Appendix K summarizes all "other specify" items on the faculty questionnaire, indicating whether they were coded and documenting reasons for the coding decision made. One question, F53B, which included verbatim responses to the "other specify" option for respondent race/ethnicity, was left unchanged on the data file. No effort was made to code the verbatim responses for Question F53B.

5.4.3 Institution Questionnaire Coding

Coding for the institution questionnaire was performed for verbatim definitions of full-time and part-time faculty, both instructional and non-instructional, and permanent and temporary faculty listed on page 2 of the questionnaire. The codeframe used to code institutional definitions of faculty was constructed based on responses from a sample of 100 questionnaires, selected to represent all institutional strata. Codes were then fine tuned for each individual category to include relevant variations and responses unique to each category.

Once the codeframe was created, a computer-assisted coding system was used to code the verbatim responses to faculty definitions for all completed institution questionnaires. Verbatim responses were data-entered into the system, and then coded on a case-by-case basis using the established codeframe. Responses to questionnaire items A1A-D and A2A-D (numbers of different types of staff employed during the 1992 Fall Term) and B15 and C31(availability of benefits to temporary staff) appeared on-screen to assist in the interpretation of responses, particularly when a category was left blank.

Once all definitions were coded, a hardcopy printout of responses by category was reviewed for accuracy and consistency. Errors were marked on the printout and corrections were made to the file. After all corrections were made, the code file was merged with the institution questionnaire datafile.

Faculty codeframe. Most responses made reference to workload (number of hours worked, etc.) as part of the definition for full or part-time faculty. However, a response was coded as "defined by workload" only when no other factors were mentioned in the definition; other codes include "workload" as an implicit part of the definition.

Responses were coded as matching IPEDS definitions when the institution specifically said it used the IPEDS definition (or the glossary definition), or the response closely matched the glossary definition. If an institution mentioned additional factors not in the IPEDS/glossary definition, or if it was unclear that the definition matched IPEDS, it was coded in another appropriate category. Missing responses were coded as "not applicable" if answers to A1A-D, A2A-D, B15 or C31 clearly indicated that there were no faculty in a given category. The following are codes and definitions for each type of faculty/staff:

Full-time instructional faculty and staff:

1. defined by compensation or benefits (and teaching load)
2. defined by length or terms of contract (and teaching load)
3. defined by teaching load and/or other duties and responsibilities only (number of courses per term or year/number of hours or week/student contact hours/days worked per term or year)
4. defined by rank/title/faculty status/voting privileges or senate membership (and teaching load)
5. IPEDS/matching IPEDS definition
6. defined by funding source or type of funding/legislative body/other governing body (private or public) and teaching load
7. defined by tenure status—tenured or tenure track—and teaching load
8. other governmental or organizational definition used
9. other
10. not applicable/no faculty in this category

Full-time non-instructional faculty:

1. defined by compensation or benefits (and workload)
2. defined by length or terms of contract (and workload)
3. defined by workload and/or other duties and responsibilities only

4. defined by rank/title/faculty status/voting privileges or senate membership (and workload)
5. IPEDS/matching IPEDS definition
6. defined by funding source or type of funding/legislative body/other governing body (private or public) (and workload)
7. defined by tenure status (and workload)
8. other governmental or organizational definition used
9. other
10. not applicable/no faculty in this category

Part-time instructional faculty and staff:

1. defined by compensation or benefits (and teaching load)
2. defined by length or terms of contract (and teaching load)
3. defined by teaching load and/or other duties and responsibilities only (number of courses per term or year/number of hours or week/student contact hours/days worked per term or year)
4. defined by faculty status (including adjunct) /rank/title/level of privileges (and teaching load)
5. IPEDS/matching IPEDS
6. defined by funding source or type of funding/legislative body/other governing body (private or public) (and teaching load)
7. defined by tenure status (tenured/tenure track)
8. defined by lack of tenure status or ineligibility for tenure (and teaching load) (i.e.,not tenured or tenure track)
9. other governmental or organizational definition used
10. defined by lack of faculty status or privileges
11. other
12. not applicable/no faculty in this category

Part-time non-instructional faculty:

1. defined by compensation or benefits (and workload)
2. defined by length or terms of contract (and workload)
3. defined by workload and/or types of duties and responsibilities only
4. defined by faculty status (incl. adjunct faculty)/rank/title/level of privileges (and workload)
5. defined by lack of faculty status (and workload)
6. IPEDS/matching IPEDS definition
7. defined by funding source or type of funding/legislative body/other governing body (private or public) (and workload)
8. defined by tenure status (and work load)
9. defined by lack of tenure status /ineligibility for tenure (and work load)
10. other governmental or organizational definition used
11. other
12. not applicable/no faculty in this category

Permanent faculty/instructional staff:

1. defined by compensation or benefits (and workload)
2. defined by length or terms of contract (and workload)
3. defined by teaching load and/or other duties and responsibilities only (number of courses per term or year/number of hours or week/student contact hours/days worked per term or year)

4. defined by rank/title/faculty status/voting privileges or senate membership (and workload)
5. IPEDS/matching IPEDS definition
6. defined by funding source or type of funding/legislative body/other governing body (private or public) (and workload)
7. defined by tenure status?tenured /tenure track (and workload)
8. defined by tenure status?tenured only
9. other governmental or organizational definition used
10. other
11. not applicable/no faculty in this category

Temporary faculty/instructional staff:

1. defined by compensation or benefits (and workload)
2. defined by length or terms of contract (and workload)
3. defined by work load and/or other duties and responsibilities only (number of courses per term or year/number of hours or week/student contact hours/days worked per term or year)
4. defined by faculty status (incl. visiting faculty)/rank/title /level of privileges
5. defined by lack of faculty status
6. IPEDS/matching IPEDS
7. defined by funding source or type of funding/legislative body/other governing body (private or public) (and workload)
8. defined as tenure track faculty only/faculty not yet tenured (but not ineligible for tenure)
9. defined as non-tenure track faculty only/not eligible for tenure
10. other governmental or organizational definition used
11. other
12. not applicable no faculty in this category

"Other specify" and verbatim text. In addition to the six questions from which the faculty codeframe was developed, six other institution questionnaire items were eligible for verbatim or "other specify" responses. Of these, only the answers to Questions B10C1 and C26C1, which asked for a description of "any other actions" taken to lower the percent of tenured faculty (for full-time instructional faculty and for full-time non-instructional faculty, respectively) provided consistent verbatim responses. For both Questions B10C1 and C26C1, the most frequently cited actions taken to reduce the percent of tenured faculty involved downsizing, redefining positions as non-tenured, and offering early retirement incentives. The complete listing of all "other specify" and verbatim responses is stored in electronic text form at NCES.

5.5 Faculty Questionnaire Editing and Imputation

Prior to data entry, editors scanned faculty questionnaires for readability, completeness, and overall adequacy. Problems (e.g., eligibility questions, incomplete questionnaires, etc.) were identified and forwarded to an edit/coding supervisor for resolution.

Range errors, logical inconsistencies, erroneous skip patterns, and any missing critical items were identified by a computer-based cleaning and editing system specifically developed for NSOPF–93. Whenever a case had one or more critical items missing, CADE operators were notified of the specific items that required retrieval and prompted to route the case to the telephone retrieval supervisor for follow-up. Moreover, the program identified out-of-range responses during data-entry and did not allow them to be keyed without confirmation that the response was accurately entered.

For erroneous skip patterns, values were logically assigned as feasible on the basis of the presence or absence of responses within the skip pattern, given the responses provided. For errors that could not be corrected in this fashion, the hardcopy questionnaire was inspected and if necessary, the respondent was called to try to resolve the problem. Questionnaires with missing critical items were forwarded to telephone interviewers for retrieval.

Range errors were examined and corrected through hardcopy examination, which involved reviewing a sample of cases with out-of-range responses in order to determine whether the responses were caused by something other than random variation or unique respondent situations. Following the examination, variables were treated in one of two ways. In some cases, the out-of-range response was topped off at the highest value encompassing 99.9 percent of the responses. There were no out-of-range values at the low end of the value range. As part of the cleaning and editing process, out-of-range values in a series or set of related items were "scaled" proportionally to an overall total.

On the fewer than 1 percent of the cases for which data on gender, race, and employment status of faculty were missing, the data were directly imputed whenever possible. This information had already been collected for most faculty on the sampling lists supplied by participating institutions. Additional editing and consistency checks were run to enforce ranges, skip pattern rules, and logical consistency among questionnaire items.

Because of the large amount of questionnaire data, a system of algorithms was developed to check and, if possible, to correct the validity of data elements. The principal rule was to preserve data collected from the questionnaires while correcting logical inconsistencies between related data elements. After cleaning, those data elements that remained missing were subsequently imputed.

Depending on the scale of the variable being imputed, one of two methods were used: 1) Regression imputation was used for continuous and dichotomous variables; and 2) Hotdeck imputation was used for unordered polytomous variables. The regression method incorporated in NCES's PROC IMPUTE was used to impute missing values for approximately 90 percent of the 395 items on the faculty questionnaire[25]. Of the total of 395 items, 353 were imputed using the regression-based imputation procedures only.

After a first round of imputation using PROC IMPUTE, the distributions and values of imputed items were compared to distributions and values for recorded items (i.e. non-missing data). These comparisons helped to pinpoint variables needing special treatment in order to produce credible imputed values. Special steps were taken to address particular problems arising during imputation. These were:

"Spikes" at zero values. A number of variables showed "spikes," where the same value was imputed to a number of cases within an imputation cell. To address the problem of spikes at the zero value, these variables were reimputed in two steps. First, a dummy variable to flag cases as containing a zero value or a value greater than zero was modeled. Second, only those cases which received the imputed dummy value greater than zero were modeled using the standard regression-based imputation procedures. This two-step process "smoothed out" the distribution of imputed values, eliminating the spikes at zero.

Illogical/implausible imputed values. The first round of regression-based imputation assigned values to items B20A and B20B (faculty productivity measures, i.e. books and articles published, presentations, patents, etc.). However, this imputation produced inappropriate imputations for particular types of faculty. For example, records of faculty members whose reported teaching and research fields had nothing to do with

[25]For a description of this technique, see American Institutes of Research, *Guidebook for Imputation of Missing Data* (August, 1980). AIR prepared this guidebook for the National Center for Education Statistics, under contract #300-78-150.

artistic performance were imputed to have performed artistic presentations. Likewise, faculty members whose reported areas of activity included teaching, but no research, were imputed to have performed research activities. In order to address these cases, another regression model including eight more predictors—in addition to the five "core predictors" was specified for PROC IMPUTE to impute values for questionnaire sections whose items depended on proper specifications of teaching and research activities.

Imputing DKs. Two imputations were performed for selected items in the faculty questionnaire with "don't know" responses, where this caused 30 percent or more of the responses to be eligible for imputation. In the first imputation, "don't knows" were treated as legitimate responses. For these items, in the first imputation, missing responses were imputed across all response categories, including the "don't know" category. In the second imputation, "don't knows" were set to "missing" before imputation was performed. Two imputations were done to allow researchers to choose how to treat "don't knows" in their analyses. Two variables were used to signal these different approaches to imputation. The first, the survey variables, preserved "don't know" as a legitimate response. The second, identified by the letter "Y" preceding the variable name, includes imputation for "don't know" as well as "missing" The following faculty variables had two imputations performed:

Survey variables	**Imputed-DK variables**	**Variable description**
D42	YD42	Age most likely to stop working at a postsecondary institution
D44	YD44	Draw on retirement and continue working at institution part-time
D45	YD45	Take early retirement option at institution
D46	YD46	Age most likely to retire from paid employment
F58A	YF58A	Mother's education
F58B	YF58B	Father's education
F60A-F60I	YF60A-YF60I	Opinion questions about institution, faculty and students

"Sequential nearest neighbor" hotdeck imputations were used on 42 items, the majority of them polytomous or categorical variables. Three items used both regression-based and hot deck imputations. To carry out the hotdeck imputations, the faculty file was first sorted by the following variables: ISTRATUM (institution sampling stratum), A4 (full-time/part-time stratus), OSGROUP (faculty oversampling stratum), F51 (faculty member gender), X01F52 (faculty member age) and a random number variable. Then the computer program proceeded sequentially through the sorted file, replacing each missing value by the last non-missing value.

All imputation was followed by a final series of cleaning passes that resulted in generally clean and logically consistent data. Some residual inconsistencies between different data elements remained in situations in which it was impossible to resolve the ambiguity as reported by the respondent.

5.6 Institution Questionnaire Editing and Imputation

Two manual edits were conducted for the institution questionnaire: the first checked for missing critical items, while the second, performed immediately prior to data entry, checked for filter questions that could be coded based on subsequent responses and responses that could be coded or corrected based on verbatims or documentation accompanying the questionnaire. Questionnaires were also reviewed for valid responses that did not fit into existing categories and for inter-item consistency.

As with the faculty questionnaire, a computer-based editing system was employed to check data for range errors, logical inconsistencies, and erroneous skip patterns. Any missing or inconsistent critical items were identified for retrieval. Hardcopy questionnaires were reviewed to resolve logical inconsistencies or skip pattern errors; out-of-range responses were reviewed to determine if they were legitimate. If necessary, the institutions were recontacted to try to resolve the problem.

After data entry was completed, institution data were run through additional consistency checks designed to flag data entry errors and inter-item inconsistencies; data entry errors were corrected based on a review of the hardcopy questionnaire; inter-item discrepancies that were clearly the result of systematic error were corrected through programmed cleaning statements.

Because the faculty counts (at Questions A1A-A1D, B2 and C20) and counts of tenure/tenure-track faculty (at Questions B6 and C22) that institutions provided were often estimated or provided by multiple offices (whose records may not match precisely), a small margin of error was allowed for inter-item discrepancies. Responses falling outside this range were individually reviewed and corrected, if possible, based on other questionnaire data. Discrepancies outside this margin of error were reviewed again, and, as appropriate, set to missing.

On the NSOPF-93 institution file, substantive responses were imputed for missing data using the regression method. "Don't know" responses were also imputed to distribute "don't know" across all response categories. Following imputation, a number of inter-item consistency checks and post-imputation cleaning procedures were implemented to produce logically consistent and valid data.

Imputed values at A2A-2F (counts for instructional faculty) and C20A-F (counts for non-instructional faculty) were corrected whenever possible by performing the math for non-imputed values to arrive at a contextually accurate amount. When multiple items were imputed, variables were corrected by using mean values to arrive at values proportionate to faculty totals. Errors in counts of tenured/tenure track faculty were similarly cleaned by using mean values to arrive at values proportionate to the total number of permanent faculty (at Question A2A) in the questionnaire. Those values replaced imputed values that caused the total number of tenured/tenure track faculty to be larger than the total number of temporary and permanent faculty reported at Question A1A.

A small number of discrepancies at Questions A2A-F and C20-F resulting from non-imputed data were allowed to stand. In these instances, discrepancies could not be corrected by using relevant questionnaire data. Hardcopy data for each case was reviewed to check for data-entry errors, or other problems indicating whether the value should be corrected or set to missing and imputed.

Answers at Question B17 (percent of undergraduate instruction carried out by full-time faculty) were cleaned so that the total of Questions B17 and D41 (percent of undergraduate instruction carried out by part-time faculty) was not greater than 100 percent. Responses totaling less or more than 100 percent were reviewed individually and cleaned on a case-by-case basis.

5.7 Retrieval of Missing Data

Appendix F contains lists of the items deemed critical for both survey questionnaires. If one or more of these items were missing, calls were made to retrieve the missing information. For the faculty questionnaire, out of the 20,785 self-administered instruments, approximately 5,705 (27 percent) were identified for retrieval. Retrieval was completed for 5,483 (96 percent) of these questionnaires. Of the 5,483 cases for which retrieval was completed, respondents provided some or all of the missing data required in approximately 84 percent of the cases. The remaining 16 percent of the 5,483 cases were determined to be complete without retrieval based on other information supplied on the questionnaire. All faculty retrieval activities were completed by January 29, 1994.

Faculty self-administered questionnaires (SAQs) identified through the edit program as having missing data on critical items were forwarded to interviewers for additional follow-up. Case records were routed to a special location within CADE. Telephone retrievers were provided with the hardcopy SAQ, accompanied by a retrieval form listing items to be retrieved. The interviewer reviewed the hardcopy before calling to confirm that the case needed retrieval. "Don't knows" and "refusals" were considered legitimate responses for retrieval purposes and not followed up. Interviewers accessed contact information and updated case dispositions through the CATI system. New data were recorded directly on the hardcopy questionnaire and entered by data preparation staff.

For the institution questionnaires, 178 (20 percent) were identified for retrieval. Retrieval was completed for 172 (97 percent) of these cases. All institution retrieval activities were completed by June 8, 1994.

Retrievals for the institution questionnaire were identified largely through the two manual edits prior to data entry; again, "don't knows" and "refusals" were considered legitimate responses and not retrieved. Information was obtained both by the telephone and by fax. Once retrieval efforts for a case had been completed, the questionnaire was sent to data entry. If a retrieval was identified during the data entry process, the operator discontinued data entry on that case and routed it to a supervisor for review; if the information could not be obtained from existing documentation, the supervisor then forwarded the case to an interviewer for telephone retrieval.

5.8 Faculty Questionnaire Eligibility Review

At the close of data collection for the faculty survey, all completed faculty questionnaires were reviewed to determine if any respondents were ineligible. This review was done on several levels. First, the responses to Question A9 in the faculty questionnaire, "Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term?" were examined. Verbatim responses to Question A9 were reviewed for evidence of ineligibility. These generally consisted of cases in which the respondent had given a title such as research assistant, graduate assistant, lab assistant, or teaching or research fellow. If a questionable case showed any sign of eligibility (for example, providing responses to the question on classes taught or indicating faculty status) the respondent was assumed to be eligible. This review uncovered 23 respondents who were deemed to be ineligible and their questionnaire data were deleted.

The second, more automated, review was performed on cases in which the respondent answered "no" to Question 1 ("Did you have any instructional duties?") *and* Question 3 ("Did you have faculty status?"). All such records were examined, using additional data from the questionnaire to guide the determination of eligibility. As a result of this review, some additional respondents were deemed ineligible and their questionnaire data were deleted.

5.9 Storage and Protection of Completed Instruments

Whenever questionnaires were not being processed, they were stored in a restricted area; access was limited to authorized project staff who had signed the NCES Affidavit of Nondisclosure and had it notarized. The room was locked at night and protected by a surveillance system.

Data integrity was further ensured through a combination of electronic system access restrictions, screen update rules, and system maintenance and backup procedures that protected against unauthorized system access, mistakes in case information entry, and data loss. Every night all files used by the system were copied to tape and stored in a secure location. Information that identified individuals was maintained in physically separate files accessible only to authorized project staff.

Long-term storage of hardcopy documents is maintained in secure facilities with 24-hour surveillance, both at the contractor's central office and off-site, with access limited to authorized project staff who signed had notarized the NCES Affidavit of Nondisclosure.

6. Guide to the Data Files and Codebooks

6.1 Overview

This chapter provides information on the content and organization of the data files, the use of flags and weights and derived variables. The NSOPF-93 public-use institution file and restricted-use faculty file are available as two separate files. For data users receiving a licensing agreement, both are contained on one CD-ROM. FAC93.DAT, the raw data file for the faculty questionnaire, contains records for 25,780 responding faculty from 817 institutions that participated by providing faculty lists. INST93.DAT, the raw data file for the institution questionnaire, contains records for 872 institutions, including 760 of the 817 institutions that provided lists for sampling faculty, and an additional 112 that did not provide lists.

The institution data file is a public-use file. Those who do not sign a licensing agreement with NCES may still gain access to the institution data file, which is available on diskette. A public-use faculty data file, which has been modified to minimize the risk of disclosure of individual respondents, is also available for analysts who do not sign a licensing agreement with NCES. The discussion of the faculty data file in this chapter refers to the restricted-use faculty data file, which is available on CD-ROM only to those who sign the licensing agreement.

6.2 Content and Organization of NSOPF Files on CD-ROM

The NSOPF Faculty Data (1988 and 1993) restricted-use compact disk (CD) contains all NSOPF-93 data, including the public use institution data collected as part of NSOPF-93, and electronic codebook systems for using it. NSOPF-88 restricted-use faculty data have also been included for convenience. However, there is no electronic codebook for the data. The README.TXT file is the only file in the root directory of the CD:

NSOPF88 <DIR>
NSOPF93 <DIR>
ECBW <DIR>
README.TXT

A flat file (.DAT), a version 6.03 PC-SAS dataset (.SSD), and two SPSS portable files (A.POR and B.POR) have been provided for 1988 in the NSOPF88 directory (there are two SPSS portable files because SPSS for windows version 6.0, which was used to create the files, has a 500 variable limitation):

FAC88.DAT
FAC88.SSD
FAC88A.POR
FAC88B.POR

A flat file (.DAT), a version 6.03 PC-SAS dataset (.SSD), and a version 6.0 SPSS-Windows sysfile (.SAV) have been provided for the 1993 Faculty file. In addition, the necessary syntax for SAS and SPSS, along with the formats used to create the datasets, are provided with NSOPF-93. The SPSS syntax is provided in its entirety since different platforms have different limitations in SPSS. It is assumed that the user will be aware of these limitations, and will create extract programs, if necessary, depending on their platform.

Finally, the NSOPF93 directory includes a flat file (.DAT) for the 1993 NSOPF institution file (used by the ECB system) plus other INST93 programming files:

FREQ <DIR>
DOC <DIR>
FAC93.DAT
FAC93.SAS
FAC93.SAV
FAC93.SPS
FAC93.SSD
INST93.DAT
INST93.SAS
INST93.SAV
INST93.SPS
INST93.SSD

Frequencies for the NSOPF-93 data are provided in a subdirectory FREQ for all of the variables, weighted and unweighted, generated from the SAS dataset FAC93.SSD (output for a subset of variables was also generated using SPSS):

FAC93SPS.TXT
FAC93UWT.TXT
FAC93WGT.TXT

Documentation for the NSOPF-93 data is provided in a subdirectory DOC, including the file layout, codebook, technical notes, documentation of derived variable creation, institution and faculty questionnaires (both in WordPerfect 5.1 and in text formats), and a WordPerfect 5.1 version of the Data File User's Manual:

DERVARS.WPD
DFUSERM.WPD
F93CBK.PRN
FACLAY.WPD
FACQUEX.TXT
FACQUEX.WPD
FCLT93W.CBK
INSTQUEX.TXT
INSTQUEX.WPD
PRELDOC.WPD

Two electronic codebooks are provided for NSOPF-93 data. Both Windows and DOS versions of an electronic codebook, which reads the raw faculty data file, can be accessed from the ECBW subdirectory.

\ECBW

SETUP.EXE	The setup program to install the Windows ECB
SETUP.INI	
SETUP.INS	
_SETUP.LIB	
SETUP.BMP	
_SETUP.DLL	
INST16.EX	
ECBW.EXE	

ECBW.HLP
ECBW.ICO
CTL3D.DLL
TBPRO1W.DLL
TBPRO2W.DLL
TBPRO3W.DLL
TBPRO4W.DLL
TBPRO5W.DLL
TBPRO6W.DLL

\FAC Faculty file ECB subdirectory

ECBFAC.EXE Electronic codebook software
ECB.HLP Help file (print this to learn more about the ECB)
ECBSPEC.FAC Configuration file for ECB
FAC01.CDC
FAC02.CDC
FAC.ICO Icon file for windows ECB
EXTRFAC.EXE Software for extracting data from CD to fixed disk

\MRG Merged faculty and institution ECB subdirectory:

ECBMRG.EXE Electronic codebook software
ECB.HLP Help file (print this to learn more about the ECB)
ECBSPEC.MRG Configuration file for ECB
MRG01.CDC
MRG02.CDC
MRG.ICO Icon file for windows ECB
EXTRMRG.EXE Software for extracting data from CD to fixed disk

The faculty raw data file consists of 25,780 records for responding faculty. The institution raw data file consists of 872 records for institutions participating in the institution survey. The record layout for the faculty data file appears in Appendix I; the record layout for the institution file appears in Appendix J.

Both SAS and SPSS can be used with the data files, and the appropriate program files or control cards are provided on the CD-ROM. All SAS-PC and SPSS program code should be edited. While most of the program code is functional, users may wish to change the output file names and some labels. SPSS code for FREQUENCIES and DESCRIPTIVES is included even if no variables are listed; delete such entries. SAS code includes a FORMAT statement without a procedure to use it; either delete this or add a PROC.

6.3 Identification Codes

The first variable in both files is an encrypted identification code. The encrypted identification code for institution-level respondents in the institution data file is the 6-digit INSTID. The first variable on the faculty file is the encrypted 9-digit faculty identification number, CASEID, consisting of the 6-digit INSTID and a three-digit number that identifies a unique respondent at the institution. Using the identification variable in each file, it is possible to link faculty respondents to institution respondents, provided the institution supplied a list of faculty and also responded to the institution questionnaire. No information that directly identifies the institution is provided on the NSOPF-93 files. Users who desire to link IPEDS data and NSOPF-93 data can obtain IPEDS data files, modified to include NSOPF-93 INSTIDs, from NCES. Analysts wishing to acquire these NSOPF-modified IPEDS files must contact the NCES Data Security Officer (see section 1.11) to alter their licensing agreement.

6.4 Variable Names

Variable names for questionnaire items for both the faculty and institution data files were created according to the following convention: the first letter indicates the section of the questionnaire (for the faculty questionnaire, most variable names begin with the letters A through F, corresponding to Sections A-F in the questionnaire; for the institution questionnaire, A, B or C correspond to Section I, II and III respectively). Questions are then numbered consecutively within sections, with sub-questions indicated by a letter following the question number.

6.5 Derived Variables

For NSOPF-93, a total of 143 institution-level and faculty-level derived variables were created in order to simplify access to standard queries likely to be of use to analysts and to enhance substantive analysis. This set of derived variables has been carefully constructed and added to the faculty and institution data files. The faculty file includes all 143 derived variables. The institution file contains 36 institution-level derived variables. A description of the specifications used to create these derived variables is found in Appendix G.

Institution-level derived variables. Most of the institution-level derived variables were created by NCES using multiple sources of data including: the 1991-92 IPEDS (Integrated Postsecondary Education Data System), the Carnegie classification system, and NSOPF-93 sampling information. Most of the institution-level derived variables were created directly from IPEDS data. The last element of the SAS variable name for institution-level derived variables consists of two characters, an underscore and a zero ***"_0"*** (e.g., ***X01_0***, ***X02_0***, ***X03_0***, etc.). This component of the variable name signifies both that the variable is an institution-level derived variable and that an outside data source was used when creating it (derived variables ***X01_0*** through ***X37_0***)[26]. The example below is a variable derived from IPEDS data; the ***"_0"*** indicates that it is an institution-level variable. The variable title created for documentation purposes appears below the variable name. Below that is the CODE which defines the value of the variable.

X02_0
Institution strata (modified NSOPF-88 categories)

CODE:
1=Public research (I_AFF=1, I_CNG=11 or 12)
2=Private research (I_AFF=2, I_CNG=11 or 12)
3=Public doctoral, including medical (I_AFF=1, I_CNG=13 or 14 or 52)
4=Private doctoral, including medical (I_AFF=2, I_CNG=13 or 14 or 52)
5=Public comprehensive (I_AFF=1, I_CNG=21 or 22)
6=Private comprehensive (I_AFF=2, I_CNG=21 or 22)
7=Private liberal arts (I_AFF=2, I_CNG=31 or 32)
8=Public two year (I_AFF=1, I_CNG=40)
9=Other, including private 2-year institutions, public liberal arts institutions and religious and other specialized institutions, except medical (I_AFF=1 and I_CNG=31 or 32, I_AFF=2 and I_CNG=40, I_CNG=51, 53-65)

[26]Although there are 36 institution-level derived variables, they are numbered from X01_0 to X37_0. NCES decided to drop the derived variable numbered X03_0 from final data files.

Description of the Derived Variable:
This variable is a modification of *X01_0*. The categories for Codes 1-6 and 8 correspond to categories used in NSOPF-88 (as in *X01_0*). Code 7, previously labeled "liberal arts," has been modified to include only private liberal arts institutions. Code 9, "other," now includes public liberal arts, private 2-year institutions, and religious and other specialized institutions. (Specific Carnegie classifications are defined at *X05_0*.) This variable creates the "institution type and control" stratification used in tables in the NCES reports *Institutional Policies and Practices Regarding Faculty in Higher Education* [NCES 97-080] and *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992* [NCES 97-470].

For NSOPF-93 institutions with unknown Carnegie classifications, the value of *X02_0* was individually assigned based on information available from IPEDS.

Faculty-level derived variables. All faculty-level derived variables were created by NORC using data collected from the NSOPF-93 faculty questionnaire. Each faculty-level derived variable name begins with the letter A***X***≅. The second and third elements of the variable name indicate in what order the derived variable was created from the primary survey variable or other source (e.g., ***X01***, ***X02***, ***X03***, etc.). The last component of the derived variable name reflects the section and question in the NSOPF-93 faculty questionnaire from which the variable originated.

In the example below, ***"01"*** in the derived variable name, ***X01A7***, indicates that this is the first variable derived from survey variable A7 (section A, Question 7). The CODE identifies the values for the derived variable, based on the survey variables? original coding scheme (i.e. X01A7's value 4 is equivalent to A7's values 4 and/or 5). The description explains how the survey variable (A7) was collapsed to create the derived variable.

X01A7
Tenure: Tenure status
CODE:
1=Tenured (Q7=1)
2=On tenure track but not tenured (Q7=2)
3=Not on tenure track (Q7=3)
4=No tenure system for respondent's faculty status or no tenure system at institution (Q7=4 or 5)

Description of the Derived Variable:
This derived variable was created from SAS variable A7 to indicate tenure status of a faculty respondent during the 1992 fall term; codes for ?no tenure system for respondent?s faculty status? and ?no tenure system at this institution? have been combined into one category.

Survey variables from questions in the preface of the NSOPF-93 faculty questionnaire use a leading underscore in place of a section letter (e.g., ***_1***, ***_1A***, etc.); derived variables based on questions from the preface begin with the letter "***X"*** and a number indicating order of creation, followed by the name of the survey variable (e.g., ***X01_1, X02_2, etc.***).

Exhibit G-1 in Appendix G contains a list of the academic disciplines and codes used in several NSOPF-93 derived variables and provides a crosswalk to the NSOPF-88 discipline codes. Exhibit G-2 in Appendix G contains the derived variable titles in alphabetical order, and a crosswalk and comparison with the derived variable titles from NSOPF-88.

6.6 Use of Flags and Weights

Imputation procedures for missing data. In accordance with NCES standards and guidelines, all non-legitimate missing data in the faculty and institution files were imputed. Imputation for item nonresponse was performed for each survey item to make the study results simpler to present and allow consistent totals to be obtained when analyzing questionnaire items. Not applicable ("NA") responses were not imputed since these represented respondents who were not eligible to answer the relevant item. All missing data, including "refused" and "don't know" responses (except where "don't know" was treated as a valid response), were imputed (see below).

Imputation was performed using one of three procedures. Gender, race/ethnicity, and employment status of faculty were directly imputed as part of the editing and cleaning program. This information had already been collected for most faculty on the annotated lists supplied by participating institutions to be used in sampling faculty. Whenever this information was available, it was directly imputed to the data file.

For items in the faculty survey imputed directly, the names of the flags begin with the letter "S" and are appended to the end of the data file, immediately after the derived variables. These flags have one of two values:

0 = not imputed
1 = directly imputed

For all other missing data, two statistical procedures—regression and hot-deck—were employed for imputation. Regression-based imputation was used for ordered and dichotomous variables, whereas hot-deck imputation was used for unordered polytomous variables. For any given survey item, the kind of imputation used is recorded on the imputation flag.

Imputation flags. For each numeric questionnaire item or variable in the institution and faculty files, there is a corresponding imputation flag. Imputation flags, beginning with the letter "M", are appended to the end of the data file. Following the "M" is the name of the variable being imputed.

For 15 variables in the faculty questionnaire where "don't know" was allowed as a legitimate, coded response in the questionnaire, a larger number of "don't know" responses occurred than at other items. Where this caused 30 percent or more of the responses to be eligible for imputation, two separate variables appear in the data file: the first, the survey variable, preserves "don't know" as a legitimate response, and does not impute for "don't know". The second, identified by the letter "Y" preceding the variable name, includes imputation performed for "don't know" as well as "missing". The following variables appear in this fashion: D42, D44, D45, D46, F58A, F58B, F60A, F60B, F60C, F60D, F60E, F60F, F60G, F60H, F60I. For example, survey variable D42 preserves "don't know" as a legitimate response. MD42 is the corresponding imputation flag. Variable YD42 includes imputation performed for "don't know" as well as for "missing." The corresponding imputation flag is MYD42.

"M" imputation flags take one of four values:

0 = not imputed
1 = imputed with regression method
2 = imputed with hot-deck method
3 = imputation of ?don?t know? with the regression method

Weights. The sample was weighted to produce national estimates of faculty and instructional staff. The weights were designed to adjust for differential probabilities of selection and nonresponse at the institution and faculty levels. After excluding ineligible members from the sample, the adjusted weights sum to 1,033,966, the estimated total number of faculty and instructional staff in the target population.

The first-stage institution weights were constructed in three steps. First, the institution's probability of selection into the sample and its base weight—the reciprocal of its selection probability—were calculated. Second, the initial base weights were adjusted for institutions that had merged and so were effectively listed multiple times in the sampling frame. Finally, nonresponse adjustment factors were applied to the weights to compensate for institution-level noncooperation.

The faculty weights were computed in four steps. First, the raw conditional selection probabilities were calculated; these reflected the selection rates for faculty members given that their institutions were sampled. In this step, the initial selection probabilities were also adjusted to reflect the exclusion of a random subsample of faculty and then the reciprocals of the selection probabilities were calculated to yield the raw conditional weights. (A total of 2,000 initial nonrespondents were eliminated through subsampling.) Second, these weights were multiplied by the first-stage nonresponse-adjusted weights to yield second-stage sampling weights that were adjusted for institutional nonresponse. Third, these latter weights were multiplied by second-stage nonresponse adjustment factors to compensate for nonresponse by faculty members. Finally, these nonresponse adjusted weights were poststratified to "best estimates" of faculty of the national population of full-time and part-time faculty.

The weights for the institution questionnaire were designed to provide national estimates of postsecondary institutions. The weights for institution questionnaires were calculated in the same manner as the first-stage weights for institutions from which faculty were selected, the only difference being the definition of a respondent. To calculate the weights for institutions with institution questionnaires, a respondent was defined as any institution from which an acceptable questionnaire was received. Most institutions responded to the institution survey and also provided a faculty sampling list. Therefore, the response classifications were identical under the two criteria. As a result, the weighting cells for the first-stage weights for these institutions were used without change for the weights for institution questionnaires. After excluding ineligible institutions, the adjusted weights sum to 3,188 institutions.

Thirty-three weight variables are attached at the end of each data set: one baseline respondent weight (labeled WEIGHT), used to weight the sample to the estimated universe population, and 32 replicate weights (RWGHT01-RWGHT32). The 32 replicate weights were calculated to provide variance estimates using balanced half-sample replication (BHS). Refer to Chapter 3 for more details about the weighting of the sample.

6.7 Notes on Variance Estimation

A common method to estimate variances relies on Taylor-series approximation to calculate variances. Variance estimation programs, such as SUDAAN[27] and CENVAR[28], calculate variances with the Taylor-series approximation method. The variables ISTRATUM, the institution sampling variable, and PSU, the primary sampling unit variable, are provided on both data files so they can be used in Taylor-series approximation-based variance calculations. Please refer to Chapter 3 for special instructions on Taylor-series approximation-based variance calculations.

Thirty-two replicate weights are provided on the data files for users who prefer to use the BHS method of variance estimation. These weights implement the balanced half-sample (BHS) method of variance

[27]Shah, Babubhai V., Beth G. Barnwell and Gayle S. Bieler, *SUDAAN User=s Manual Release 6.4*. (Research Triangle Park, N.C.: Research Triangle Institute), 1995.

[28]U.S. Bureau of the Census, *CENVAR IMPS Version 3.1* (Washington D.C.: U.S. Bureau of the Census), 1995.

estimation, and they have been created to handle the certainty stratum and to incorporate finite population correction factors for each of the 14 noncertainty strata. Two widely available software packages, WesVarPC[29], and PC CARP[30], have capabilities to use replicate weights to estimate variances.

Analysts should be cautious about use of BHS-estimated variances that relate only to one stratum or to a group of two or three strata. Such variance estimates may be based upon far fewer than 32 replicates, and thus the variance of the variance estimator may be large.

Those using either the restricted-use faculty file or the institution file should also be cautious about cross-classifying data so deeply that the resulting estimates are based upon a very small number of observations. Analysts should interpret the accuracy of NSOPF-93 statistics in light of estimated standard errors and of the number of observations used in the statistics. Users should consult sections 3.16 and 3.17 of this manual for essential information on variance estimation.

Analysts using the faculty file should note that the variable OSGROUP was used in sampling to stratify faculty by race/ethnicity, gender, employment status (full-time, part-time), and subject area (humanities, non-humanities). Selection probabilities for these strata were incorporated into the faculty weight variable, WEIGHT, which was fully adjusted for non-response. Therefore, to produce accurate statistical estimates, analysts need only to weight the sample by WEIGHT. OSGROUP can be ignored.

6.8 Using SAS and SPSS to Analyze the Datasets

The NSOPF-93 CD-ROM contains several types of files useable by SAS and SPSS. Specifically, these are SAS and SPSS command files, ASCII data files, permanent SAS datasets, and SPSS portable files. The types of files on the CD-ROM are:

1. **Raw data files** (.DAT extension).

2. **SAS command files** (.SAS extension) to create permanent SAS datasets and to generate frequencies from the data files.

3. **SAS for Windows Version 6.03 datasets** (.SSD extension), generated from the SAS command file.

4. **SPSS for Windows "include" files** to create SPSS datasets and to generate frequencies from the data files. The SPSS cards (.SPS extension) are provided in their entirety since different platforms have different limitations in SPSS.

5. **SPSS for Windows Version 6.0 saved system file** (.SAV extension), generated from the SPSS for Windows "include" command files.

6. **Item frequencies** are included as ASCII files (.TXT extension).

7. **Documentation files**.

[29]Westat, Inc., *A User's Guide to WesVarPC®, Version 2.0* (Rockville, Md.: Westat, Inc.), 1996.

[30]Fuller, Wayne C., *et al., PC CARP IV*. (Ames, Iowa: Statistical Laboratory, Iowa State University), 1986.

Each of the data files include the following items for each respondent:

a. Faculty file (1,005 variables):

Variables included on each record:
(1) Encrypted ID number (9 digits)
(2) Faculty questionnaire data (397 variables)
(3) 143 derived variables (institution level and faculty-level)
(4) WEIGHT
(5) 32 replicate weights (RWGHT01-RWGHT32)
(6) Sampling variables (XMODE, OSGROUP, ISTRATUM, PSU)
(7) Imputation flag variables ("S" or "M") (398 flags)
(8) 15 questionnaire variables with "don't know" imputed
(9) 15 imputation flags for the variables with "don't know" imputed

Note: The first six digits of the faculty respondent ID constitute the school ID. The last three digits constitute the specific faculty ID within the given school. The applicable institution responses can be merged with the faculty responses by matching the first six digits of the faculty ID with the institution ID.

b. Institution file (640 variables):

Variables included on each record:
(1) Encrypted ID number (6 digits)
(2) Institution questionnaire data (284 variables)
(3) 36 derived variables (institution-level only)
(4) WEIGHT
(5) 32 replicate weights (RWGHT01-RWGHT32)
(6) ISTRATUM and PSU sampling variables
(7) Imputation flags ("M") (284 variables)

The naming conventions for these basic types of files are:

- ASCII data files with the filename extension *.DAT contain NSOPF-93 faculty- and institution-level data. These ASCII data files serve as input for SPSS and SAS command files.

- ASCII files with the filename extensions *.SAS and *.SPS are SAS and SPSS command files, respectively. Each such file contains SAS or SPSS command statements, variable label information, and variable format information. These SAS and SPSS command files read the ASCII data files (*.DAT) containing the faculty- and institution-level data to create temporary or permanent SAS/SPSS datasets.

- Files with the file name extension *.SSD indicate SAS Version 6.03 permanent datasets.

- Files with the name extension *.SAV indicate SPSS for Windows Version 6.0 permanent datasets.

- Files with the file name extension *.POR indicate SPSS portable files. Such files are generic files that can be imported into different versions of SPSS across various operating systems and platforms. The two SPSS portable files (FAC88A.POR and FAC88B.POR) are provided for the NSOPF-88 faculty data only. There are two SPSS portable files because SPSS for Windows Version 6.0, which was used to create the .POR files, has a 500-variable limitation.

6.8.1 Getting Started With NSOPF-93 SAS and SPSS files

Using SAS command files. Path statements in each SAS command file should be modified to reflect local system settings. After the command files have been modified, they can be submitted to the appropriate processor. Each SAS command file on the NSOPF-93 CD-ROM is designed to produce frequencies for all variables by default. Additional statements may be added to the command file to produce other output according to users? analytic interests (e.g., descriptive statistics, cross tabulations, etc.).

Using SAS system files. The permanent SAS dataset (Version 6.03) can be accessed using conventional SAS statements. Once a library created in a LIBNAME statement is referenced, the permanent SAS dataset (denoted by the extension *.SSD) can be accessed by a ASET≅ statement. See the code example below:

```
LIBNAME  NSOPF       >E:\NSOPF93\=;

DATA  FAC;
        SET NSOPF.FAC93;        /* FAC93.SSD is the name of the data file */
PROC CONTENTS;
RUN;
```

Using SPSS include files. Path statements in each SPSS command file and the include file command should be modified to reflect systems settings. Each SPSS command file on the NSOPF-93 CD-ROM is designed to produce frequencies for all variables in the data file by default. Additional statements may be added to the command file to produce other output according to analytical interests (e.g., descriptive statistics, cross-tabulations, etc.).

In SPSS for Windows, select from the SPSS/W command bar SPSS File>New> SPSS Syntax. Next, in the SPSS/W editor for this new file, use the SPSS syntax similar to the example below to invoke the SPSS command file. Users of the DOS version of SPSS can use the same syntax at the SPSS command line. For example:

```
INCLUDE FILE = 'E:\NSOPF93\INST93.SPS.'
```

Using SPSS portable files. Files with *.POR file extensions indicate SPSS portable files. Such generic files are portable between different versions of SPSS across various platforms. To import and use a portable file, use the following syntax to create an active SPSS data set:

```
IMPORT FILE= 'E:\NSOPF88\FAC88A.POR'. /KEEP = CASEID PSU.
```

A subset of variables can be selectively read into the active file or saved to the system file by using the '(/KEEP=...)' or '(/DROP=...)' options after the import or save commands. To save the active file as a system file, use:

```
SAVE OUTFILE = 'C:\INST93.SAV'. /DROP = INSTID PSU.
```

6.8.2 Optimizing SAS and SPSS programs

Processing time and disk space are critical resources for most analysts. Running optimized programs and conserving disk space allows users to submit more jobs and to store more data. Some suggestions for increasing the efficiency of your programs and for saving storage space are included below.

Checking your SAS and SPSS syntax. Select zero cases for the first SAS or SPSS run. Building a data set with zero cases takes very little processor time and provides a quick method to allow the SAS/SPSS processor

to verify the command file syntax. In SAS command and system files, use the OBS=0 data set option to verify SAS syntax,

```
OPTIONS OBS=0;
```

In SPSS the 'N 0.' command serves the same function,

```
N 0.
DATA LIST FILE = 'C:\NSOPF93\FAC93.DAT' FIXED RECORDS=3.
```

Use the NCES-defined derived and classification variables. These variables were carefully constructed and tested. In addition, some of the derived variables were created from data sources outside of the NSOPF-93 data sets.

Create smaller, more manageable, data subsets. Building, merging or recoding large datasets requires large amounts of disk space, processing time and computer memory capacity. Problems with system and space limitations can be avoided by carefully planning analyses ahead of time. Only variables relevant to planned analysis should be selected. Then, they can be included in smaller, more manageable, data subsets.

Keep only the variables needed for analysis. In SAS and SPSS, data subsets can be created using DROP and KEEP options. In SAS, data subsets are created using the '(KEEP=...;)' and '(DROP=...;)' options in the 'SET...;' statement and/or in the 'DATA...;' statement when creating the SAS data set,

```
DATA FACULTY (KEEP=CASEID PSU);
```

In SPSS, permanent data subsets can be created using the '(/DROP...)' and '(/KEEP...)' options in the '(SAVE OUTFILE=...)' statement,

```
SAVE OUTFILE = 'C:\FAC93.POR' /DROP = CASEID PSU.
```

It is more efficient (but not essential) for variables in the KEEP statement to be listed in the same order as they occur in the main system file. The KEEP statement does not reorder the variables in the new data set.

Keep only the records needed for analysis. In SAS, sub-setting AIF≅ statements can be used to build datasets that include only the records needed for analysis (IF <SAS variable name> = <condition> ;) Sub-setting IF statements are placed immediately after the last SAS input statement. See the example below:

```
DATA NSOPF93;
    INFILE INDATA LRECL=1024 MISSOVER;
INPUT
    CASEID    1-9      /*CASEID*/
    A7        36-37;   /*TENURE STATUS*/;
IF A7=1;
RUN;
```

These control statements will build a data set containing the variables CASEID and A7 where the variable A7 value is equal to 1. In other words, this dataset selects for analysis only cases (CASEIDS) of tenured faculty (A7=1). Please note that variance estimation packages based on Taylor-series approximations require un-subsetted data.

Another technique to save disk space and processing time in SAS. Use the '(LENGTH=...)' statement. The default length in SAS is 8 and the minimum length declaration is 3 for numeric variables. If most of the variables selected for analysis can be stored in 3 bytes rather than the default 8 bytes, any system files created will be one-half the size and will run twice as fast as programs using the SAS default settings. Length statements are included with all NSOPF-93 command files and should be used wherever possible.

6.9 Guide to Hardcopy Codebooks

The hardcopy codebooks provide a comprehensive description of the faculty and institution data files. For each variable, the codebook provides a summary of the related information. The question number and wording, the variable's position and format, and the responses to the item along with their unweighted frequency and percent and weighted percent are shown. An example of a codebook entry appears in Exhibit 6-1. The faculty data file codebook appears in Appendix L. The institution data file codebook appears in Appendix M.

Exhibit 6-1: Codebook entry: NSOPF-93 faculty questionnaire

Variable: B15_4 Numeric Pos: (1)84-85

GRAD SCHOOL: FELLOWSHIP

When you were in graduate school, which of the following forms of financial assistance, if any, did you receive? [FELLOWSHIP]

RESPONSE	CODES	FREQ	PER CENT	WGHTD PCT
Yes.....	1	5629	21.8%	22.7%
No.....	2	17879	69.4%	77.3%
RESERVED CODES:				
NOT APPLICABLE.....	-5	2272	8.8%	(miss)
TOTALS:.....		25780	100.0%	100.0%

Key

Variable: This field contains the name of the variable in the datafile.

Numeric: This label identifies the type of variable. Almost all variables are numeric. The word ACharacter≅ appears in this field for an alphanumeric variable.

Pos: This item represents the position and gives the line number within each record (in parentheses) and the column number within the line for the variable.

Grad School: Fellowship: This is a sample of a variable name. All variable names appear in this field. The question wording from the questionnaire appears below the variable name.

Response: This item provides the original response categories or ranges for continuous variables, as well as categories added during editing to code legitimate responses (in the case of questionnaire items) or to add the recoded or constructed response categories (for derived variables) and data indicators such as flags.

Codes: This item provides the actual numerical codes that appear on the data file in the position specified.

Freq: This item shows the unweighted frequency counts for all records that were processed, including records that have missing data codes or legitimate skips.

Percent: This column displays the unweighted frequency counts as percentages. All records processed are included.

Wghtd Pct: This column displays percentages based on response codes weighted up to the relevant population. Cases coded with reserved codes (see below) are excluded.

Reserved codes: ANot applicable≅ (-5), and ADon=t know≅ (-2), where they appear, were valid coded values. Other reserved codes are Anot in IPEDS≅ (-7) used to indicate data missing from IPEDS for certain derived variables, and AText absent≅ (-3) where an expected text response was missing.

Legitimate Skip: Because of responses to preceding filter questions, this indicates data should not be present for this item by some respondents; that is, the value is legitimately missing.

6.10 NSOPF-93 Electronic Codebooks (ECBs)

Three NSOPF-93 electronic codebooks (ECBs) are also available to users: one for the institution file, one for the restricted-use faculty file, and one for merged institution and restricted-use-access faculty files. The ECB combines the convenience, simplicity and cost efficiencies of personal computers (PCs) with CD-ROM technology. It is easily accessible with the MS-Windows operating system and statistical and word processing software to which most users are accustomed. However, a user must already have access to SAS or SPSS (DOS or Windows). Virtually all steps that must be undertaken prior to actual analysis of the data may now be conducted within the ECB.

The ECB can be used to select variables for subsequent analysis, to write SAS or SPSS-PC code for file construction of the designated variables, and to generate a codebook of the chosen set of variables. For each variable, two windows of information are available:

- Unweighted frequencies, percentages, codes, and labels
- Item wording and other descriptive text

The user has the option of selecting SAS-PC code, including PROC FORMAT labeling, SPSS-PC for DOS or Windows code, SPSS for Windows 6.0 code, IDs for merging modules automatically included in SAS/SPSS code, and ASCII text for a printed codebook.

The ECB software is designed to acquaint the user with the available survey measures and responses by means of on-line, fully documented codebooks. Users may browse through the documentation, searching on variable names, labels, and question text to find items that are suitable for their research questions. Users can move quickly in the ECB between questionnaire items or derived variables.

A window shows how many variables have been tagged at any one time. The process culls a set of variables, and only those variables, that are appropriate to the user's own research needs. Since variable names and labels are already in electronic form on the ECB, time-consuming tasks (such as typing in this information) are eliminated. The ECB permits users to write SAS-PC or SPSS-PC program code and/or command statements in order to construct system files of the selected variables. Finally, a print file of a codebook containing unweighted frequencies only for tagged items is another ECB option. The print file may subsequently be used to generate individualized hardcopy codebooks of the selected variables, providing a convenient reference during subsequent data analyses.

In order to use the ECB technology, the following are required:

- a CD-ROM reader;
- an IBM-compatible personal computer (PC), minimally a 286 system;
- up to 10 MB of space on the PC for the full ECB system[31]; and
- a substantial amount of space for the data files. Although up to 250 MB are required for the institution or restricted faculty datasets, it is not necessary to copy and/or to analyze all of these files simultaneously.

The NSOPF-93 Compact Disc includes installation procedures, programs and files required by the codebook system, the raw data files and data user manuals (in WordPerfect format).

[31]Space requirements will vary according to a number of factors: the ECB component that is selected, the number of variables chosen for generation of a hardcopy codebook, and the statistical package the researcher uses.

7. Comparability Between NSOPF-88 and NSOPF-93 Datasets

7.1 Comparability Issues Regarding NSOPF-93 Faculty Questionnaire Data

7.1.1 Definition of Instructional Faculty

As discussed in Chapter 1, NSOPF-93 and NSOPF-88 defined slightly different target populations. Unlike NSOPF-88, NSOPF-93 included noninstructional faculty in its target population. Therefore, to compare similar populations between the two NSOPF rounds requires comparing instructional faculty only.

Analysts wishing to compare NSOPF-93 faculty questionnaire data with NSOPF-88 faculty questionnaire data should compare the entire sample of 1988 faculty with the subset of the 1993 faculty who responded "yes" to Question 1, and then said in Question 1A that "all" or "some of [their] instructional duties related to credit courses or advising or supervising academic activities for credit." These questions are almost identical to the first two questions on the NSOPF-88 faculty questionnaire. This definition of instructional faculty selects approximately 90 percent of the NSOPF-93 sample for analysis. The most efficient way to select these faculty from NSOPF-93 is to use the derived variable X01_1, selecting cases where X01_1=1. X01_1 has been created to flag the faculty members meeting the two conditions discussed above: those who responded "yes" to Question 1, and said in Question 1a that "all" or "some of [their] instructional duties related to credit courses or advising or supervising academic activities for credit."

A look at the distribution of faculty across institution types (defined by the modified NSOPF-88 stratification variable, X02_0) indicates that the selection criteria described above yield comparable faculty population estimates. Exhibit 7-1, compares the numbers of faculty in 1988 and in 1993. Exhibit 7-2 compares the percentage distribution of faculty in each institutional stratum in 1988 and in 1993. The percentages are similar, although a larger proportion of faculty in two-year schools is observed in 1993.

Exhibit 7-1: Number of instructional faculty (X01_1=1), by modified NSOPF-88 stratum (weighted data)

	All		Full-time		Part-time	
	NSOPF-88	NSOPF-93	NSOPF-88	NSOPF-93	NSOPF-88	NSOPF-93
Public research	119,334	132,717	102,150	107,358	17,184	25,359
Private research	53,120	49,423	41,593	32,164	11,527	17,259
Public doctoral	67,678	73,570	56,308	52,808	11,370	20,762
Private doctoral	39,793	46,699	25,070	28,684	14,723	18,015
Public comprehensive	130,341	141,533	97,104	94,477	33,237	47,056
Private comprehensive	60,457	75,085	36,818	38,561	23,639	36,524
Private liberal arts	55,391	58,961	38,441	38,052	16,950	20,909
Public two-year	200,663	276,292	96,118	109,957	104,545	166,335
Other	43,047	50,654	21,524	26,200	21,524	24,454
All	769,824	904,934	515,125	528,261	254,699	376,673

Exhibit 7-2: Percent of instructional faculty by institution type (X01_1=1), by modified NSOPF-88 stratum

	All		Full-time		Part-time	
	NSOPF-88	NSOPF-93	NSOPF-88	NSOPF-93	NSOPF-88	NSOPF-93
Public research	16	15	20	20	7	7
Private research	7	5	8	6	5	5
Public doctoral	9	8	11	10	4	6
Private doctoral	5	5	5	5	6	5
Public comprehensive	17	16	19	18	13	12
Private comprehensive	8	8	7	7	9	10
Private liberal arts	7	7	7	7	7	6
Public two-year	26	31	19	21	41	44
Other	6	6	4	5	8	6

7.2 Health Sciences Faculty and the Faculty Questionnaire

Creation of best estimates could only partly rectify problems with estimates of health sciences faculty. The reconciliation effort helped to identify some institutions that failed to list health sciences faculty on their original faculty lists. However, because faculty list data were only recorded for faculty members in the four NEH disciplines (i.e., English language and literature, foreign languages, history, and philosophy and religion), it was impossible to poststratify to best estimates for health science faculty.

Characteristics specific to health sciences faculty make comparisons between health sciences faculty and other types of faculty difficult. The total number of health sciences faculty estimated in the NSOPF-93 faculty dataset is 146,615. However, when the selection criterion for instructional faculty described in section 7.1.1 is applied, a total of 124,186 health sciences faculty is selected for analysis. While this selection criterion provides the greatest comparability with NSOPF-88 faculty population estimates, it still selects an estimated total of health sciences faculty that represents a decline from 1988.

One reason for the selection of fewer health sciences instructional faculty may be that health sciences faculty are more likely to perform individualized instruction or noncredit teaching activities than are other types of faculty participating in NSOPF-93. The largest concentration of faculty who conducted individualized instruction but who did not teach courses, was found in the health sciences. Of the estimated 76,200 faculty who conducted individualized instruction and taught no other course, 31,201, or 41 percent, or the total were health sciences faculty. The next largest group of faculty meeting these criteria were found in the natural sciences (8,805 or 11.6 percent). Because of the importance of individualized instruction to health sciences faculty, selecting for analysis only those faculty who had any for-credit instructional responsibilities may have the unintended consequence of excluding a greater number of health sciences faculty than is warranted.

Because differences between health science faculty and other types of faculty persist despite reconciliation, analysts should be cautious when using these data. A more detailed discussion on health science estimates can be found in the *1993 National Study of Postsecondary Faculty Methodology Report* [NCES 97-467]. Analysts should be aware that NCES plans to include health sciences faculty estimates in the total, but not report health sciences faculty estimates separately in its publications. One example is the NCES report, *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992* [NCES 97-470].

Appendix A

NSOPF-93 Faculty Questionnaires

OMB No. 1850-0608
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

FACULTY QUESTIONNAIRE

All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-sponsored by: **National Science Foundation**
National Endowment for the Humanities

Contractor: **National Opinion Research Center (NORC)**
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY

Instructions for Completing Faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term ***at the institution listed on the label on the back cover of the questionnaire.***

This questionnaire was designed to be completed by both full-time and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask you to circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

If you have any questions on how to proceed, please call NORC toll-free at 1-800-733-NORC.

NATIONAL STUDY OF POSTSECONDARY FACULTY:
Faculty Questionnaire

1. **During the 1992 Fall Term, did you have any <u>instructional</u> duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)?** *(CIRCLE ONE NUMBER)*

‡)Q 1. Yes **(ANSWER 1A)** 2. No **(SKIP TO QUESTION 2)**

.))< **1A.** **During the 1992 Fall Term, were . . .** *(CIRCLE ONE NUMBER)*

1. *all* of your instructional duties related to credit courses,

2. some of your instructional duties related to credit courses or advising or supervising academic activities for credit, <u>or</u>

3. *all* of your instructional duties related to *non*credit courses or advising or supervising *non*credit academic activities?

2. **What was your principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one.** *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
   (WRITE IN TITLE OR POSITION) _____
7. On sabbatical from this institution
8. Other (subsidized performer, artist-in-residence, etc.)

3. **During the 1992 Fall Term, did you have faculty status at this institution?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No, I did not have faculty status
3. No, no one has faculty status at this institution

SECTION A. NATURE OF EMPLOYMENT

4. **During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time?** *(CIRCLE ONE NUMBER)*

1. Part-time **(ANSWER 4A)**
2. Full-time **(SKIP TO QUESTION 5)**

4A. **Did you hold a part-time position at this institution during the 1992 Fall Term because . . .** *(CIRCLE "1" OR "2" FOR EACH REASON)*

Yes	No	
1	2	a. you preferred working on a part-time basis?
1	2	b. a full-time position was not available?
1	2	c. you were supplementing your income from other employment?
1	2	d. you wanted to be part of an academic environment?
1	2	e. you were finishing a graduate degree?
1	2	f. of other reasons?

5. **Were you chairperson of a department or division at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No

6. **In what year did you begin the job you held at this institution during the 1992 Fall Term? Include promotions in rank as part of your Fall 1992 job.** *(WRITE IN YEAR)*

19 ~ ~

7. **What was your tenure status at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Tenured **7A. In what year did you achieve tenure at this institution?** 19 ~ ~
2. On tenure track but not tenured **(SKIP TO QUESTION 9)**
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

8. **During the 1992 Fall Term, what was the duration of your contract or appointment at this institution?** *(CIRCLE ONE NUMBER)*

1. One academic term
2. One academic/calendar year
3. A limited number of years (i.e., two or more academic/calendar years)
4. Unspecified duration
5. Other

9. **Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA")*

NA. Not applicable: no ranks designated at this institution **(SKIP TO QUESTION 11)**

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other *(WRITE IN)*_____

10. **In what year did you first achieve this rank?**
(WRITE IN YEAR)

19 ~ ~

11. **During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?**
(CIRCLE ALL THAT APPLY)

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
   (WRITE IN TITLE OR POSITION) _____
6. Research
   (WRITE IN TITLE OR POSITION) _____
7. None of the above

12. **What is your <u>principal</u> field or discipline of teaching?** *(REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

13. **What is your <u>principal</u> area of research? If equal areas, select one.** *(IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

AGRICULTURE
101 Agribusiness & Agricultural Production
102 Agricultural, Animal, Food, & Plant Sciences
103 Renewable Natural Resources, including Conservation, Fishing, & Forestry
110 Other Agriculture

ARCHITECTURE & ENVIRONMENTAL DESIGN
121 Architecture & Environmental Design
122 City, Community, & Regional Planning
123 Interior Design
124 Land Use Management & Reclamation
130 Other Arch. & Environmental Design

ART
141 Art History & Appreciation
142 Crafts
143 Dance
144 Design (other than Arch. or Interior)
145 Dramatic Arts
146 Film Arts
147 Fine Arts
148 Music
149 Music History & Appreciation
150 Other Visual & Performing Arts

BUSINESS
161 Accounting
162 Banking & Finance
163 Business Administration & Management
164 Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
165 Human Resources Development
166 Organizational Behavior
167 Marketing & Distribution
170 Other Business

COMMUNICATIONS
181 Advertising
182 Broadcasting & Journalism
183 Communications Research
184 Communication Technologies
190 Other Communications

COMPUTER SCIENCE
201 Computer & Information Sciences
202 Computer Programming
203 Data Processing
204 Systems Analysis
210 Other Computer Science

EDUCATION
221 Education, General
222 Basic Skills
223 Bilingual/Cross-cultural Education
224 Curriculum & Instruction
225 Education Administration
226 Education Evaluation & Research
227 Educational Psychology
228 Special Education
229 Student Counseling & Personnel Svcs.
230 Other Education

TEACHER EDUCATION
241 Pre-Elementary
242 Elementary
243 Secondary
244 Adult & Continuing
245 Other General Teacher Ed. Programs
250 Teacher Education in Specific Subjects

ENGINEERING
261 Engineering, General
262 Civil Engineering
263 Electrical, Electronics, & Communication Engineering
264 Mechanical Engineering
265 Chemical Engineering
270 Other Engineering
280 Engineering-Related Technologies

ENGLISH AND LITERATURE
291 English, General
292 Composition & Creative Writing
293 American Literature
294 English Literature
295 Linguistics
296 Speech, Debate, & Forensics
297 English as a Second Language
300 English, Other

FOREIGN LANGUAGES
311 Chinese (Mandarin, Cantonese, or Other Chinese)
312 French
313 German
314 Italian
315 Latin
316 Japanese
317 Other Asian
318 Russian or Other Slavic
319 Spanish
320 Other Foreign Languages

HEALTH SCIENCES
331 Allied Health Technologies & Services
332 Dentistry
333 Health Services Administration
334 Medicine, including Psychiatry
335 Nursing
336 Pharmacy
337 Public Health
338 Veterinary Medicine
340 Other Health Sciences

350 HOME ECONOMICS

360 INDUSTRIAL ARTS

370 LAW

380 LIBRARY & ARCHIVAL SCIENCES

NATURAL SCIENCES: BIOLOGICAL SCIENCES
391 Biochemistry
392 Biology
393 Botany
394 Genetics
395 Immunology
396 Microbiology
397 Physiology
398 Zoology
400 Biological Sciences, Other

NATURAL SCIENCES: PHYSICAL SCIENCES
411 Astronomy
412 Chemistry
413 Physics
414 Earth, Atmosphere, and Oceanographic (Geological Sciences)
420 Physical Sciences, Other

430 MATHEMATICS

440 STATISTICS

450 MILITARY STUDIES

460 MULTI/INTERDISCIPLINARY STUDIES

470 PARKS & RECREATION

480 PHILOSOPHY AND RELIGION

490 THEOLOGY

500 PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)

510 PSYCHOLOGY

520 PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)

530 SCIENCE TECHNOLOGIES

SOCIAL SCIENCES AND HISTORY
541 Social Sciences, General
542 Anthropology
543 Archeology
544 Area & Ethnic Studies
545 Demography
546 Economics
547 Geography
548 History
549 International Relations
550 Political Science & Government
551 Sociology
560 Other Social Sciences

VOCATIONAL TRAINING

CONSTRUCTION TRADES
601 Carpentry
602 Electrician
603 Plumbing
610 Other Construction Trades

CONSUMER, PERSONAL, & MISC. SERVICES
621 Personal Services (e.g., Barbering, Cosmetology)
630 Other Consumer Services

MECHANICS AND REPAIRERS
641 Electrical & Electronics Equipment Repair
642 Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
643 Vehicle & Mobile Equipment Mechanics & Repairers
644 Other Mechanics & Repairers

PRECISION PRODUCTION
661 Drafting
662 Graphic & Print Communications
663 Leatherworking & Upholstering
664 Precision Metal Work
665 Woodworking
670 Other Precision Production Work

TRANSPORTATION AND MATERIAL MOVING
681 Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)
682 Land Vehicle & Equipment Operation
683 Water Transportation (e.g., Boat & Fishing Operations, Deep Water Diving, Marina Operations, Sailors & Deckhands)
690 Other Transportation & Material Moving

900 OTHER *(IF YOU USE THIS CODE, BE SURE TO WRITE IN A COMPLETE DESCRIPTION AT QUESTIONS 12-13, AND 16)*

SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND

14. **Which of the following undergraduate academic honors or awards, if any, did you receive?** *(CIRCLE ALL THAT APPLY)*

1. National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society
2. Cum laude or honors
3. Magna cum laude or high honors
4. Summa cum laude or highest honors
5. Other undergraduate academic achievement award
6. None of the above

15. **When you were in graduate school, which of the following forms of financial assistance, if any, did you receive?** *(CIRCLE ALL THAT APPLY, OR CIRCLE "NA")*

NA. Not applicable; did not attend graduate school **(GO TO QUESTION 16)**

1. Teaching assistantship
2. Research assistantship
3. Program or residence hall assistantship
4. Fellowship
5. Scholarship or traineeship
6. Grant
7. G.I. Bill or other veterans' financial aid
8. Federal or state loan
9. Other loan
10. None of the above

16. **Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name of the field, and the name and location of the institution from which you received each degree or award. Do not list honorary degrees.** *(COMPLETE ALL COLUMNS FOR EACH DEGREE)*

CODES FOR TYPE OF DEGREE

1 Professional degree (M.D., D.D.S., L.L.B., etc.)
2 Doctoral degree (Ph.D., Ed.D., etc.)
3 Master's degree or equivalent
4 Bachelor's degree or equivalent
5 Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6 Associate's degree or equivalent
7 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

	A. Degree Code (see above)	B. Year Received	C. Field Code (from pp. 5-6)	D. Name of Field (from pp. 5-6)	E. Name of Institution (a) and City and State/Country of Institution (b)
(1) Highest	_____	19_____	_____	_____	a. _____
				_____	_____
					b. _____
					_____
(2) Next Highest	_____	19_____	_____	_____	a. _____
				_____	_____
					b. _____
					_____
(3) Next Highest	_____	19_____	_____	_____	a. _____
				_____	_____
					b. _____
					_____
(4) Next Highest	_____	19_____	_____	_____	a. _____
				_____	_____
					b. _____
					_____

17. **During the 1992 Fall Term, were you employed <u>only</u> at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice?** *(CIRCLE ONE NUMBER)*

1. Employed only at this institution **(SKIP TO QUESTION 19)**
2. Had other employment, consulting, self-owned business, or private practice

17A. **How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice.** *(WRITE IN NUMBER)*

_____ Number of Jobs

18. **Not counting any employment at this institution, what was the employment sector of the main <u>other</u> job you held during Fall 1992?** *(CIRCLE ONE NUMBER)*

1. 4-year college or university, graduate or professional school
2. 2-year or other postsecondary institution
3. Elementary or secondary school
4. Consulting, freelance work, self-owned business, or private practice
5. Hospital or other health care or clinical setting
6. Foundation or other nonprofit organization other than health care organization
7. For-profit business or industry in the private sector
8. Federal government, including military, or state or local government
9. Other *(WRITE IN)* _____

18A. **What year did you begin that job?** *(WRITE IN YEAR)*

19 ~ ~

18B. **What was your primary responsibility in that job?** *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
7. Other

18C. **Was that job full-time or part-time?** *(CIRCLE ONE NUMBER)*

1. Full-time
2. Part-time

19. **The next questions ask about jobs that ended <u>before</u> the beginning of the 1992 Fall Term. For the three most recent and significant <u>main</u> jobs that you held during the past 15 years, indicate below the year you began and the year you left each job, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.**

- **Do not list promotions in rank at one place of employment as different jobs.**
- **Do not include temporary positions (i.e., summer positions) or work as a graduate student.**
- **List each job (other than promotion in rank) separately.**

If not applicable, circle "NA")))))<	**NA**	**NA**	**NA**
(1) YEARS JOB HELD	**A. MOST RECENT MAIN JOB (PRIOR TO FALL 1992)**	**B. NEXT MOST RECENT MAIN JOB**	**C. NEXT MOST RECENT MAIN JOB**
FROM:	19_____	19_____	19_____
TO:	19_____	19_____	19_____
(2) EMPLOYMENT SECTOR	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
4-year college or university, graduate or professional school	1	1	1
2-year or other postsecondary institution	2	2	2
Elementary or secondary school	3	3	3
Consulting, freelance work, self-owned business, or private practice	4	4	4
Hospital or other health care or clinical setting	5	5	5
Foundation or other nonprofit organization other than health care organization	6	6	6
For-profit business or industry in the private sector	7	7	7
Federal government, including military, or state or local government	8	8	8
Other	9	9	9
(3) PRIMARY RESPONSIBILITY	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Teaching	1	1	1
Research	2	2	2
Technical activities (e.g., programmer, technician, chemist, engineer, etc.)	3	3	3
Clinical service	4	4	4
Community/public service	5	5	5
Administration	6	6	6
Other	7	7	7
(4) FULL-TIME/PART-TIME	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Full-time	1	1	1
Part-time	2	2	2

20. **About how many of each of the following have you presented/published/etc. during your entire career and during the last 2 years? For publications, please include <u>only</u> works that have been accepted for publication. Count multiple presentations/publications of the same work <u>only</u> once.** *(CIRCLE "NA" IF YOU HAVE NOT PUBLISHED OR PRESENTED)*

NA. No presentations/publications/etc. **(GO TO QUESTION 21)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Presentation/Publication/etc.	A. Total during career	B. Number in past 2 years
(1) Articles published in refereed professional or trade journals	_____	_____
(2) Articles published in nonrefereed professional or trade journals	_____	_____
(3) Creative works published in juried media	_____	_____
(4) Creative works published in nonjuried media or in-house newsletters	_____	_____
(5) Published reviews of books, articles, or creative works	_____	_____
(6) Chapters in edited volumes	_____	_____
(7) Textbooks	_____	_____
(8) Other books	_____	_____
(9) Monographs	_____	_____
(10) Research or technical reports disseminated internally or to clients	_____	_____
(11) Presentations at conferences, workshops, etc.	_____	_____
(12) Exhibitions or performances in the fine or applied arts	_____	_____
(13) Patents or copyrights (excluding thesis or dissertation)	_____	_____
(14) Computer software products	_____	_____

SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

21. **During the 1992 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams, orals committees, or examination or certification committees did you chair and/or serve on at this institution?** *(CIRCLE "NA" IF YOU DID NOT SERVE ON ANY COMMITTEES)*

NA. Did not serve on any undergraduate or graduate committees **(GO TO QUESTION 22)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Committee	A. Number served on	B. Of that number, how many did you chair?
(1) Undergraduate thesis or dissertation committees	_____	_____
(2) Undergraduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(3) Undergraduate examination/certification committees	_____	_____
(4) Graduate thesis or dissertation committees	_____	_____
(5) Graduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(6) Graduate examination/certification committees	_____	_____

22. **During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individualized instruction, such as independent study or individual performance classes. Count multiple sections of the same course as a separate class, but not the lab section of a course.** *(WRITE IN A NUMBER, OR CIRCLE "0")*

0. No classes taught **(SKIP TO QUESTION 25)**

‡)Q _____ Number of classes/sections **(ANSWER 22A)**

.))< **22A. How many of those classes were classes for credit?**

0. No classes for credit **(SKIP TO QUESTION 25)**

_____ Number of classes/sections for credit **(ANSWER QUESTION 23 ON THE NEXT PAGE)**

23. **For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.**

If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class. (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A. FIRST FOR-CREDIT CLASS	B. SECOND FOR-CREDIT CLASS
(1) CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)		
(2) DURING 1992 FALL TERM		
Number of weeks the class met?	a. _____	a. _____
Number of credit hours?	b. _____	b. _____
Number of hours the class met per week?	c. _____	c. _____
Number of teaching assistants, readers?	d. _____	d. _____
Number of students enrolled?	e. _____	e. _____
Was this class team taught?	f. 1. Yes 2. No	f. 1. Yes 2. No
Average # hours per week *you* taught the class?	g. _____	g. _____
(3) PRIMARY LEVEL OF STUDENTS	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lower division students (first or second year postsecondary) or	1	1
Upper division students (third or fourth year postsecondary) or	2	2
Graduate or any other post-baccalaureate students, or	3	3
All other students?	4	4
(4) PRIMARY INSTRUCTIONAL METHOD USED	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lecture	1	1
Seminar	2	2
Discussion group or class presentations	3	3
Lab, clinic or problem session	4	4
Apprenticeship, internship, field work, or field trips	5	5
Role playing, simulation, or other performance (e.g., art, music, drama)	6	6
TV or radio	7	7
Group projects	8	8
Cooperative learning groups	9	9

C.	D.	E.	
THIRD FOR-CREDIT CLASS	**FOURTH FOR-CREDIT CLASS**	**FIFTH FOR-CREDIT CLASS**	
a. _____ b. _____ c. _____ d. _____ e. _____ f. 1. Yes 2. No g. _____	a. _____ b. _____ c. _____ d. _____ e. _____ f. 1. Yes 2. No g. _____	a. _____ b. _____ c. _____ d. _____ e. _____ f. 1. Yes 2. No g. _____	**a. Number of weeks the class met** **b. Number of credit hours** **c. Number of hours the class met per week** **d. Number of teaching assistants, readers** **e. Number of students enrolled** **f. Was this class team taught** **g. Average # hours per week *you* taught**
(CIRCLE ONE) 1 2 3 4	*(CIRCLE ONE)* 1 2 3 4	*(CIRCLE ONE)* 1 2 3 4	**Lower division students** **Upper division students** **Graduate, post-baccalaureate students** **All other students**
(CIRCLE ONE) 1 2 3 4 5 6 7 8 9	*(CIRCLE ONE)* 1 2 3 4 5 6 7 8 9	*(CIRCLE ONE)* 1 2 3 4 5 6 7 8 9	**Lecture** **Seminar** **Discussion group or class presentations** **Lab, clinic or problem session** **Apprenticeship, internship, etc.** **Role playing, simulation, performance, etc.** **TV or radio** **Group projects** **Cooperative learning groups**

24. **Did you teach any undergraduate courses <u>for</u> <u>credit</u> during the 1992 Fall Term at this institution?**

‡)Q 1. Yes **(ANSWER 24A)** 2. No **(SKIP TO QUESTION 25)**

.))< **24A. In how many of the undergraduate courses that you taught <u>for</u> <u>credit</u> during the 1992 Fall Term did you use . . .** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

None	Some	All		
1	2	3	a.	Computational tools or software?
1	2	3	b.	Computer-aided or machine-aided instruction?
1	2	3	c.	Student presentations?
1	2	3	d.	Student evaluations of each other's work?
1	2	3	e.	Multiple-choice midterm and/or final exam?
1	2	3	f.	Essay midterm and/or final exams?
1	2	3	g.	Short-answer midterm and/or final exams?
1	2	3	h.	Term/research papers?
1	2	3	i.	Multiple drafts of written work?
1	2	3	j.	Grading on a curve?
1	2	3	k.	Competency-based grading?

25. **For each type of student listed below, please indicate how many students received individual instruction from you during the 1992 Fall Term, (e.g., independent study or one-on-one instruction, including working with individual students in a clinical or research setting), and the total number of contact hours with these students per week. Do not count regularly scheduled office hours.** *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

Type of students receiving Formal Individualized Instruction	A. Number of students	B. Total contact hours per week
(1) Lower division students (first or second year postsecondary)	_____	_____
(2) Upper division students (third or fourth year postsecondary)	_____	_____
(3) Graduate or any other post-baccalaureate students	_____	_____
(4) All other students	_____	_____

26. **During the 1992 Fall Term, how many regularly scheduled office hours did you have per week?** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

_____ Number of hours per week

27. **During the 1992 Fall Term, how much informal contact with students did you have each week outside of the classroom? Do <u>not</u> count individual instruction, independent study, etc., <u>or</u> regularly scheduled office hours.** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

_____ Number of hours per week

28. **During the 1992 Fall Term, were you engaged in any professional research, writing, or creative works?**

1. Yes **(ANSWER QUESTION 29)** 2. No **(SKIP TO QUESTION 34)**

29. **How would you describe your <u>primary</u> professional research, writing, or creative work during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Pure or basic research
2. Applied research
3. Policy-oriented research or analysis
4. Literary or expressive
5. Program/Curriculum design and development
6. Other

30. **During the 1992 Fall Term, were you engaged in any <u>funded</u> research or <u>funded</u> creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services.** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 34)**

31. **During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 33)**

32. **During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI?** *(WRITE IN NUMBER; IF NONE, WRITE IN "0")*

_____ Number of individuals

33. **Fill out the information below for each funding source during the 1992 Fall Term. If not sure, give your best estimate.**

A. **Funding source** *(CIRCLE "1" OR "2" FOR EACH SOURCE)*	**B.** **Number of Grants/ Contracts**	**C.** **Work done as...** *(CIRCLE ALL THAT APPLY)*	**D.** **Total funds for 1992-93 academic year**	**E.** **How funds were used** *(CIRCLE ALL THAT APPLY)*
(1) This institution? 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(2) Foundation or other nonprofit organization? 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(3) For profit business or industry in the private sector? 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(4) State or local government? 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(5) Federal Government? 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(6) Other source? *(WRITE IN)* _____ 1. Yes 6 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other

34. **How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA," ON EACH LINE)*

Not Available/ Not Applicable	Very Poor	Poor	Good	Very Good	
NA	1	2	3	4	a. Basic research equipment/instruments
NA	1	2	3	4	b. Laboratory space and supplies
NA	1	2	3	4	c. Availability of research assistants
NA	1	2	3	4	d. Personal computers
MA	1	2	3	4	e. Centralized (main frame) computer facilities
NA	1	2	3	4	f. Computer networks with other institutions
NA	1	2	3	4	g. Audio-visual equipment
NA	1	2	3	4	h. Classroom space
NA	1	2	3	4	i. Office space
NA	1	2	3	4	j. Studio/performance space
NA	1	2	3	4	k. Secretarial support
NA	1	2	3	4	l. Library holdings

35. **Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty.**

A. Was institutional or department funding available for your use during the past two years for . . .		**B. Did you use any of those funds at <u>this</u> institution?**	**C. Were those funds adequate for your purposes?**
(1) tuition remission at this <u>or</u> other institutions?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No
(2) professional association memberships and/or registration fees?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No
(3) professional travel?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No
(4) training to improve research or teaching skills?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No
(5) retraining for fields in higher demand?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No
(6) sabbatical leave?	1. Yes)))))))))< 2. No DK. Don't know	1. Yes)))))))))))))))))))))))))))< 2. No	1. Yes 2. No

36. **On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term?** *(IF NOT SURE, GIVE YOUR BEST ESTIMATES)*

Average number hours per week during the 1992 Fall Term

_____ a. All paid activities at this institution (teaching, research, administration, etc.)

_____ b. All unpaid activities at this institution

_____ c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)

_____ d. Unpaid (pro bono) professional service activities outside this institution

37. **In column A, we ask you to allocate your <u>total</u> work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would <u>prefer</u> to spend in each of the listed categories.**

A. % of Work Time Spent	*(WRITE IN A PERCENTAGE ON EACH LINE. IF NOT SURE, GIVE YOUR BEST ESTIMATE; IF NONE, WRITE IN "0")*	**B. % of Work Time Preferred**
_____%	a. **Teaching** (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; working with student organizations or intramural athletics)	_____%
_____%	b. **Research/Scholarship** (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	_____%
_____%	c. **Professional Growth** (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	_____%
_____%	d. **Administration**	_____%
_____%	e. **Outside Consulting or Freelance Work**	_____%
_____%	f. **Service/Other Non-Teaching Activities** (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	_____%
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME.	100%

38. Are you a member of the union (or other bargaining association) that represents faculty at this institution?

1. Union is available, but I am not eligible
2. I am eligible, but not a member
3. I am eligible, and a member
4. Union is not available at this institution

SECTION D. JOB SATISFACTION ISSUES

39. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution? *(CIRCLE "NA" IF YOU HAD NO INSTRUCTIONAL DUTIES)*

NA. No instructional duties **(GO TO QUESTION 40)**

(CIRCLE ONE NUMBER FOR EACH ITEM; IF AN ITEM DOES NOT APPLY TO YOU, WRITE IN "NA" NEXT TO THE ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. The authority I have to make decisions about content and methods in the courses I teach
1	2	3	4	b. The authority I have to make decisions about other (non-instructional) aspects of my job
1	2	3	4	c. The authority I have to make decisions about what courses I teach
1	2	3	4	d. Time available for working with students as an advisor, mentor, etc.
1	2	3	4	e. Quality of undergraduate students whom I have taught here
1	2	3	4	f. Quality of graduate students whom I have taught here

40. How satisfied or dissatisfied are you with the following aspects of your job at this institution?
(CIRCLE ONE NUMBER FOR EACH ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. My work load
1	2	3	4	b. My job security
1	2	3	4	c. Opportunity for advancement in rank at this institution
1	2	3	4	d. Time available for keeping current in my field
1	2	3	4	e. Freedom to do outside consulting
1	2	3	4	f. My salary
1	2	3	4	g. My benefits, generally
1	2	3	4	h. Spouse or partner employment opportunities in this geographic area
1	2	3	4	i. My job here, overall

41. **During the next three years, how likely is it that you will leave this job to . . .**
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not At All Likely	Somewhat Likely	Very Likely		
1	2	3	a.	accept a part-time job at a different postsecondary institution?
1	2	3	b.	accept a full-time job at a different postsecondary institution?
1	2	3	c.	accept a part-time job not at a postsecondary institution?
1	2	3	d.	accept a full-time job not at a postsecondary institution?
1	2	3	e.	retire from the labor force?

42. **At what age do you think you are most likely to stop working at a postsecondary institution?**
(WRITE IN AGE, OR CIRCLE "DK")

_____ Years of age

DK. Don't know

43. **If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Not Important	Somewhat Important	Very Important		
1	2	3	a.	Salary level
1	2	3	b.	Tenure-track/tenured position
1	2	3	c.	Job security
1	2	3	d.	Opportunities for advancement
1	2	3	e.	Benefits
1	2	3	f.	No pressure to publish
1	2	3	g.	Good research facilities and equipment
1	2	3	h.	Good instructional facilities and equipment
1	2	3	i.	Good job or job opportunities for my spouse or partner
1	2	3	j.	Good geographic location
1	2	3	k.	Good environment/schools for my children
1	2	3	l.	Greater opportunity to teach
1	2	3	m.	Greater opportunity to do research
1	2	3	n.	Greater opportunity for administrative responsibilities

44. **If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so?** *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't know

45. **If an early retirement option were offered to you at your institution, would you take it?** *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't know

46. **At which age do you think you are most likely to retire from all paid employment?** *(WRITE IN AGE, OR CIRCLE "DK")*

_____ Years of age

DK. Don't know

SECTION E. COMPENSATION

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.

47. For the calendar year 1992, estimate your gross compensation before taxes from each of the sources listed below.

(IF NOT SURE, GIVE YOUR BEST ESTIMATES; IF NO COMPENSATION FROM A SOURCE, WRITE IN "0")

Compensation from this institution:

$ _____ a. Basic salary S)< b. **Type of appointment (e.g., 9 months)** ~ # of months

$ _____ c. Other teaching at this institution not included in basic salary (e.g., for summer session)

$ _____ d. Supplements not included in basic salary (for administration, research, coaching sports, etc.)

$ _____ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

$ _____ f. Any other income from this institution

Compensation from other sources:

$ _____ g. Employment at another academic institution

$ _____ h. Legal or medical services or psychological counseling

$ _____ i. Outside consulting, consulting business or freelance work

$ _____ j. Self-owned business (other than consulting)

$ _____ k. Professional performances or exhibitions

$ _____ l. Speaking fees, honoraria

$ _____ m. Royalties or commissions

$ _____ n. Any other employment

$ _____ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income *(WRITE IN BELOW):*

$ _____ p. _____

$ _____ q. _____

48. For the calendar year 1992, how many persons were in your household including yourself?

_____ Total number in household

49. For the calendar year 1992, what was your total household income?

$ _____ Total household income

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

_____ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. **Are you . . .**

1. male, or
2. female?

52. **In what month and year were you born?**
(WRITE IN MONTH AND YEAR)

~ ~ 19 ~ ~
MONTH YEAR

53. **What is your race?** *(CIRCLE ONE NUMBER)*

1. American Indian or Alaskan Native
2. Asian or Pacific Islander **(ANSWER 53A)**)))))))))))))))))))< **53A.**
3. African American/Black
4. White
5. Other *(WRITE IN BELOW)*

_____

53A. **What is your Asian or Pacific Islander origin? If more than one, circle the one you consider the most important part of your background.** *(CIRCLE ONE NUMBER)*

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese, Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other *(WRITE IN BELOW)*

_____

(SKIP TO QUESTION 55)

54. **Are you of Hispanic descent?**
(CIRCLE ONE NUMBER)

+)Q 1. Yes **(ANSWER 54A)**
* 2. No **(SKIP TO QUESTION 55)**
*
.))< **54A.** **What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.**

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertorriqueno, or Bouricuan
4. Other *(WRITE IN BELOW)*

_____

55. **What is your current marital status?**
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

56. **In what country were you born?**
(CIRCLE ONE NUMBER)

1. USA
2. Other *(WRITE IN)*_____

57. **What is your citizenship status?**
(CIRCLE ONE NUMBER)

1. United States citizen, native
2. United States citizen, naturalized
3. Permanent resident of the United States (immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of United States (non-immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

58. **What is the highest level of formal education completed by your mother and your father?**
(CIRCLE ONE FOR EACH PERSON)

A. Mother	**B. Father**		
1	1	a.	Less than high school diploma
2	2	b.	High school diploma
3	3	c.	Some college
4	4	d.	Associate's degree
5	5	e.	Bachelor's degree
6	6	f.	Master's degree
7	7	g.	Doctorate or professional degree (e.g., Ph.D., M.D., D.V.M., J.D./L.L.B.)
8	8	h.	Other
DK	DK	i.	Don't know

59. **Please indicate the extent to which you agree or disagree with each of the following statements.** *(CIRCLE ONE NUMBER FOR EACH STATEMENT)*

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	a. Teaching effectiveness should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	b. Research/publications should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	c. At this institution, research is rewarded more than teaching.
1	2	3	4	d. State or federally mandated assessment requirements will improve the quality of undergraduate education.
1	2	3	4	e. Female faculty members are treated fairly at this institution.
1	2	3	4	f. Faculty who are members of racial or ethnic minorities are treated fairly at this institution.
1	2	3	4	g. If I had it to do over again, I would still choose an academic career.

60. **Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution.** *(CIRCLE ONE FOR EACH ITEM)*

Worsened	Stayed the Same	Improved	Don't Know	
1	2	3	DK	a. The quality of students who choose to pursue academic careers in my field
1	2	3	DK	b. The opportunities junior faculty have for advancement in my field
1	2	3	DK	c. The professional competence of individuals entering my academic field
1	2	3	DK	d. The ability of this institution to meet the educational needs of entering students
1	2	3	DK	e. The ability of faculty to obtain external funding
1	2	3	DK	f. Pressure to increase faculty workload at this institution
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	h. The atmosphere for free expression of ideas
1	2	3	DK	i. The quality of research at this institution

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Return this completed questionnaire in the enclosed prepaid envelope to:

National Opinion Research Center (NORC)
University of Chicago
1525 East 55th Street
Chicago, Illinois 60615

RESPONDENT LABEL

OMB No. 1850-0680
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement
National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

FACULTY
QUESTIONNAIRE

P. 4552 – NSOPF
October 29, 1993

REFUSAL CONVERSION – Date _____
R. Name: _____
CASE ID: _____
Institution: _____
Phone: ____(____)_____
IWER: _____

Have you updated call notes in TNMS --
"COMPLETE ABBREVIATED QUEX"?
YES **NO**

++

QUEUE STATUS _____
DATE MOVED: _____
_____
_____

All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-Sponsored by: **National Science Foundation, National Endowment for the Humanities**
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University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY

Instructions for Completing faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term at the institution listed on the label on the back cover of the questionnaire.

This questionnaire was designed to be completed by both full- and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask that you circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

If you have any questions on how to proceed, please call NORC toll-free at 1-800-733-NORC.

NATIONAL SURVEY OF POSTSECONDARY FACULTY

Faculty Questionnaire

EXACT TIME NOW: _____

1. During the 1992 Fall Term, did you have any <u>instructional</u> duties at this institution (e.g., teaching one or more courses, advising or supervising students' academic activities)? ***(PLEASE CIRCLE ONE NUMBER)***

1. Yes (ANSWER 1A) 2. No. (SKIP TO QUESTION 2)

1A. During the 1992 Fall Term, were…
(CIRCLE ONE NUMBER)

1. *all* of your instructional duties related to credit courses.

2. some of your instructional duties related to credit courses or advising or supervising academic activities for credit, <u>or</u>

3. *all* of your instructional duties related to *noncredit* courses or advising or supervising *noncredit* academic activities.

2. What was your principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one. ***(CIRCLE ONE NUMBER)***

1. Teaching

2. Research

3. Technical activities (e.g. programmer, technician, chemist, engineer, etc.)

4. Clinical service

5. Community/public service

6. Administration
(WRITE TITLE OR POSITION) _____

7. On sabbatical from this institution

8. Other (subsidized performer, artist-in-residence, etc.)

3. During the 1992 Fall Term, did you have faculty status at this institution? ***(CIRCLE ONE NUMBER)***

1. Yes

2. No, I don't have faculty status

3. No, no one has faculty status at this institution

SECTION A. NATURE OF EMPLOYMENT

4. During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time? ***(CIRCLE ONE NUMBER)***

1. Part-time
2. Full-time

7. What was your tenure status at this institution during the 1992 Fall Term?
(CIRCLE ONE NUMBER)

1. Tenured → 7A. In what year did you achieve tenure at this institution? 19 ☐☐
   SKIP TO QUESTION 9
2. On tenure track but not tenured
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

9. Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER, OR "NA")*

NA. Not Applicable: no ranks designated at this institution (SKIP TO QUESTION 11)

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other *(WRITE IN)* _____

11. **During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?** *(CIRCLE ALL THAT APPLY)*

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
   *(WRITE IN TITLE OR POSITION)*_____
6. Research
   (WRITE IN TITLE OR POSITION) _____
7. None of the above

12 **What is your <u>principal</u> field or discipline of teaching?** *(REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")*

NA, Not Applicable

CODE FOR FIELD OR DISCIPLINE _____ _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

13. What is your <u>principal</u> area of research? If equal areas, select one. *(IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")*

NA, Not Applicable

CODE FOR FIELD OR DISCIPLINE _____ _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES OF MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

AGRICULTURE
101 Agribusiness & Agricultural Production
102 Agricultural, Animal, Food, & Plant Sciences
103 Renewable Natural Resources Conservation, Fishing, & Forestry
110 Other Agriculture

ARCHITECTURE & ENVIRONMENTAL DESIGN
121 Architecture & Environmental Design
122 City, Community, & Regional Planning
123 Interior Design
124 Land Use Management & Reclamation
130 Other Arch. & Environmental Design

ART
141 Art History & Appreciation
142 Crafts
143 Dance
144 Design (other than Arch. or Interior)
145 Dramatic Arts
146 Film Arts
147 Fine Arts
148 Music
149 Music History & Appreciation
150 Other Visual & Performing Arts

BUSINESS
161 Accounting
162 Banking & Finance
163 Business Administration & Management
164 Business Administrative Support (e.g. Bookkeeping Office Management, Secretarial)
165 Human Resources Development
166 Organizational Behavior
167 Marketing & Distribution
170 Other Business

COMMUNICATIONS
181 Advertising
182 Broadcasting & Journalism
183 Communications Research
184 Communications Technologies
190 Other Communications

COMPUTER SCIENCE
201 Computer & Information Services
202 Computer Programming
203 Data Processing
204 Systems Analysis
210 Other Computer Science

EDUCATION
221 Education, General
222 Basic Skills
223 Bilingual/Cross-cultural Education
224 Curriculum & Instruction
225 Education Administration
226 Education Evaluation & Research
227 Educational Psychology
228 Special Education
229 Student Counseling & Personnel Svcs.
230 Other Education

TEACHER EDUCATION
241 Pre-Elementary
242 Elementary
243 Secondary
244 Adult & Continuing
245 Other General Teacher Ed. Programs
250 Teacher Education in Specific Subjects

ENGINEERING
261 Engineering, General
262 Civil Engineering
263 Electrical, Electronics & Communications Engineering
264 Mechanical Engineering
265 Chemical Engineering
270 Other Engineering
280 Engineering-Related Technologies

ENGLISH AND LITERATURE
291 English, General
292 Composition & Creative Writing
293 American Literature
294 English Literature
295 Linguistics
296 Speech, Debate & Forensics
297 English as a Second Language
300 English, Other

FOREIGN LANGUAGES
311 Chinese (Mandarin, Cantonese, or Other Chinese)
312 French
313 German
314 Italian
315 Latin
316 Japanese
317 Other Asian
318 Russian or Other Slavic
319 Spanish
320 Other Foreign Languages

HEALTH SCIENCES
331 Allied Health Technologies & Services
332 Dentistry
333 Health Services Administration
334 Medicine, including Psychiatry
335 Nursing
336 Pharmacy
337 Public Health
338 Veterinary Medicine
340 Other Health Sciences

350 HOME ECONOMICS

360 INDUSTRIAL ARTS
370 LAW

380 LIBRARY & ARCHIVAL SCIENCES

NATURAL SCIENCES: BIOLOGICAL SCIENCES
391 Biochemistry
392 Biology
393 Botany
394 Genetics
395 Immunology
396 Microbiology
397 Physiology
398 Zoology
400 Biological Sciences, Other

NATURAL SCIENCES: PHYSICAL SCIENCES
411 Astronomy
412 Chemistry
413 Physics
414 Earth, Atmosphere, and Oceanographic (Geological Sciences)
420 Physical Sciences; Other

430 MATHEMATICS

440 STATISTICS

450 MILITARY STUDIES

460 MULTI/INTERDISCIPLINARY STUDIES

470 PARKS & RECREATION

480 PHILOSOPHY AND RELIGION

490 THEOLOGY

500 PROTECTIVE SERVICES (e.g. Criminal Justice, Fire Protection

510 PSYCHOLOGY

520 PUBLIC AFFAIRS (e.g., Community Services, Public Admin., Public Works, Social Work)

530 SCIENCE TECHNOLOGIES

SOCIAL SCIENCES AND HISTORY
541 Social Sciences, General
542 Anthropology
543 Archeology
544 Area & Ethnic Studies
545 Demography
546 Economics
547 Geography
548 History
549 International Relations
550 Political Science & Government
551 Sociology
560 Other Social Sciences

VOCATIONAL TRAINING

CONSTRUCTION TRADES
601 Carpentry
602 Electrician
603 Plumbing
610 Other Construction Trades

CONSUMER, PERSONAL & MISC. SERVS
621 Personal Services (e.g. Barbering, Cosmetology)
630 Other Consumer Services

MECHANICS AND REPAIRERS
641 Electrical & Electronics Equipment Repair
642 Heating, Air Conditioning, & Refrigeration Mechanics & Repairers

PRECISION PRODUCTION
661 Drafting
662 Graphic & Print Communications
663 Leatherworking & Upholstering
664 Precision Metal Work
665 Woodworking
670 Other Precision Production Work

TRANSPORTATION & MATERIAL MOVING
681 Air Transportation (e.g. Piloting, Traffic Control, Flight Attendance, Aviation Management)

682 Land Vehicle & Equipment Operation

683 Water Transportation (e.g. Boat & Fishing Operations, Deep Water Diving, Marina Operations, Sailors & Deckhands)

690 Other Transportation & Material Moving

900 OTHER (IF YOU USE THIS CODE BE SURE TO WRITE IN A COMPLETE DESCRIPTION AT QUESTIONS 12-13, AND 16)

SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND

16. **Please indicate the highest degree or other formal award that you hold, the year you received it, (the field code from pages 5-6 that applies), name of the field, and the name and location of the institution from which you received that degree or award. Do not list honorary degrees.** *(COMPLETE ALL COLUMNS)*

CODES FOR TYPE OF DEGREE

1. Professional Degree (M.D., D.D.S., L.L.B., etc.)
2. Doctoral Degree (Ph.D., Ed.D., etc.)
3. Master's degree or equivalent
4. Bachelor's degree or equivalent
5. Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length.
6. Associate's degree or equivalent
7. Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

	A. Degree Code (see above)	B. Year Received	C. Field Code (from pp. 5-6)	D. Name of Field (from pp. 5-6)	E. Name of Institution (a) and City and State/Country of Institution (b)
(1) Highest	_____	19_____	_____	_____	a. _____
				_____	_____
					b. _____
					_____

17. During the 1992 Fall Term, were you employed only at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice? *(CIRCLE ONE NUMBER)*

1. Employed only at this institution (SKIP TO QUESTION 19)
2. Had other employment, consulting, self-owned business, or private practice

17A. How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice.
(WRITE IN NUMBER)

_____ Number of Jobs

18. Not counting any employment at this institution, what was the employment sector of the main other job you held during the Fall 1992? *(CIRCLE ONE NUMBER)*

1. 4-year college or university, graduate or professional school
2. 2-year or other postsecondary institution
3. Elementary or secondary school
4. Consulting, freelance work, self-owned business, or private practice
5. Hospital or other health care clinical setting
6. Foundation or other non-profit organization other than health care organization
7. For-profit business or industry in the private sector
8. Federal government, including military, or state or local government
9. Other *(WRITE IN)* _____

18.A. **What year did you begin that job?**
(WRITE IN YEAR)

19 ☐☐

18B. **What was your primary responsibility in that job**
(CIRCLE ONE NUMBER)

1. Teaching
2. Research
3. Technical activities (e.g. programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
7. Other

18C. **Was that job full-time or part-time?** *(CIRCLE ONE NUMBER)*

1. Full-time
2. Part-time

19. **The next questions ask about your recent (last) job that ended <u>before</u> the beginning of the 1992 Fall Term. For the (last) most recent and significant <u>main</u> job you held during the past 15 years, indicate the year you began and the year you left, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.**

- Do not list promotions in rank at one place of employment as different jobs.
- Do not include temporary positions (i.e. summer positions) or work as a graduate student
- List each job (other than promotion in rank) separately.

If not applicable, circle "NA" →	NA
	A.
(1) YEARS JOB HELD	MOST RECENT MAIN JOB (PRIOR) TO FALL 1992)
FROM:	19 _____
TO:	19 _____
(2) EMPLOYMENT SECTOR	*(CIRCLE ONE)*
4-year college or university, graduate or professional school	1
2-year or other postsecondary institution	2
Elementary or secondary school	3
Consulting, freelance work, self-owned business, or private practice	4
Hospital or other health care clinical setting	5
Foundation or other nonprofit organization other than health care organization	6
For-profit business or industry in the private sector	7
Federal government, including military, or state or local government	8
Other	9
	(CIRCLE ONE)
(3) PRIMARY RESPONSIBILITY	
Teaching	1
Research	2
Technical activities(e.g., programmer, technician, chemist, engineer, etc.)	3
Clinical service	4
Community/public service	5
Administration	6
Other	7
	(CIRCLE ONE)
(4) FULL-TIME/PART-TIME	
Full-time	1
Part-time	2

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SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

22. **During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individual instruction, such as independent study or individual performance classes. Count multiple sections of the same course as separate class, but not the lab section of a course.** *(WRITE IN A NUMBER, OR CIRCLE "0")*

0. No classes taught (SKIP TO QUESTION 28)

_____ Number of classes/sections (ANSWER 22A)

22A. How many of those classes were classes for credit?

0. No classes for credit (SKIP TO QUESTION 28)

_____ Number of classes/sections (ANSWER QUESTION 23)

23. For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.

If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A. FIRST FOR-CREDIT CLASS	B. SECOND FOR-CREDIT CLASS
(1) CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)	_____	_____
(2) DURING FALL 1992 TERM		
Number of weeks the class met?	a. _____	a. _____
Number of credit hours?	b. _____	b. _____
Number of hours the class met per week?	c. _____	c. _____
Number of teaching assistants, readers?	d. _____	d. _____
Number of student s enrolled?	e. _____	e. _____
Was this class team taught?	f. 1. Yes 2. No	f. 1. Yes 2. No
Average # hours per week you taught the class?	g. _____	g. _____
(3) PRIMARY LEVEL OF STUDENTS?	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lower division of students (first or second year postsecondary) or	1	1
Upper division students (third or fourth year postsecondary) or	2	2
Graduate or any other post-baccalaureate students, or	3	3
All other students?	4	4

C.	D.	E.	
THIRD FOR-CREDIT CLASS	FOURTH FOR-CREDIT CLASS	FIFTH FOR-CREDIT CLASS	
_____	_____	_____	
a. _____	a. _____	a. _____	a. Number of weeks the class met?
b. _____	b. _____	b. _____	b. Number of credit hours?
c. _____	c. _____	c. _____	c. Number of hours class met per week?
d. _____	d. _____	d. _____	d. Number of teaching assistants, readers?
e. _____	e. _____	e. _____	e. Number of students enrolled?
f. 1. Yes 2. No	f. 1. Yes 2. No	f. 1. Yes 2. No	f. Was this class team taught?
g. _____	g. _____	g. _____	g. Average # hours per week you taught the class
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	Lower division of students
2	2	2	Upper division students
3	3	3	Graduate, post-baccalaureate students
4	4	4	All other students

28. During the 1992 Fall Term, were you engaged in any professional research, writing, or creative works?

1. Yes (ANSWER QUESTION 29) 2. No (SKIP TO QUESTION 36)

29. How would you describe your <u>primary</u> professional research, writing, or creative work during the 1992 Fall Term? ***(CIRCLE ONE NUMBER)***

1. Pure or basic research
2. Applied research
3. Policy-oriented research analysis
4. Literary or expressive
5. Program/Curriculum design and development
6. Other

30. During the 1992 Fall Term, were you engaged in any <u>funded</u> research or <u>funded</u> creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services. ***(CIRCLE ONE NUMBER)***

1. Yes 2. No (SKIP TO QUESTION 36)

31. During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts? *(CIRCLE ONE NUMBER)*

1. Yes 2. No (SKIP TO QUESTION 36)

32. **During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI?** *(WRITE IN NUMBER: IF NONE, WRITE IN "O")*

_____ Number of individuals

36. **On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term ?** *(IF NOT SURE, GIVE YOUR BEST ESTIMATES)*

Average number hours per week during the 1992 Fall Term

_____ a. All paid activities at this institution (teaching, research, administration, etc.)

_____ b. All unpaid activities at this institution

_____ c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)

_____ d. Unpaid (pro bono) professional service activities outside this institution

37. In column A, we ask that you allocate your <u>total</u> work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would <u>prefer</u> to spend in each of the listed categories.

A. % of Work Time Spent	*(WRITE IN A PERCENTAGE ON EACH LINE. IF NOT SURE, GIVE YOUR BEST ESTIMATE: IF NONE, WRITE IN "O")*	B. % of Work Time Preferred
____ %	a. Teaching (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; working with student organizations or intramural athletics)	_____ %
____ %	b. Research/Scholarship (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	_____ %
____ %	c. Professional Growth (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	_____ %
____ %	d. Administration	_____ %
____ %	e. Outside Consulting or Freelance Work	
____ %	f. Service/Other Non-Teaching Activities (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	_____ %
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME	100%

SECTION D. JOB SATISFACTION ISSUES

40. **How satisfied or dissatisfied are you with….** *(CIRCLE ONE NUMBER)*

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	i. your job here overall

41. During the next three years, how likely is it that you will leave this job to…….
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not at All Likely	Somewhat Likely	Very Likely	
1	2	3	a. accept a part-time job at a different postsecondary institution?
1	2	3	b. accept a full-time job at a different postsecondary institution?
1	2	3	c. accept a part-time job not at a postsecondary institution?
1	2	3	d. accept a full-time job not at a postsecondary institution?
1	2	3	e. retire from the labor force?

42. At what age do you think you are most likely to stop working at a postsecondary institution?
(WRITE IN AGE, OR CIRCLE "DK")

_____ Years of age

DK Don't Know

43. **If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Not Important	Somewhat Important	Very Important	
1	2	3	a. Salary level
1	2	3	b. Tenure-track/tenured position
1	2	3	c. Job security
1	2	3	d. Opportunities for advancement
1	2	3	e. Benefits
1	2	3	f. No pressure to publish
1	2	3	g. Good research facilities and equipment
1	2	3	h. Good instructional facilities and equipment
1	2	3	i. Good job or job opportunities for my spouse or partner
1	2	3	j. Good geographic location
1	2	3	k. Good environment/schools for my children
1	2	3	l. Greater opportunity to teach
1	2	3	m. Greater opportunity to do research
1	2	3	n. Greater opportunity for administrative responsibilities

44. **If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so?** *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't Know

45. If an early retirement option were offered to you at your institution, would you take it? *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't know

46. At which age do you think you are most likely to retire from all paid employment? *(WRITE IN AGE, OR CIRCLE "DK")*

_____ Years of age

DK. Don't know

SECTION E. COMPENSATION

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.

47. **For the calendar year 1992, estimate your gross compensation before taxes from each of the sources below.**
(IF NOT SURE, GIVE YOUR ESTIMATES: IF NO COMPENSATION FROM A SOURCE, WRITE IN "O")

Compensation from this institution:

$ _____ a. Basic salary → b. Type of appointment (e.g., 9 months) [ ] # of months

$ _____ c. Other teaching at this institution not included in basic salary (e.g. for summer session)

$ _____ d. Supplements not included in basic salary (for administration, research, coaching, sports, etc.)

$ _____ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

$ _____ f. Any other income from this institution

Compensation from other sources:

$ _____ g. Employment at another academic institution

$ _____ h. Legal or medical services or psychological counseling

$ _____ i. Outside consulting, consulting business or freelance work

$ _____ j. Self-owned business (other than consulting)

$ _____ k. Professional performances or exhibitions

$ _____ l. Speaking fees, honoraria

$ _____ m. Royalties or commissions

$ _____ n. Any other employment

$ _____ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income *(WRITE BELOW)*:

$ _____ p. _____

$ _____ q. _____

48. For the calendar year 1992, how many persons were in your household including yourself?
_____ Total number in household

49. For the calendar year 1992, what was your household income?
_____ Total household income?

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

_____ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. **Are you…**

1. male, or
2. female?

52. In what month and year were you born?
(WRITE IN MONTH AND YEAR)

		19		
MONTH			YEAR	

53. What is your race? *(CIRCLE ONE NUMBER)*

1. American Indian or Alaskan Native
2. Asian or Pacific Islander (ANSWER 53A) ——→53A
3. African
4. White

5. Other *(WRITE BELOW)*

_____

53A What is your Asian or Pacific Islander origin? If more than one, circle the one that you consider the most important part of your background. ***(CIRCLE ONE NUMBER)***

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other *(WRITE IN BELOW)*

_____

(SKIP TO QUESTION 55)

54. **Are you of Hispanic descent?**
(CIRCLE ONE NUMBER)

1. Yes (ANSWER 54A)
2. No (SKIP TO QUESTION 55)

54A. What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertoriqueno, or Bouricuan
4. Other *(WRITE IN BELOW)*

_____

55. What is your current marital status?
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

56. In what country were you born?
(CIRCLE ONE NUMBER)

1. USA
2. Other *(WRITE IN)* _____

57. What is your citizenship status?
(CIRCLE ONE NUMBER)

1. United States Citizen, native
2. United States Citizen, naturalized
3. Permanent resident of the United States (immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of the United States (non-immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

59. Please indicate the extent to which you agree or disagree with the following statement.
(CIRCLE ONE NUMBER)

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	g. If I had to do it all over again, I would still choose an academic career

60. **Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution?** *(CIRCLE ONE FOR EACH ITEM)*

Worsened	Stayed the same	Improved	Don't Know	
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	i. The quality of research at this institution

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

EXACT TIME NOW: _____

Appendix B

NSOPF-93 Institution Questionnaire

OMB: No. 1850-0665
Expiration Date: 3/94

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

INSTITUTION QUESTIONNAIRE

All information on this form will be kept confidential and will be used only in statistical summaries. All information that would permit identification of individuals will be removed from survey files.

Co-sponsored by: **National Science Foundation**
National Endowment for the Humanities

Contractor: **National Opinion Research Center (NORC)**
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY (NSOPF) INSTITUTION QUESTIONNAIRE

General Instructions

Obtaining counts of different kinds of faculty/staff is an important part of NSOPF-93. The institution questionnaire seeks information about full- and part-time instructional faculty and other instructional personnel, as well as non-instructional faculty in 2- and 4-year (and above) higher education institutions of all types and sizes. Section I pertains to **full-time**

instructional faculty/staff, Section II pertains to **full-time non-instructional faculty**, and Section III pertains to **part-time instructional faculty/staff**. For more information on who to include or exclude in each of the sections of this questionnaire, please refer to the glossary below and/or the introduction at each section. Since we are asking about full- and part-time, and permanent and temporary faculty/staff as defined by your institution, please write in those definitions in the space provided in the glossary.

Most questions ask you to fill in information; write in the number in the space provided. Other questions ask you to circle a number to indicate your response; circle the number in front of the response, and not the response itself. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your institution precisely; if you have a response other than those listed for a particular question, write in that response.

Many questions ask about the 1992 Fall Term. By this, we mean whatever academic term was in progress on **October 15, 1992**. If your institution has multiple campuses, answer only for the campus named in the label on the back of the questionnaire.

Please keep track of who fills out this questionnaire and fill in this information on page 20. Mailing instructions for the completed questionnaire are also on page 20.

If you have any questions on how to proceed if your institution has both lay faculty and those assigned by a religious order, or if you have other questions, please call NORC toll-free at 1-800-733-NORC.

Glossary

Instructional faculty/staff--All institutional staff (faculty and non-faculty) whose major regular assignment at this institution (more than 50%) is instruction. This corresponds to the IPEDS definition. Individuals do not need to have a dedicated instructional assignment to be included in this category. Be sure to include (1) administrators whose major responsibility is instruction; (2) individuals with major instructional assignments who have temporary, adjunct, acting or visiting status; (3) individuals whose major regular assignment is instruction but who have been granted release time for other institutional activities; and (4) individuals whose major regular assignment is instruction but who are on sabbatical from your institution.

Please do not include: Graduate or undergraduate teaching assistants, postdoctoral appointees, temporary replacements for personnel on sabbatical leave, instructional personnel on leave without pay or teaching outside the U.S., military personnel who teach only ROTC courses, and instructional personnel supplied by independent contractors.

Non-instructional faculty--All institutional staff who have faculty status but would not be included as instructional faculty since their specific and major regular assignment is not instruction but may be for the purpose of conducting research, performing public service, or carrying out administrative functions of the institution.

ON THE NEXT PAGE, PLEASE PROVIDE YOUR INSTITUTION'S DEFINITIONS OF FULL- AND PART-TIME AND PERMANENT AND TEMPORARY FACULTY/STAFF.

Full-time instructional faculty/staff *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

Full-time non-instructional faculty *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

Part-time instructional faculty/staff *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

Part-time non-instructional faculty *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

Permanent faculty/instructional staff *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

Temporary faculty/instructional staff *(WRITE IN YOUR INSTITUTION'S DEFINITION)*

_____

_____

PLEASE FILL OUT THE REST OF THE QUESTIONNAIRE USING YOUR INSTITUTION'S DEFINITIONS OF FULL- AND PART-TIME AND PERMANENT AND TEMPORARY FACULTY/STAFF. PLEASE REMEMBER THAT THE 1992 FALL TERM IS THE PRIMARY REFERENCE PERIOD.

1. During the 1992 Fall Term, how many of each of the following types of staff were employed by your institution? Include both permanent and temporary faculty/staff. *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

____a. Full-time instructional faculty/staff

____b. Part-time instructional faculty/staff

____c. Full-time non-instructional faculty

____d. Part-time non-instructional faculty

GUIDE TO COMPLETING THE REST OF THE QUESTIONNAIRE

IF YOUR INSTITUTION HAD ANY FULL-TIME INSTRUCTIONAL FACULTY/STAFF, BEGIN WITH SECTION I ON THE NEXT PAGE. IF YOUR INSTITUTION DID NOT HAVE ANY FULL-TIME INSTRUCTIONAL FACULTY/STAFF, SKIP TO SECTION II ON PAGE 10.

SECTION I: FULL-TIME INSTRUCTIONAL FACULTY/STAFF

QUESTIONS 2-14 APPLY TO <u>PERMANENT</u> FULL-TIME INSTRUCTIONAL FACULTY/STAFF (REFER TO THE GLOSSARY ON PAGE 1)

QUESTIONS 15-16 APPLY TO <u>TEMPORARY</u> FULL-TIME INSTRUCTIONAL FACULTY/STAFF

QUESTIONS 17-19 APPLY TO <u>ALL</u> FULL-TIME INSTRUCTIONAL FACULTY/STAFF

2. Please provide the following information about changes in the number of permanent full-time instructional faculty/staff between the 1991 and 1992 Fall Terms.
(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

_____ a. Total permanent full-time instructional faculty/staff during 1992 Fall Term
(IF ALL FULL-TIME INSTRUCTIONAL FACULTY AT YOUR INSTITUTION ARE PERMANENT, THIS NUMBER SHOULD EQUAL THE NUMBER REPORTED IN QUESTION 1a, ON PAGE 3)

_____ b. Number of permanent full-time instructional faculty/staff at the beginning of the 1992 Fall Term who were hired since the beginning of the 1991 Fall Term

_____ c. Number of permanent full-time instructional faculty/staff who retired between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ d. Number of permanent full-time instructional faculty/staff who left because of downsizing between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ e. Number of permanent full-time instructional faculty/staff who left for other reasons between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ f. Total permanent full-time instructional faculty/staff during 1991 Fall Term

3. How many <u>permanent</u> full-time instructional faculty/staff was your institution seeking to hire for the 1992 Fall Term? *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

_____ Number of permanent full-time instructional faculty/staff

4. Were any permanent full-time instructional faculty/staff <u>positions</u> not filled for the 1992 Fall Term due to fiscal constraints? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____ Number of unfilled positions *(WRITE IN A NUMBER)*
2. No

5. Does your institution have a tenure system for full-time instructional faculty/staff?
(CIRCLE ONE NUMBER)

1. Yes **(CONTINUE WITH QUESTION 6 ON THE NEXT PAGE)**
2. No **(SKIP TO QUESTION 11 ON PAGE 6)**

6. During the 1992 and 1991 Fall Terms, how many tenured and tenure-track full-time instructional faculty/staff did your institution have? *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

_____ a. Tenured, 1992 Fall Term

_____ b. Tenure-track, 1992 Fall Term

_____ c. Tenured, 1991 Fall Term

_____ d. Tenure-track, 1991 Fall Term

7. Of those tenured full-time instructional faculty/staff who left your institution between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term, how many left for each of the following reasons? *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

_____ a. Retirement

_____ b. Downsizing

_____ c. For other reasons

8. During the 1992-93 academic year (i.e., Fall 1992 through Spring 1993), how many full-time instructional faculty/staff at your institution were considered for tenure, and how many were granted tenure? *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

_____ a. Number of full-time instructional faculty/staff considered for tenure

_____ b. Number of full-time instructional faculty/staff granted tenure

9. Fill in the following information about the maximum number of years full-time instructional faculty/staff can be on a tenure track. *(WRITE IN A NUMBER ON EACH LINE)*

_____ a. Maximum number of years full-time instructional faculty/staff can be on a tenure track and not receive tenure *(IF NO MAXIMUM, WRITE IN "0")*
Yrs

_____ b. If maximum number of years has changed during past 5 years, write in previous maximum *(IF NO CHANGE, WRITE IN "0")*
Yrs

10. During the past five years, has your institution done any of the following? *(CIRCLE ONE NUMBER FOR EACH ACTION)*

Yes	**No**		
1	2	a.	Replaced some tenured or tenure-track full-time instructional faculty with faculty on fixed-term contracts
1	2	b.	Made the standards more stringent for granting tenure to full-time instructional faculty/staff
1	2	c.	Taken any other actions designed to lower the percent of tenured full-time instructional faculty/staff *(DESCRIBE ANY ACTIONS TAKEN)*

_____

_____

11. During the past five years, has your institution offered early or phased retirement to any permanent full-time instructional faculty/staff? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____ Number of permanent full-time instructional faculty/staff who took advantage of this offer during the past five years *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*
2. No

12. Indicate if each of the retirement plans listed below is available to any permanent full-time instructional faculty/staff at your institution. If available, please indicate whether the plan is subsidized or not subsidized by your institution.

(12A)

		Fully Subsidized	Partially Subsidized	Not Subsidized
a. TIAA/CREF plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
b. Other 403B plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
c. State plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
d. 401K or 401B plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
e. Other retirement plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3

13. Indicate which of the following employee benefits is available at your institution to any permanent full-time instructional faculty/staff. If available, indicate whether the benefit is subsidized or not subsidized by your institution.

		(13A) Fully Subsidized	Partially Subsidized	Not Subsidized
a. Wellness program or health promotion	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
b. Medical insurance or medical care	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
c. Dental insurance or dental care	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
d. Disability insurance program	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
e. Life insurance	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
f. Tuition remission/grants at this or other institutions for spouse	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
g. Tuition remission/grants at this or other institutions for children	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
h. Child care	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
i. Housing/mortgage	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
j. Meals	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
k. Transportation/parking	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
l. Maternity leave	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
m. Paternity leave	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
n. Medical insurance for retirees	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
o. "Cafeteria-style" benefits plan (plan under which staff can trade off some benefits for others, following guidelines established by the institution)	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3

14. What is the average percentage of salary that is contributed by your institution to the <u>total</u> benefits package for permanent full-time instructional faculty/staff? *(WRITE IN PERCENTAGE; IF NONE, WRITE IN "0")*

_____ %

15. Are any of the employee benefits listed in Question 13 available to <u>temporary</u> full-time instructional faculty/staff at your institution? *(CIRCLE ONE NUMBER OR DK)*

1. Yes **(ANSWER QUESTION 16)**
2. No **(SKIP TO QUESTION 17 ON THE NEXT PAGE)**

DK. Don't Know **(SKIP TO QUESTION 17 ON THE NEXT PAGE)**

16. Indicate which of the following employee benefits are available to <u>temporary</u> full-time instructional faculty/staff at your institution? If available, indicate whether each benefit is subsidized or not subsidized by your institution. *(IF YOU DON'T KNOW WHETHER A BENEFIT IS AVAILABLE, CIRCLE "DK")*

		(16A)		
		Fully Subsidized	**Partially Subsidized**	**Not Subsidized**
a. Wellness program or health promotion	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
b. Medical insurance or medical care	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
c. Dental insurance or dental care	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
d. Disability insurance program	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
e. Life insurance	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
f. Tuition remission/grants at this or other institutions for spouse	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
g. Tuition remission/grants at this or other institutions for children	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
h. Child care	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
i. Housing/mortgage	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
j. Meals	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
k. Transportation/parking	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
l. Maternity leave	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
m. Paternity leave	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
n. Medical insurance for retirees	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
o. "Cafeteria-style" benefits plan (plan under which staff can trade off some benefits for others, following guidelines established by the institution)	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3

17. What percentage of undergraduate instruction, as measured by total student credit hours taught, is carried by <u>all</u> full-time permanent and temporary instructional faculty/staff? Student credit hours are defined as the number of course credits or contact hours multiplied by the number of students enrolled. *(CIRCLE ONE NUMBER)*

1. NONE
2. Less than 10%
3. 10-24%
4. 25-49%
5. 50-74%
6. 75-99%
7. 100%

18. Are any of the following used in assessing the teaching performance of full-time (permanent or temporary) instructional faculty/staff at this institution? *(CIRCLE ONE NUMBER OR "DK" ON EACH LINE)*

<u>Yes</u>	<u>No</u>	<u>Don't Know</u>		
1	2	DK	a.	Student evaluations
1	2	DK	b.	Student test scores
1	2	DK	c.	Student career placement
1	2	DK	d.	Other measures of student performance
1	2	DK	e.	Department/division chair evaluations
1	2	DK	f.	Dean evaluations
1	2	DK	g.	Peer evaluations
1	2	DK	h.	Self-evaluations
1	2	DK	i.	Other *(DESCRIBE)* _____

19. Are any of your full-time instructional faculty/staff legally represented by a union (or other association) for purposes of collective bargaining with this institution? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____% (approximate) percent represented *(WRITE IN PERCENTAGE)*
2. No

SECTION II: FULL-TIME NON-INSTRUCTIONAL FACULTY

IF YOU INDICATED YOUR INSTITUTION HAD NO FULL-TIME NON-INSTRUCTIONAL FACULTY (AT QUESTION 1c), PLEASE SKIP TO SECTION III, PAGE 15. OTHERWISE, CONTINUE WITH SECTION II.

QUESTIONS 20-30 APPLY TO PERMANENT FULL-TIME NON-INSTRUCTIONAL FACULTY (REFER TO THE GLOSSARY ON PAGE 1). PLEASE WRITE IN BELOW EXAMPLES OF SOME OF THE TITLES OR POSITIONS HELD BY NON-INSTRUCTIONAL FACULTY AT YOUR INSTITUTION (e.g., RESEARCH SCIENTIST, COMMUNICATIONS DIRECTOR, VICE-PRESIDENT, ETC.).

_____

_____

_____

QUESTIONS 31-33 APPLY TO TEMPORARY FULL-TIME NON-INSTRUCTIONAL FACULTY.

20. Please provide the following information about changes in the number of permanent full-time non-instructional faculty between the 1991 and 1992 Fall Terms. *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0." IF YOU DON'T KNOW, WRITE IN "DK")*

_____ a. Total permanent full-time non-instructional faculty during 1992 Fall Term

_____ b. Number of permanent full-time non-instructional faculty at the beginning of the 1992 Fall Term who were hired since the beginning of the 1991 Fall Term

_____ c. Number of permanent full-time non-instructional faculty who retired between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ d. Number of permanent full-time non-instructional faculty who left because of downsizing between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ e. Number of permanent full-time non-instructional faculty who left for other reasons between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term

_____ f. Total permanent full-time non-instructional faculty during 1991 Fall Term

21. Does your institution have a tenure system for full-time non-instructional faculty? *(CIRCLE ONE NUMBER)*

1. Yes 2. No **(SKIP TO QUESTION 27 ON PAGE 12)**

22. During the 1992 and 1991 Fall Terms, how many tenured and tenure-track full-time non-instructional faculty did your institution have? *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

_____ a. Tenured, 1992 Fall Term

_____ b. Tenure-track, 1992 Fall Term

_____ c. Tenured, 1991 Fall Term

_____ d. Tenure-track, 1991 Fall Term

23. Of those tenured non-instructional faculty who left your institution between the beginning of the 1991 Fall Term and the beginning of the 1992 Fall Term, how many left for each of the following reasons?
(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

_____ a. Retirement

_____ b. Downsizing

_____ c. For other reasons

24. During the 1992-93 academic year (i.e., Fall 1992 through Spring 1993), how many full-time non-instructional faculty at your institution were considered for tenure, and how many were granted tenure?
(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

_____ a. Number of permanent full-time non-instructional faculty considered for tenure

_____ b. Number of permanent full-time non-instructional faculty granted tenure

25. Fill in the following information about the maximum number of years full-time non-instructional faculty can be on a tenure track. *(WRITE IN A NUMBER ON EACH LINE)*

_____ a. Maximum number of years full-time non-instructional faculty staff can be on a tenure track and
Yrs not receive tenure *(IF NO MAXIMUM, WRITE IN "0")*

_____ b. If maximum number of years has changed during past 5 years, write in previous maximum
Yrs *(IF NO CHANGE, WRITE IN "0")*

26. During the past five years, has your institution done any of the following?
(CIRCLE ONE NUMBER FOR EACH ACTION)

Yes	No		
1	2	a.	Replaced some tenured or tenure-track full-time non-instructional faculty positions with faculty on fixed-term contracts
1	2	b.	Made the standards more stringent for granting tenure to full-time non-instructional faculty
1	2	c.	Taken any other actions designed to lower the percent of tenured full-time non-instructional faculty *(DESCRIBE ANY ACTIONS TAKEN)*

_____

_____

27. During the past five years, has your institution offered early or phased retirement to any permanent full-time non-instructional faculty? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____ Number of permanent full-time non-instructional faculty who took advantage of this offer during the past five years *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

2. No

28. Indicate if each of the retirement plans listed below is available to any permanent full-time non-instructional faculty at your institution. If available, please indicate whether the plan is subsidized or not subsidized by your institution.

(28A)

		Fully Subsidized	Partially Subsidized	Not Subsidized
a. TIAA/CREF plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
b. Other 403B plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
c. State plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
d. 401K or 401B plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3
e. Other retirement plan	1. Yes ÄÄÄÄÄ➢ 2. No	1	2	3

29. Indicate which of the following employee benefits is available at your institution to any permanent full-time non-instructional faculty. If available, indicate whether the benefit is subsidized or not subsidized by your institution.

		(29A) Fully Subsidized	Partially Subsidized	Not Subsidized
a. Wellness program or health promotion	1. Yes ÄÄÄ➢ 2. No	1	2	3
b. Medical insurance or medical care	1. Yes ÄÄÄ➢ 2. No	1	2	3
c. Dental insurance or dental care	1. Yes ÄÄÄ➢ 2. No	1	2	3
d. Disability insurance program	1. Yes ÄÄÄ➢ 2. No	1	2	3
e. Life insurance	1. Yes ÄÄÄ➢ 2. No	1	2	3
f. Tuition remission/grants at this or other institutions for spouse	1. Yes ÄÄÄ➢ 2. No	1	2	3
g. Tuition remission/grants at this or other institutions for children	1. Yes ÄÄÄ➢ 2. No	1	2	3
h. Child care	1. Yes ÄÄÄ➢ 2. No	1	2	3
i. Housing/mortgage	1. Yes ÄÄÄ➢ 2. No	1	2	3
j. Meals	1. Yes ÄÄÄ➢ 2. No	1	2	3
k. Transportation/parking	1. Yes ÄÄÄ➢ 2. No	1	2	3
l. Maternity leave	1. Yes ÄÄÄ➢ 2. No	1	2	3
m. Paternity leave	1. Yes ÄÄÄ➢ 2. No	1	2	3
n. Medical insurance for retirees	1. Yes ÄÄÄ➢ 2. No	1	2	3
o. "Cafeteria-style" benefits plan (plan under which staff can trade off some benefits for others, following guidelines established by the institution)	1. Yes ÄÄÄ➢ 2. No	1	2	3

30. What is the average percentage of salary that is contributed by your institution to the total benefits package for permanent full-time non-instructional faculty? *(WRITE IN PERCENTAGE; IF NONE, WRITE IN "0")*

_____ %

31. Are any of the employee benefits described at Question 29 available to <u>temporary</u> full-time non-instructional faculty at your institution? *(CIRCLE ONE NUMBER OR DK)*

1. Yes **(ANSWER QUESTION 32)**
2. No **(SKIP TO SECTION III ON PAGE 15)**

DK. Don't Know **(SKIP TO SECTION III ON PAGE 15)**

32. Indicate which of these employee benefits is available to temporary full-time non-instructional faculty at your institution. If available, indicate whether the benefit is subsidized or not subsidized by your institution.
(IF YOU DON'T KNOW IF A BENEFIT IS AVAILABLE, CIRCLE "DK") **(32A)**

		Fully Subsidized	Partially Subsidized	Not Subsidized
a. Wellness program or health promotion	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
b. Medical insurance or medical care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
c. Dental insurance or dental care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
d. Disability insurance program	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
e. Life insurance	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
f. Tuition remission/grants at this or other institutions for spouse	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
g. Tuition remission/grants at this or other institutions for children	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
h. Child care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
i. Housing/mortgage	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
j. Meals	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
k. Transportation/parking	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
l. Maternity leave	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
m. Paternity leave	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
n. Medical insurance for retirees	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
o. "Cafeteria-style" benefits plan (plan under which staff can trade off some benefits for others, following guidelines established by the institution)	1. Yes ÄÄÄ➢ 2. No DK	1	2	3

33. Are any of your full-time non-instructional faculty legally represented by a union (or other association) for purposes of collective bargaining with this institution? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____ (approximate) percent represented *(WRITE IN PERCENTAGE)*
2. No

SECTION III: PART-TIME INSTRUCTIONAL FACULTY/STAFF

IF YOU INDICATED THAT YOUR INSTITUTION HAD NO PART-TIME INSTRUCTIONAL FACULTY/STAFF (AT QUESTION 1b), PLEASE SKIP TO PAGE 20. OTHERWISE, CONTINUE WITH SECTION III.

34. Are any retirement plans available to any part-time instructional faculty/staff at your institution? *(CIRCLE ONE NUMBER)*

1. Yes 2. No **(SKIP TO QUESTION 36)**

35. Indicate which of the retirement plans listed below is available to <u>any</u> part-time instructional faculty/staff at your institution. If available, please indicate whether the plan is subsidized or not subsidized by your institution. *(IF YOU DON'T KNOW IF A PLAN IS AVAILABLE, CIRCLE "DK")*

		(35A)		
		Fully Subsidized	**Partially Subsidized**	**Not Subsidized**
a. TIAA/CREF plan	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
b. Other 403B plan	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
c. State plan	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
d. 401K or 401B plan	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3
e. Other retirement plan	1. Yes ÄÄÄÄÄ➢ 2. No DK	1	2	3

36. Are any employee benefits available to any part-time instructional faculty/staff at your institution? *(CIRCLE ONE NUMBER)*

1. Yes **(CONTINUE WITH QUESTION 37 ON THE NEXT PAGE)**

2. No **(SKIP TO QUESTION 41 ON PAGE 17)**

37. Indicate which of the following employee benefits is available at your institution to <u>any</u> part-time instructional faculty/staff. If available, indicate whether the benefit is subsidized or not subsidized by your institution.
(IF YOU DON'T KNOW IF A BENEFIT IS AVAILABLE, CIRCLE "DK")

		(37A)		
		Fully Subsidized	**Partially Subsidized**	**Not Subsidized**
a. Wellness program or health promotion	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
b. Medical insurance or medical care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
c. Dental insurance or dental care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
d. Disability insurance program	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
e. Life insurance	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
f. Tuition remission/grants at this or other institutions for spouse	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
g. Tuition remission/grants at this or other institutions for children	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
h. Child care	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
i. Housing/mortgage	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
j. Meals	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
k. Transportation/parking	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
l. Maternity leave	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
m. Paternity leave	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
n. Medical insurance for retirees	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
o. "Cafeteria-style" benefits plan (plan under which staff can trade off some benefits for others, following guidelines established by the institution)	1. Yes ÄÄÄ➢ 2. No DK	1	2	3
p. Other	1. Yes ÄÄÄ➢ 2. No DK	1	2	3

38. What is the average percentage of salary that is contributed by your institution to the total benefits package for part-time instructional faculty/staff? *(WRITE IN PERCENTAGE; IF NONE, WRITE IN "0")*

_____ %

39. Does your institution have any criteria that must be met in order for part-time instructional faculty/staff to be eligible for any benefits? *(CIRCLE ONE NUMBER)*

1. Yes 2. No **(SKIP TO QUESTION 41)**

40. Indicate which requirements must be met at your institution by part-time instructional faculty/staff to be eligible for any benefits? *(IF YOU DON'T KNOW IF A REQUIREMENT APPLIES, CIRCLE "DK")*

		(40A) Description of Requirement	**(40B)** Percent of Part-time Instructional faculty/staff That Meet This Requirement
a. Minimum number of hours employed per week at institution	1. Yes ÄÄÄÄÄ➢ 2. No DK	_____ number of hours required per week	____%
b. Minimum length of time employed at institution	1. Yes ÄÄÄÄÄ➢ 2. No DK	*(CIRCLE ONE)* 1. Less than one academic year 2. One academic year 3. More than one academic year	____%
c. Other requirement	1. Yes ÄÄÄÄÄ➢ 2. No DK	*(DESCRIBE)* _____ _____ _____	____%

41. What percentage of undergraduate instruction, as measured by total student credit hours taught, is carried by <u>part-time</u> instructional faculty/staff? Student credit hours are defined as the number of course credits or contact hours multiplied by the number of students enrolled. *(NOTE: THE PERCENTAGES YOU INDICATE HERE PLUS ANY PERCENTAGES YOU INDICATED AT QUESTION 17 ON PAGE 9 SHOULD NOT EXCEED 100%)*

1. NONE
2. Less than 10%
3. 10-24%
4. 25-49%
5. 50-74
6. 75-99%
7. 100%

42. Are any of the following used in assessing the teaching performance of <u>part-time</u> instructional faculty/staff at this institution? *(CIRCLE ONE NUMBER OR "DK" ON EACH LINE)*

Yes	No	Don't Know		
1	2	DK	a.	Student evaluations
1	2	DK	b.	Student test scores
1	2	DK	c.	Student career placement
1	2	DK	d.	Other measures of student performance
1	2	DK	e.	Department/division chair evaluations
1	2	DK	f.	Dean evaluations
1	2	DK	g.	Peer evaluations
1	2	DK	h.	Self-evaluations
1	2	DK	i.	Other *(DESCRIBE)* _____

43. Are any of your part-time instructional faculty legally represented by a union (or other association) for purposes of collective bargaining with this institution? *(CIRCLE ONE NUMBER)*

1. Yes ÄÄÄ➢ (A.) _____% (approximate) percent represented *(WRITE IN PERCENTAGE)*
2. No

Please fill in your name and your title at this institution, as well as the names and titles of any other individuals who have answered one or more questions in this questionnaire, and the question numbers each individual worked on. Include telephone numbers in case we have any questions about any entries.

Your responses to these items, as with all other items in this questionnaire, are voluntary and strictly confidential. The information provided in this questionnaire will be used only in statistical summaries. Furthermore, all information that would permit identification of individuals, including names and telephone numbers, will be removed from survey files.

YOUR NAME: _____ TITLE: _____

PHONE #: _____ QUESTIONS #s: _____

OTHER NAME: _____ TITLE: _____

PHONE #: _____ QUESTIONS #s: _____

OTHER NAME: _____ TITLE: _____

PHONE #: _____ QUESTIONS #s: _____

OTHER NAME: _____ TITLE: _____

PHONE #: _____ QUESTIONS #s: _____

OTHER NAME: _____ TITLE: _____

PHONE #: _____ QUESTIONS #s: _____

THANK YOU VERY MUCH FOR YOUR PARTICIPATION. RETURN THIS QUESTIONNAIRE IN THE ENCLOSED PREPAID ENVELOPE TO:

National Opinion Research Center (4552)
University of Chicago
1525 East 55th Street
Chicago, Illinois 60615

RESPONDENT LABEL

Appendix C

NSOPF-88 Faculty Questionnaire

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE ASSSITANT SECRETARY
FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

CENTER FOR EDUCATION STATISTICS
April 1988

Dear Faculty Member:

There is very little current and comprehensive information about higher education faculty in this country. For this reason, the Center for Education Statistics of the U.S. Department of Education is conducting a national survey of faculty in American colleges and universities. This study, which is cosponsored by the National Endowment for the Humanities, is designed to provide reliable and current data for higher-education researchers, as well as planners and policymakers at all levels (institutional and governmental). The Center has contracted with SRI International (formerly Stanford Research Institute) and the Center for the Study of Higher Education at Penn State University to conduct the study.

This National Survey of Postsecondary Faculty (NSOPF) is the most comprehensive study of faculty in postsecondary educational institutions ever undertaken. It will provide national profiles of faculty members regarding their backgrounds, responsibilities, career and retirement plans, compensation, benefits, and attitudes about their jobs and various academic issues. Additionally, information on institutional and departmental characteristics, policies, and practices that affect faculty will be collected from institutional spokespersons and chairpersons of selected departments (or comparable academic units).

You and several of your colleagues at your institution are part of a randomly drawn national sample of instructional faculty who are being asked to contribute to this study. While your participation is voluntary, it is particularly important because this survey will establish a baseline for any future profiles of faculty.

Individual responses and all information which would permit identification of individuals will be kept strictly confidential, in accordance with the provisions of the Family Educational Rights and Privacy Acts of 1976. Reponses will be used only in statistical summaries and will not be disclosed to any group or individual.

Please complete this questionnaire as soon as possible and return it directly to SRI in the enclosed business-reply envelope. When the study is completed, the Center will provide your institution with a summary report of the findings. Study reports and data tapes also will be available upon request to researchers who wish to explore the study issues further. If you have any questions or comments concerning this study, please telephone Dr. Susan Russell, Project Director, of SRI International (415-859-4164).

Thank you in advance for your cooperation.

Sincerely,
Emerson J. Elliott, Director

OHB Clearance # 1850-0608
Expiration date: 7/89

NATIONAL SURVEY OF POSTSECONDARY FACULTY

Faculty Questionnaire

PLEASE NOTE:

Many of our questions ask about your activities during the 1987 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1987.

All questions that ask about your current position or institution refer to your position during the 1987 Fall Term at the institution to which this questionnaire was addressed.

This questionnaire was designed to be completed by both full- and part-time instructional faculty in 2- and 4-year postsecondary institutions of all kinds. Because this is such a diverse group, some of the questions may not be worded quite appropriately for your situation. We would appreciate your tolerance of these difficulties.

1. During the 1987 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, advising or supervising students' academic activities)?
(PLEASE CIRCLE ONE NUMBER)

Yes 1

No 2

IF NO, PLEASE STOP HERE AND RETURN THIS PACKET TO SRI IN THE ENCLOSED FRANKED ENVELOPE.

2. During the 1987 Fall Term, were at least some of your instructional duties related to for-credit courses, or were all of your instructional duties related to noncredit courses?
(PLEASE CIRCLE ONE NUMBER)

At least some of my instructional duties were related to for-credit courses . . . . ……1

All of my instructional duties were related to noncredit courses . . . . . ……2

IF ALL NONCREDIT, PLEASE STOP HERE AND RETURN THIS PACKET TO SRI IN THE ENCLOSED FRANKED ENVELOPE.

3. During the 1987 Fall Term, were you on sabbatical from another institution?

Yes . . . . . ……. 1

No . . . . . ……. 2

A. NATURE OF EMPLOYMENT

4. During the 1987 Fall Term, did this institution consider you to be employed here full-time or part-time?

Full-time 1

Part-time 2

5. During the 1987 Fall Term, were you employed only at this institution, or did you also have other employment**?** *Please include outside consulting or other self-owned business.*

Employed only at this institution . . . . ……. 1 → SKIP TO Q.7
Also had other employment or consulting . . 2

6. Other than this institution, in which of the following ways were you employed during the 1987 Fall Term?
(PLEASE CIRCLE "FULL-TIME" OR "PART-TIME" FOR ALL SECTORS THAT APPLY)

Employment sector	TYPE OF EMPLOYMENT: Full-time (35+ hours/week)	Part-time (<35 hours/week)
Consulting, freelance work, or self-owned business in area directly related to my field at this institution	1	2
Consulting, freelance work, or self-owned business in area largely unrelated to my field at this institution	1	2
On staff of another postsecondary educational institution	1	2
On staff of an elementary or secondary school	1	2
On staff of a hospital or other health care/ clinical setting	1	2
On staff of a foundation or other nonprofit organization	1	2
On staff of a for-profit business or industry in the private sector	1	2
On staff of the federal government (including military)	1	2
On staff of a state or local government	1	2
Other (PLEASE SPECIFY BELOW:) _____	1	2

7. Were you chairperson of a department or division at this institution during the 1987 Fall Term?

Yes 1

No 2

8. During the 1987 Fall Term, were you on sabbatical from this institution?

Yes 1

No 2

9. What was your tenure status at this institution during the 1987 Fall Term?

Not applicable: no tenure system at this institution . . . . . 1 → SKIP TO Q. 11

Not applicable: no tenure system for my faculty status . . . . . 2 → SKIP TO Q. 11

Not on tenure track . . . . . 3 → SKIP TO Q. 11

On tenure track but not tenured . . . . . 4 → SKIP TO Q. 11

Tenured 5

10. In what year did you achieve tenure at this institution?
(PLEASE GIVE YOUR BEST ESTIMATE IF NOT SURE)

19_____

PLEASE SKIP TO QUESTION 12

11. During the 1987 Fall Term, what was the duration of your contract or appointment at this institution?

One academic term 1

One academic/calendar year 2

Two or more academic/calendar years . . 3

Unspecified duration 4

Other *(PLEASE SPECIFY BELOW).* . . . 5

_____

12. Which of the following best describes your academic rank at this institution during the 1987 Fall Term?
(PLEASE CIRCLE ONE NUMBER)

Not applicable: no ranks designated at this institution . . . . . 0 → SKIP TO Q.14

Distinguished/Named Professor 1

Professor 2

Associate Professor 3

Assistant Professor 4

Instructor 5

Lecturer 6

Other (PLEASE SPECIFY BELOW) 7

_____

13. In what year did you first achieve this rank?
(PLEASE GIVE YOUR BEST ESTIMATE IF NOT SURE) 19_____

14. During the 1987 Fall Term, did you hold any of the following kinds of appointments at this institution?
(PLEASE CIRCLE ALL THAT APPLY)

Acting 1

Affiliate or adjunct 2

Visiting 3

Assigned by religious order 4

No, none of the above 0

15. Have you ever achieved tenure at another institution?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY THE YEAR TENURE FIRST ACHIEVED, IF APPLICABLE)

Yes 1
(YEAR FIRST ACHIEVED: 19____)

No 2

16. What is your principal field of discipline of teaching?
(PLEASE REFER TO THE LIST OF FIELDS OF STUDY ON PAGES 24-25 AND ENTER THE APPROPRIATE CODE NUMBER (S) BELOW)

Field code of my discipline: _____

17. Are any faculty at this institution legally represented by a union (or other association) for purposes of collective bargaining?

Yes…….1
No……..2 → SKIP TO Q. 19
Don't know……9 → SKIP TO Q. 19

18. Are you a member of the union (or other bargaining association) that represents faculty at this institution?

Yes…….1
No……..2

B. JOB SATISFACTION ISSUES

19. How satisfied or dissatisfied do *you personally* feel about each of the following aspects of your job at this institution?
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	DISSATISFIED		SATISFIED		Does not
	Very	Somewhat	Somewhat	Very	apply
My work load	1	2	3	4	0
My job security	1	2	3	4	0
The authority I have to make decisions about what courses I teach	1	2	3	4	0
The authority I have to make decisions about content and methods in the courses I teach	1	2	3	4	0
The authority I have to make decisions about other (noninstructional) aspects of my job	1	2	3	4	0
The mix of teaching, research, administration, and service (as applicable) that I am required to do	1	2	3	4	0

(continued)

Satisfaction with your job at this institution: (continued)

	DISSATISFIED		SATISFIED		Does not
	Very	Somewhat	Somewhat	Very	apply
Opportunity for my advancement in rank at this institution	1	2	3	4	0
Time available for working with students as an advisor, mentor, etc.	1	2	3	4	0
Availability of support services and equipment (including clerical support, personal computers, etc.)	1	2	3	4	0
Freedom to do outside consulting	1	2	3	4	0
My salary	1	2	3	4	0
My benefits, generally	1	2	3	4	0
Overall reputation of the institution	1	2	3	4	0
Institutional mission or philosophy	1	2	3	4	0
Quality of leadership in my department/program	1	2	3	4	0
Quality of chief administrative officers at this campus	1	2	3	4	0
Quality of my colleagues in my department/program	1	2	3	4	0
Quality of faculty leadership (e.g., Academic Senate, Faculty Council) at this institution	1	2	3	4	0
Quality of union leadership at this institution	1	2	3	4	0
Relationship between administration and faculty at this institution	1	2	3	4	0
Interdepartmental cooperation at this institution	1	2	3	4	0
Spirit of cooperation among faculty at this institution	1	2	3	4	0
Quality of my research facilities and support	1	2	3	4	0
Quality of undergraduate students whom I have taught here	1	2	3	4	0

(continued)

Satisfaction with your job at this institution: (continued)

	DISSATISFIED		SATISFIED		Does not
	Very	Somewhat	Somewhat	Very	apply
Quality of graduate students whom I have taught here	1	2	3	4	0
Teaching assistance that I receive	1	2	3	4	0
Research assistance that I receive	1	2	3	4	0
Spouse employment opportunities in this geographic area	1	2	3	4	0
My job here, overall	1	2	3	4	0

20. During the next three years, how likely is it that you will leave this job to do the following?

(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not at all Likely	Somewhat likely	Very Likely
Retire	1	2	3
Seek or accept a (different) part- time job	1	2	3
Seek or accept a (different) full- time job	1	2	3

21. IF you were to leave this job to accept another position, would you want to do more, less, or about the same amount of each of the following as you currently do?

	I WOULD WANT TO DO:		
	More of this	Same amount of this as I do now	Less of this
Research	1	2	3
Teaching	1	2	3
Advising students	1	2	3
Service activities	1	2	3
Administration	1	2	3

22. IF you were to leave this job to accept another position, how important would each of the following be in your decision to accept another position?

(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not Important	Somewhat Important	Very Important
Salary level	1	2	3
Tenure track/tenured position	1	2	3
Job security	1	2	3
Opportunities for advancement	1	2	3
Benefits	1	2	3
No pressure to publish	1	2	3
Good research facilities and equipment	1	2	3
Good instructional facilities and equipment	1	2	3
Excellent students	1	2	3
Excellent colleagues	1	2	3
Institutional mission or philosophy that is compatible with my own views	1	2	3
Good job for my spouse	1	2	3
Good geographic location	1	2	3
Good housing	1	2	3
Good environment/schools for my children	1	2	3
A full-time position	1	2	3
A part-time position	1	2	3

23. IF you were to leave your current position, how likely is it that you would do so to:

(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Not at all Likely	Somewhat likely	Very Likely
a. Return to school as a student	1	2	3
b. Accept employment in:			
doctoral granting university or college	1	2	3
other 4-year university or college	1	2	3
2-year postsecondary institution	1	2	3
less than 2-year postsecondary institution	1	2	3
elementary or secondary school	1	2	3
hospital or other health care organization	1	2	3
consulting, self-owned business, freelancing	1	2	3
foundation or other nonprofit organization	1	2	3
private sector for-profit business or industry	1	2	3
federal government (including military)	1	2	3
state or local government	1	2	3

24. At what age do you think you are most likely to stop teaching at a postsecondary institution?

(PLEASE CIRCLE ONE NUMBER)

Under 40……..1
40 - 44…...……..2
45 - 49……...……..3
50 - 54……...…..4
55 - 59…….5
60 - 64…….6
65 - 69…….7
70 or older……...8
Have no idea……...9

25. At what age do you think you are most likely to retire from paid employment?

(PLEASE CIRCLE ONE NUMBER)

Under 50……..1
50 - 54……..2
55 - 59……..3
60 - 64……..4
65 - 69……..5
70 or older…….……6
Have no idea……....9

C. ACADEMIC PROFESSIONAL BACKGROUND

26. Please list below each collegiate and graduate degree that you hold, the name and location of the institution from which you received it, the year you received it, and the Field Code (from pages 24-25) that applies. Please do not list honorary degrees.
(PLEASE COMPLETE ALL COLUMNS FOR EACH DEGREE)

Codes for type of degree:

1 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length
2 Associate's degree or equivalent
3 Certificate, diploma or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
4 Bachelor's degree or equivalent
5 Graduate work not resulting in a degree
6 Master's' degree or equivalent
7 Doctoral degree (Ph.D., Ed.D., etc)
8 Professional degree (M.D., D.D.S., L.L.B., etc.)

Degree Code	Year received	Field code	Name of institution	City and state/country of institution
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____
_____	19_____	____	_____	_____

27. Which of the following undergraduate academic honors or awards, if any, did you receive?

(PLEASE CIRCLE ALL THAT APPLY)

National academic honor society, such as
Phi Beta Kappa, Tau Beta Pi, or other
field-specific national honor society……1

Cum laude or honors……2

Magna cum laude or high honors……3

Summa cum laude or highest honors……4

Other undergraduate academic achievement award……5

None of the above……0

28. When you were in graduate school, which of the following, if any, did you receive?

(PLEASE CIRCLE ALL THAT APPLY)

Doesn't apply: did not attend graduate school……0

Teaching assistantship……1

Research assistantship……2

Program or residence hall assistantship……3

Fellowship……4

Scholarship or traineeship……5

Grant……6

G.I. Bill or other veterans' financial aid……7

Loan……8

None of the above……9

29. For each of the jobs that you have held since graduating from college, please indicate in the table below the years that you began and left the job, the employment sector, your primary responsibility, and whether you were employed full- or part-time.
   - *Please begin with your current job, and work backward.*
   - *Do not list promotions in rank at your current job(s) as different jobs.*
   - *Do not include temporary positions or work as a graduate assistant.*
   - *Please list each job (other than promotions in rank) separately!*

(PLEASE COMPLETE ALL COLUMNS FOR EACH POSITION; SPECIFY EMPLOYMENT SECTOR AND PRIMARY RESPONSIBILITY CODES FROM THE LISTS ON THE FACING PAGE)

	Years job held		Employment sector	Primary responsibility	Full-time	Part-time
	From	To	(Enter Code)	(Enter Code)	(CIRCLE ONE)	
CURRENT JOB:	19--------	present	--------	---------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2
	19---------	19---------	---------	----------	1	2

CODES FOR QUESTION 29

Employment sector codes		Primary responsibility codes
01	Graduate-level institution that is not part of a 4-year school (e.g., independent law school)	1 Teaching 2 Administration 3 Technical or research 4 Community/public service 5 Clinical services 6 Other
02	Doctoral granting university or college	
03	Other 4-year college or university	
04	2-year postsecondary institution	
05	Less-than-2-year postsecondary institution	
06	Elementary or secondary school	
07	Hospital or other health care or clinical setting	
08	Consulting, freelance work, or self-owned business in area directly related to my field at this institution	
09	Consulting, freelance work, or self-owned business in area largely unrelated to my field at this institution	
10	Foundation or other nonprofit organization	
11	For-profit business or industry in the private sector	
12	Federal government, including military	
13	State or local government	
14	Other (PLEASE SPECIFY BELOW)	

IF YOU HAD MORE THAN ONE JOB IN THE "OTHER" CATEGORY, PLEASE LIST SEPARATELY AND CODE EMPLOYMENT SECTORS AS "14a," "14b," ETC., IN Q.30.

(a)_____

(b)_____

(c)_____

(d)_____

30. About how many of each of the following have you presented/published/etc. during your entire career and just during the last 2 years? *For publications, please include works that have been accepted for publication.*

(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, CIRCLE "0")

0 No presentations/publications/etc.

	Number in past 2 years	Total during career
Articles or creative works published in refereed professional or trade journals	----------	----------
Articles or creative works published in nonrefereed professional or trade journals	----------	----------
Articles or creative works published in juried popular media	----------	----------
Articles or creative works published in nonjuried popular media or in-house newsletters	----------	----------
Published reviews of books, articles, or creative works	----------	----------
Chapters in edited volumes	----------	----------
Textbooks	----------	----------
Other books	----------	----------
Monographs	----------	----------
Research or technical reports disseminated internally or to clients	----------	----------
Presentations at conferences, workshops, etc.	----------	----------
Exhibitions or performances in the fine or applied arts	----------	----------
Patents or copyrights (excluding thesis or dissertation)	----------	----------
Computer software products	----------	----------

D. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

31. During the 1987 Fall Term, how many graduate or undergraduate dissertations or theses, comprehensive exams, or orals committees did you chair or serve on at this institution?

(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, ENTER "0")

	Number served on but did not chair	Number chaired
Thesis or dissertation committees	----------	----------
Comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	----------	----------

32. For each for-credit class or section that you taught at this institution during the 1987 Fall Term, please indicate below the number of hours per week that the class met; if the class was team taught, please indicate the average number of hours per week that you personally taught it. Next, please indicate the number and primary level of students enrolled; the class' primary setting; and the number of teaching assistants (TA's), readers, etc., who assisted you with the class.

Please do not include noncredit courses that you taught. Also, please do not include individualized instruction, such as independent study or individual (one-on-one) performance classes.

If you taught multiple sections of the same course, please count them as separate classes, but do not include the lab section of a course as a separate class.

Codes for primary level of students:

1 Lower division students (first or second year) in program leading to associate or bachelor's degree

2 Upper division students (juniors or seniors) in program leading to bachelor's degree

3 Graduate students (post_baccalaureate)

4 Students in program leading to certificate or award other than associate, bachelor's, or graduate degree

5 All other students

6 Any combination of the above

Codes for primary setting:

1 Lecture

2 Seminar, discussion group

3 Lab, clinic

4 Fieldwork, field trips

5 Role playing, simulation, or other performance (e.g., art, music, drama)

6 TV, radio, or other distance media

7 Any combination of the above

8 Other (PLEASE SPECIFY BELOW):
(a)_____
(b)_____
(c)_____

Number of hours per week the class met	IF TEAM TAUGHT: Avg. # hours per week you taught the class	Number of students enrolled	Primary level of students (ENTER CODE)	Primary setting (ENTER CODE)	Number of TA's readers, etc.
----------	----------	----------	----------	----------	----------
----------	----------	----------	----------	----------	----------
----------	----------	----------	----------	----------	----------
----------	----------	----------	----------	----------	----------
----------	----------	----------	----------	----------	----------

33. For each type of student listed below, please indicate how many at this institution received individualized instruction from you during the 1987 Fall Term. Also indicate the total number of contact hours per week that you spent providing individualized instruction to each group.

(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, CIRCLE "0")

Provided no individualized instruction 0

Types of students at this institution	INDIVIDUALIZED INSTRUCTION: Number of students	INDIVIDUALIZED INSTRUCTION: Total contact hours per week
Lower division students (first or second year) in program leading to associate or bachelor's degree	----------	----------
Upper division students (juniors, seniors) in program leading to bachelor's degree	----------	----------
Graduate students (post-baccalaureate)	----------	----------
Students in program leading to certificate/award other than associate/bachelor's/graduate degree	----------	----------
All other students	----------	----------

34. During the 1987 Fall Term, were you a principal investigator or project director on any grants or contracts at this institution, including service contracts or internal awards?

Yes 1
No . . . . . 2 → SKIP TO Q.36

35. For the grants and contracts for which you were a principal investigator (PI) during the 1987 Fall Term, please indicate below, by source, how many you had and their total dollar amount for the 1987-88 academic year.

If you were/are a principal investigator on a multiple-investigator project, please divide the total dollar amount by the number of PIs on the project.

(PLEASE GIVE YOUR BEST ESTIMATE FOR EACH SOURCE; IF NONE, ENTER "0")

Source of funding	Number of grants/contracts	Total funding for the 1987-88 academic year
Federal government	----------	$ ----------
State or local government	----------	$ ----------
Foundation or other nonprofit	----------	$ ----------
For-profit business or industry in the private sector	----------	$ ----------
This institution	----------	$ ----------
Other source (PLEASE SPECIFY) _____	----------	$ ----------
	----------	$ ----------

36. On the average, how many hours per week did you spend at each of the following kinds of work during the 1987 Fall Term?
(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE)

	Average number hours per week during the 1987 Fall Term
All activities at this institution (teaching, research, administration, etc.)	----------
Any other paid activities (e.g., consulting, working on other jobs)	----------
Unpaid (*pro bono*) professional service activities	----------

37. Please estimate the percentage of your total working hours (i.e., the categories listed in Question 36) that you spent on each of the following activities during the 1987 Fall Term. *(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, ENTER "0")*
Note: The percentages you provide should sum to 100% of the total time you spent on professional activities.

	Percent
Working with student organizations or intramural athletics	----------
Teaching, advising, or supervising students (other than those activities covered in the above category)	----------
Grading papers, preparing courses, developing new curricula, etc.	----------
Administrative activities (including paperwork; staff supervision; serving on in-house committees, such as the academic senate; etc.)	----------
Research; scholarship; preparing or reviewing articles or books; attending or preparing for professional meetings or conferences; etc.	----------
Giving performances or exhibitions in the fine or applied arts, or speeches	----------
Seeking outside funding (including proposal writing)	----------
Taking courses, pursuing an advanced degree	----------
Other professional development activities, such as practice or other activities to remain current in your field	----------
Providing legal or medical services or psychological counseling to clients or patients	----------
Outside consulting or freelance work, working at self-owned business	----------
Paid or unpaid community or public service (civic, religious, etc.)	----------
Other (PLEASE SPECIFY:)	----------
----------	----------

We know that this is tedious, but please be sure that the above adds to 100%

E. BENEFITS AND PROFESSIONAL DEVELOPMENT ACTIVITIES

38. During the 1987 Fall Term, were the following employee benefits available to you at this institution? *(PLEASE CIRCLE ONE NUMBER FOR EACH BENEFIT)*

	AVAILABLE TO ME		
	Yes	No	Don't know
Free or subsidized wellness or health promotion program (e.g., fitness or smoking cessation program)	1	2	9
Paid maternity leave	1	2	9
Paid paternity leave	1	2	9
Subsidized medical insurance or medical care	1	2	9
Subsidized dental insurance or dental care	1	2	9
Subsidized disability insurance	1	2	9
Subsidized life insurance	1	2	9
Retirement plan to which institution makes contributions	1	2	9
Retirement plan to which you make contributions but the institution does not	1	2	9
Tuition remission/grants at this or other institutions for spouse	1	2	9
Tuition remission/grants at this or other institutions for children	1	2	9
Subsidized child care	1	2	9
Subsidized housing/mortgage	1	2	9

39. Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty members.

- If a professional development activity was not available to you during the 1987 Fall Term, please circle the "Not Available" code
- If an activity was available to you at this institution during the 1987 Fall Term, please indicate how adequate to your needs the funds available for that purpose were.
- If you do not know whether an activity was available to you, please circle the "Don't Know" code.

(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

Institutional or Departmental funding for:	NOT available to me	AVAILABLE TO ME: INADEQUATE Very	INADEQUATE Somewhat	ADEQUATE Somewhat	ADEQUATE Very	Don't know if this was Available
Tuition remissions at this or other institutions	0	1	2	3	4	9
Professional association memberships	0	1	2	3	4	9
Registration fees, etc., for workshops, conferences, etc.	0	1	2	3	4	9
Professional travel	0	1	2	3	4	9
Training to improve research skills	0	1	2	3	4	9
Training to improve teaching skills	0	1	2	3	4	9
Retraining for fields in higher demand	0	1	2	3	4	9
Computer equipment	0	1	2	3	4	9

F. COMPENSATION

Note: Your responses on these and all other items in this questionnaire are STRICTLY CONFIDENTIAL, will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be suppressed from the survey files.

40. For the calendar year 1987, please estimate your gross earnings before taxes from each of the sources listed below.
Please do not record any earnings in more than one category.
(PLEASE GIVE YOUR BEST ESTIMATES IF NOT SURE; IF NONE, ENTER "0")

Income from this institution:

Basic salary	$----------
Other teaching at this institution not included in basic salary (e.g., for summer session)	----------
Supplements not included in basic salary (for administration, research, coaching sports, etc.)	----------
Non-monetary compensation (e.g., food, housing, car) *(Please give approximate value)*	----------
Any other income from this institution	----------

Income from other sources:

Employment at another academic institution	----------
Legal or medical services or psychological counseling	----------
Outside consulting, consulting business, or freelance work	----------
Self-owned business (other than consulting)	----------
Professional performances or exhibitions	----------
Speaking fees, honoraria	----------
Royalties or commissions	----------
Any other employment	----------
Non-monetary compensation (e.g., food, housing, car) *(Please give approximate value)*	----------
Other sources of earned income (PLEASE SPECIFY:)	
----------	----------
----------	----------

G. SOCIODEMOGRAPHIC CHARACTERISTICS

41. Your gender:

Male 1
Female 2

42. In what year were you born? 19 _____

43. Are you of Hispanic descent--for example, Mexican, Mexican-American, Chicano, Cuban, Puerto Rican, etc.?

Yes 1
No 2

44. What is your race? *(PLEASE CIRCLE ONE NUMBER)*

American Indian, Aleut, Eskimo 1
Asian or Pacific Islander (Japanese, Chinese, Filipino, Asian Indian, Korean, Vietnamese, Hawaiian, Guamanian, Samoan, other Asian) 2
Black 3
White 4
Other (PLEASE SPECIFY BELOW) 5

_____

45. What is your current marital status? *(PLEASE CIRCLE ONE NUMBER)*

Single, never married 1
Married 2
Separated 3
Divorced 4
Widowed 5

46. Of what country are you currently a citizen?

USA 1
Other *(PLEASE SPECIFY BELOW)* 2

_____

47. What is the highest level of formal education completed by your mother, your father, and your spouse? *(PLEASE CIRCLE ONE NUMBER FOR EACH PERSON)*

	Mother	Father	Spouse
Don't know/not applicable	0	0	0
Less than high school	1	1	1
High school diploma	2	2	2
Some college	3	3	3
Associate degree	4	4	4
Bachelor's degree	5	5	5
Master's degree	6	6	6
Doctorate or professional degree (e.g., PhD, MD, DVM, JD/LLB)	7	7	7
Other (PLEASE SPECIFY BELOW)	8	8	8

_____

H. ACADEMIC INTERESTS AND VALUES

48. Please indicate the extent to which you agree or disagree with each of the following statements. *(PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT)*

	DISAGREE		AGREE	
	Strongly	Somewhat	Somewhat	Strongly
General Issues:				
It is important for the faculty to participate in governing their institutions.	1	2	3	4
Faculty promotions should be based at least in part on formal evaluations by students.	1	2	3	4
The tenure system in higher education should be preserved.	1	2	3	4
Teaching effectiveness should be the primary criterion for promotion of college faculty.	1	2	3	4
Research/publications should be the primary criterion for the promotion of college faculty	1	2	3	4
Faculty should be free to present in class any idea they consider relevant.	1	2	3	4
Collective bargaining is likely to bring overall higher salaries and improved benefits for faculty.	1	2	3	4

(continued)

	DISAGREE		AGREE		
	Strongly	Somewhat	Somewhat	Strongly	
Private consulting in areas directly related to a faculty member's field of research or teaching should be restricted.	1	2	3	4	
It is important to encourage students to consider a career in higher education.	1	2	3	4	
Institutional Issues:					
The administrative function is taking an increasingly heavy share of available resources at this institution.	1	2	3	4	
At this institution, research is rewarded more than teaching.	1	2	3	4	Does not apply 0
Female faculty members are treated fairly at this institution.	1	2	3	4	0
Faculty who are members of racial or ethnic minorities are treated fairly at this institution.	1	2	3	4	0

49. Please indicate *your opinion* regarding whether each of the following has worsened, improved, or stayed the same in recent years.
(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)

	Worsened	Stayed the same	Improved	Have no idea
The quality of undergraduate students in higher education	1	2	3	9
The quality of graduate students in my field	1	2	3	9
The quality of students who choose to pursue academic careers in my field	1	2	3	9
The opportunities junior faculty have for advancement in my field	1	2	3	9
The professional competence of individuals entering my academic field	1	2	3	9
Respect for the academic profession, generally	1	2	3	9

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Please return this completed questionnaire in the enclosed franked envelope to:
National Survey of Postsecondary Faculty
SRI International, P.O. Box 2124, Menlo Park, CA 94025-2124

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

AGRICULTURE
001 Agribusiness & Agricultural Production
002 Agricultural, Animal, Food, & Plant Sciences
003 Renewable Natural Resources, including Conservation, Fishing, & Forestry
004 Other Agriculture

ARCHITECTURE & ENVIRONMENTAL DESIGN
005 Architecture & Environmental Design
006 City, Community, & Regional Planning
007 Interior Design
008 Land Use Management and Reclamation
009 Other Arch. & Environmental Design

ART
010 Art History and Appreciation
011 Crafts
012 Dance
013 Design (other than Arch. or Interior)
014 Dramatic Arts
015 Film Arts
016 Fine Arts
017 Music
018 Music History and Appreciation
019 Other Visual & Performing Arts

BUSINESS
020 Accounting
021 Banking & Finance
022 Business Administration & Management
023 Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
024 Human Resources Development
025 Organizational Behavior
026 Marketing & Distribution
027 Other Business

COMMUNICATIONS
028 Advertising
029 Broadcasting and Journalism
030 Communications Research
031 Communication Technologies
032 Other Communications

COMPUTER SCIENCE
033 Computer & Information Sciences
034 Computer Programming
035 Data Processing
036 Systems Analysis
037 Other Computer Science

EDUCATION
038 Education, General
039 Basic Skills
040 Bilingual/Cross-cultural education
041 Curriculum & Instruction
042 Education Administration
043 Education Evaluation and Research
044 Educational Psychology
045 Special Education
046 Student Counseling & Personnel Svcs.
047 Other Education

Teacher Education
048 Pre-Elementary
049 Elementary
050 Secondary
051 Adult & Continuing
052 Other General Teacher Ed. Programs
053 Teacher Education in Specific Subjects

ENGINEERING
054 Engineering, General
055 Civil Engineering
056 Electrical, Electronics, & Communication Engineering
057 Mechanical Engineering
058 Other Engineering
059 Engineering-Related Technologies

ENGLISH AND LITERATURE
060 English, General
061 Composition and Creative Writing
062 American Literature
063 English Literature
064 Linguistics
065 Speech, Debate, & Forensics
066 English as a Second Language
067 English, Other

FOREIGN LANGUAGES
068 Chinese (Mandarin, Cantonese, or Other Chinese)
069 French
070 German
071 Italian
072 Latin
073 Japanese
074 Other Asian
075 Russian or Other Slavic
076 Spanish
077 Other Foreign Languages

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES (continued)

HEALTH SCIENCES
078 Allied Health Technologies & Services
079 Dentistry
080 Health Services Administration
081 Medicine, including Psychiatry
082 Nursing
083 Pharmacy
084 Public Health
085 Veterinary Medicine
086 Other Health Sciences

087 HOME ECONOMICS

088 INDUSTRIAL ARTS

089 LAW

090 LIBRARY & ARCHIVAL SCIENCES

NATURAL SCIENCES
091 Life or Physical Sciences, General
092 Astronomy
093 Biology
094 Botany
095 Chemistry
096 Geological Sciences
097 Physics
098 Physiology
099 Zoology
100 Other Natural Sciences

101 MATHEMATICS & STATISTICS

102 MILITARY STUDIES

103 MULTI/INTERDISCIPLINARY STUDIES

104 PARKS & RECREATION

105 PHILOSOPHY, RELIGION, & THEOLOGY

106 PSYCHOLOGY

107 PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)

108 PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)

109 SCIENCE TECHNOLOGIES

SOCIAL SCIENCES
110 Social Sciences, General
111 Anthropology
112 Archeology
113 Area & Ethnic Studies
114 Demography
115 Economics
116 Geography
117 History
118 International Relations
119 Political Science & Government
120 Sociology
121 Other Social Sciences

VOCATIONAL TRAINING

Construction Trades
122 Carpentry
123 Electrician
124 Plumbing
125 Other Construction Trades

Consumer, Personal, & Misc. Services
126 Personal Services (e.g., Barbering Cosmetology)
127 Other Consumer Services

Mechanics and Repairers
128 Electrical & Electronics Equipment Repair
129 Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
130 Vehicle & Mobile Equipment Mechanics & Repairers
131 Other Mechanics and Repairers

Precision Production
132 Drafting
133 Graphic & Print Communications
134 Leatherworking and Upholstering
135 Precision Metal Work
136 Woodworking
137 Other Precision Production Work

Transportation and Material Moving
138 Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Services, Aviation Management)
139 Land Vehicle & Equipment Operation
140 Water Transportation (e.g., Boat and Fishing Operations, Deep Water Diving, Marina Operations, Sailors and Deckhands)
141 Other Transportation and Material Moving

999 OTHER

Appendix D

NSOPF-88 Institution Questionnaire

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE ASSSITANT SECRETARY
FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

CENTER FOR EDUCATION STATISTICS
April 1988

Dear Colleague:

There is very little current and comprehensive information about higher education faculty in this country. For this reason, the Center for Education Statistics of the U.S. Department of Education is conducting a national survey of faculty in American colleges and universities. This study, which is cosponsored by the National Endowment for the Humanities, is designed to provide reliable and current data for higher-education researchers, as well as planners and policymakers at all levels (institutional and governmental). The Center has contracted with SRI International (formerly Stanford Research Institute) and the Center for the Study of Higher Education at Penn State University to conduct the study.

This National Survey of Postsecondary Faculty (NSOPF) is the most comprehensive study of faculty in postsecondary educational institutions ever undertaken. It will provide national profiles of faculty members regarding their backgrounds, responsibilities, career and retirement plans, compensation, benefits, and attitudes about their jobs and various academic issues. Additionally, information on institutional and departmental characteristics, policies, and practices that affect faculty will be collected from institutional spokepersons and chairpersons of selected departments (or comparable academic units).

Your institution has been randomly selected to participate in the 1987-88 NSOPF. Although your participation is voluntary, it is particularly important because this survey will establish a baseline for any future profiles of faculty.

Individual responses and all information which would permit identification of individuals will be kept strictly confidential, in accordance with the provisions of the Family Educational Rights and Privacy Acts of 1976. Reponses will be used only in statistical summaries and will not be disclosed to any group or individual.

Please complete this questionnaire as soon as possible and return it directly to SRI in the enclosed business-reply envelope. When the study is completed, the Center will provide your institution with a summary report of the findings. Study reports and data tapes also will be available upon request to researchers who wish to explore the study issues further. If you have any questions or comments concerning this study, please telephone Dr. Susan Russell, Project Director, of SRI International (415-859-4164).

Thank you in advance for your cooperation.

Sincerely,
Emerson J. Elliott, Director

OHB Clearance # 1850-0608
Expiration date: 7/89

NATIONAL SURVEY OF POSTSECONDARY FACULTY
Institutional Questionnaire

PLEASE READ THESE INSTRUCTIONS

This questionnaire was designed to be completed by spokespersons in 2- and 4-year postsecondary institutions of all sizes. Because there is such a wide variety of these institutions, some of the questions may not be worded quite appropriately for your institution. We would appreciate your tolerance of these difficulties.

If your institution has multiple campuses, please answer only for the campus to which the questionnaire was addressed.

If your institution has BOTH lay faculty and those assigned by a religious order, a few questions may require different answers for the two groups. If this occurs, please call Dr. Susan Russell (collect) at 415-859-4164 for instructions on how to proceed. We apologize for any inconvenience this may cause you.

Obtaining counts of different kinds of faculty is an important part of this study. If you cannot provide "hard" data for some of the "numbers" questions, please provide your best estimates.

1. On what type of academic calendar does your institution operate?
(PLEASE CIRCLE ONE NUMBER)

Semester 1

Trimester 2

Quarter 3

4 - 1 - 4 calendar 4

Other (PLEASE SPECIFY BELOW) 5

_____

PLEASE NOTE: *Many of our questions ask about the status of your institution during the 1987 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1987.*

FULL-TIME INSTRUCTIONAL FACULTY

PLEASE READ:
By full-time instructional faculty, we mean those members of your institution's instruction/research staff who are employed full-time (as defined by the institution) and whose regular assignment includes *instruction.*
Include:

- *Regular full-time instructional faculty.*
- *Those who contribute their services, such as members of religious orders.*
- *Those on sabbatical leave.*
- *Administrators such as department chairs or deans who hold full-time faculty rank and whose regular assignment includes instruction.*

Do not include:

- *Replacements for faculty on sabbatical leave.*
- *Others with adjunct, acting, or visiting appointments.*
- *Faculty on leave without pay.*
- *Teaching assistants.*

2. During the 1987 Fall Term, did your institution have any full-time instructional faculty, as defined above?
(PLEASE CIRCLE ONE NUMBER)

Yes 1

No . . . . . 2 → SKIP TO PAGE 8

Note: *Questions about your full-time instructional faculty are on pages 2 - 7.*
Questions about your part-time instructional faculty are on pages 8 - 9.

3. Does your institution have a tenure system for any of your full-time instructional faculty?
(PLEASE CIRCLE ONE NUMBER)

Yes 1

No 2

FULL-TIME INSTRUCTIONAL FACULTY (continued)

4. During the 1987 Fall Term, how many full-time instructional faculty members did your institution have in each of the categories below?
If there are no academic ranks at your institution, please complete only the line for "other full-time instructional faculty."

(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, PLEASE ENTER "0")

Professor:	_____
Associate Professor:	_____
Assistant Professor:	_____
Instructor:	_____
Lecturer:	_____
Other full-time instructional faculty, including those with no academic ranks:	_____
TOTAL FULL-TIME INSTRUCTIONAL FACULTY DURING 1987 FALL TERM:	_____

5. During the 1987 Fall Term, how many full-time instructional faculty with visiting, acting, or adjunct appointments did your institution have?
Note: These individuals should not appear in your other counts of full-time instructional faculty provided in this questionnaire.
(PLEASE GIVE YOUR BEST ESTIMATE IF "HARD" DATA ARE NOT AVAILABLE)

_____

6. How many full-time instructional faculty did your institution have in each of the following categories?
(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, PLEASE ENTER "0")

Number on the staff during the 1986 Fall Term: (NOTE: Nineteen eighty-six)	_____
Number who retired between the beginning of the 1986 Fall Term and the beginning of the 1987 Fall Term:	_____
Number who left the institution between the beginning of the 1986 Fall Term and the beginning of the 1987 Fall Term, for reasons other than retirement:	_____
Number on the staff at the beginning of the 1987 Fall Term who were hired since the beginning of the 1986 Fall Term:	_____

FULL-TIME INSTRUCTIONAL FACULTY (continued)

IF NO TENURE SYSTEM, PLEASE SKIP TO QUESTION 13, ON PAGE 6.

7. During the 1986-87 academic year (i.e., Fall '86 through Spring '87), how many instructional faculty at your institution were considered for tenure, and how many were granted tenure?
(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, PLEASE ENTER '0')

Number considered for tenure: _____

Number granted tenure: _____

8. During the 1986 and 1987 Fall Terms, how many tenured and tenure-track instructional faculty did your institution have?
(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, PLEASE ENTER '0')

	1986 Fall Term	1987 Fall Term
Tenured instructional faculty:	_____	_____
Tenure-track (but not tenured) instructional faculty:	_____	_____

9. How many tenured instructional faculty (if any) left your institution for each of the following reasons between the beginning of the 1986 Fall Term and the beginning of the 1987 Fall Term?
(PLEASE ENTER A NUMBER IN EACH CATEGORY; IF NONE, PLEASE ENTER '0')

Through retirement: _____

To assume another position: _____

Formally removed for cause (e.g., for neglect of duty, incompetence, moral turpitude, fraud, or insubordination): _____

Dismissed because of institutional budget pressures or program closures: _____

For other reasons (e.g., death, disability): _____

FULL-TIME INSTRUCTIONAL FACULTY (continued)

10. Is there a maximum number of years an instructional faculty member can be on a tenure track and not receive tenure at your institution?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY THE MAXIMUM, IF APPLICABLE)

Yes 1
MAXIMUM: _____

No 2

11. Does your institution currently have an upper limit (either formal or informal) on the percentage of full-time instructional faculty who are tenured?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY PERCENTAGE, IF APPLICABLE)

Yes 1
UPPER LIMIT: _____%

No 2

12. During the past three years, has your institution done any of the following?
(PLEASE CIRCLE ALL THAT APPLY AND SPECIFY NUMBERS, IF APPLICABLE)

Offered optional early or phased retirement 1
NUMBER WHO EXERCISED THIS OPTION
IN THE 1986-87 ACADEMIC YEAR: _____

Changed the upper limit on the percentage of
full-time faculty who may be tenured 2
PREVIOUS PERCENTAGE: _____

Changed the maximum number of years a person
can be on tenure track and not receive tenure 3
PREVIOUS MAXIMUM NUMBER OF YEARS: _____

Replaced some tenured or tenure-track positions
with fixed-term contract positions 4

Raised the standards for granting tenure or
tightened the application of the standards 5

Taken other actions designed to lower the per-
cent of tenured faculty, or having that effect
(PLEASE SPECIFY TYPE OF ACTIONS BELOW:) 6
_____

None of the above 0

FULL-TIME INSTRUCTIONAL FACULTY (continued)

13. Are any of your full-time instructional faculty legally represented by a union (or other association) for purposes of collective bargaining?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY PERCENT, IF APPLICABLE)

Yes 1
ABOUT WHAT PERCENT? _____ %

No 2

14. Which of the following employee benefits are available to any of your full-time instructional faculty?
(PLEASE CIRCLE ALL THAT APPLY)

Free or subsidized wellness program or health promotion program (e.g., fitness program, smoking cessation program)	01
Paid maternity leave	02
Paid paternity leave	03
Subsidized medical insurance or medical care	04
Subsidized dental insurance or dental care	05
Subsidized disability insurance	06
Subsidized life insurance	07
Tuition remission/grants at this or other institutions for spouse	08
Tuition remission/grants at this or other institutions for children	09
Subsidized child care	10
Subsidized housing/mortgages	11
Free or subsidized meals	12
None of the above	00

FULL-TIME INSTRUCTIONAL FACULTY (continued)

15. Please indicate whether each of the retirement plans listed below is available to at least some of your full-time instructional faculty. For those that are available, please specify whether they are subsidized by your institution and the approximate number of full-time instructional faculty who participate in each.

(PLEASE CIRCLE ONE NUMBER FOR EACH PLAN AND SPECIFY NUMBERS, AS APPLICABLE)

	AVAILABLE			Approximate number full-time instructional faculty participants
	Not available	Subsidized by institution	Not subsidized by institution	
TIAA/CREF	1	2	3	_____
State plan	1	2	3	_____
401(k) or 403(b) plan	1	2	3	_____
Other retirement plan	1	2	3	_____

16. Does your institution have a "cafeteria-style" benefits plan for your full-time instructional faculty? (A cafeteria-style plan is one under which staff can trade off some benefits for others, following guidelines established by the institution.)

Yes 1

No 2

17. What is the average percentage of salary that is contributed by your institution to a full-time instructional faculty member's total benefits package?

_____%

PART-TIME INSTRUCTIONAL FACULTY

PLEASE READ:
By part-time instructional faculty, we mean those members of your institution's instruction/research staff who are employed part-time (as defined by the institution) and whose regular assignment at your institution includes instruction.
Include:

- *Regular part-time instructional faculty.*
- *Those who contribute their services, such as members of religious orders.*
- *Part-time replacements for faculty on sabbatical leave or leave without pay.*
- *Others with part-time adjunct, acting, or visiting appointments.*

Do not include:

- *Faculty on leave without pay.*
- *Teaching assistants.*

18. During the 1987 Fall Term, did your institution have any part-time instructional faculty, as defined above?

Yes 1

No . . . . . 2 → SKIP TO END OF PAGE 9

19. During the 1987 Fall Term, how many part-time instructional faculty did your institution have?
(PLEASE GIVE YOUR BEST ESTIMATE IF "HARD" DATA ARE NOT AVAILABLE)

_____

20. How many of these part-timers (as indicated in Question 19) had adjunct, acting, or visiting appointments?
(PLEASE GIVE YOUR BEST ESTIMATE IF "HARD" DATA ARE NOT AVAILABLE)

_____

21. Does your institution have a tenure system for any of your part-time instructional faculty?

Yes 1

No 2

PART-TIME INSTRUCTIONAL FACULTY (continued)

22. Are any of your part-time instructional faculty legally represented by a union (or other association) for purposes of collective bargaining?
(PLEASE CIRCLE ONE NUMBER AND SPECIFY PERCENT, IF APPLICABLE)

Yes 1
WHAT PERCENT? _____%

No 2

23. Please indicate whether each of the retirement plans listed below is available to at least some of your part-time instructional faculty. For those that are available, please specify the approximate number of part-time instructional faculty who participate in each.
(PLEASE CIRCLE ONE NUMBER FOR EACH PLAN AND SPECIFY NUMBERS, AS APPLICABLE)

	AVAILABLE			Approximate number part-time instructional faculty participants
	Not available	Subsidized by institution	Not subsidized by institution	
TIAA/CREF	1	2	3	_____
State plan	1	2	3	_____
401(k) or 403(b) plan	1	2	3	_____
Other retirement plan	1	2	3	_____

24. Does your institution have a "cafeteria-style" benefits plan for your part-time instructional faculty? (A cafeteria-style plan is one under which staff can trade off some benefits for others, following guidelines established by the institution.)

Yes 1

No 2

25. What is the average percentage of salary that is contributed by your institution to part-time instructional faculty members' total benefits package?

_____ %

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Please return this completed questionnaire in the enclosed franked envelope to:
National Survey of Postsecondary Faculty
SRI International, P.O. Box 2124, Menlo Park, CA 94025-2124