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#### Abstract

This report describes the methods and procedures used for the 1999 National Study of Postsecondary Faculty (NSOPF:99). As did the first 2 cycles of this survey, NSOPF:99 serves the continuing need for data on faculty and other instructional personnel. NSOPF:99 used a sample of 960 institutions and 28,576 full- and part-time faculty employed at these institutions. The sample was designed to allow detailed comparisons and high levels of precision at both the institution and faculty levels. The sampled institutions represent all public and private not-for-profit Title IVparticipating, degree-granting institutions in the 50 states and the District of Columbia. Both the sample of institutions and that of faculty were stratified, systematic samples. In addition to the institution and faculty samples, a third sample of 19,123 faculty members was selected from the initial sample for intensive follow-up. NSOPF:99 involved a multistage effort to collect data from the sampled faculty, with faculty sampled in 7 waves. This report also discusses issues of quality control, item nonresponse, and discrepancies in faculty counts. Eleven appendixes contain supplemental information and instruments used in the surveys. (Contains 57 tables and 11 figures.) (SLD)


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# 1999 National Study of Postsecondary Faculty (NSOPF:99) Methodology Report 

Technical Report

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National Center for Education Statistics

National Study of Postsecondary Faculty
U.S. Department of Education Office of Educatlonal Research and Improvement NCES 2002-154

# 1999 National Study of Postsecondary Faculty (NSOPF:99) Methodology Report 

Technical Report

June 2002

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## EXECUTIVE SUMMARY

## Introduction

The 1999 National Study of Postsecondary Faculty (NSOPF:99) serves a continuing need for data on faculty and other instructional staff ${ }^{1}$, all of whom directly affect the quality of education in postsecondary institutions. Faculty determine curriculum content, performance standards for students, and the quality of students' preparation for careers. In addition, faculty 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.

## Target Population and Sample Design

NSOPF:99 utilized a sample of 960 institutions and 28,576 full- and part-time faculty employed at these institutions. The sample was designed to allow detailed comparisons and high levels of precision at both the institution and faculty levels. The sampled institutions represent all public and private not-for-profit Title IV-participating, degree-granting institutions in the 50 states and the District of Columbia.

Both the sample of institutions and the sample of faculty were stratified, systematic samples. The institution sample was stratified by Carnegie classifications that were aggregated into fewer categories. The faculty sample was stratified by gender and race/ethnicity.

The sample for NSOPF:99 was selected in three stages. In the initial stage, 960 postsecondary institutions were selected from the 1997-98 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) data files and the 1997 and 1995 IPEDS Fall Staff files. ${ }^{2}$ Each sampled institution was asked to provide a list of all of the full- and part-time faculty that the institution employed during the 1998 fall term, and 819 institutions provided such a list.

In the second stage of sampling, 28,576 faculty were selected from the lists provided by the institutions. Over 1,500 of these sample members were determined to be ineligible for NSOPF:99, as they were not employed by the sampled institution during the 1998 fall term, resulting in a sample of 27,044 faculty.

A third stage of sampling occurred in the final phases of data collection. In order to increase the response rate, a subsample of the faculty who had not responded was selected for intensive follow-up efforts. Others who had not responded were eliminated from the sample, resulting in a final sample of 19,213 eligible faculty.

## Data Collection Design and Outcomes

NSOPF:99 involved a multistage effort to collect data from sampled faculty. At the same time that institutions were asked to provide a list of all their faculty and instructional staff (as described above), they were also asked to complete a questionnaire about their policies regarding tenure, benefits, and other policies. Counts of full-time and part-time faculty were also requested on the questionnaire. Prior to sampling faculty from the lists provided by the institutions, counts of faculty on the lists were compared with counts on the questionnaires. If no questionnaire data were provided, the list counts were compared

[^0]to the prior year's IPEDS data. If a discrepancy of more than 5 percent existed, intensive follow-up was conducted to rectify the inconsistency. Once an institution's list was determined to be accurate and complete, faculty were sampled from the list and were invited to participate in the study. Intensive locating was performed to ensure that an updated home or campus address was available for each sample member.

## Institution Data Collection

Institutional recruitment began in September 1998 when the Chief Administrative Officer (CAO) for each sampled institution was asked to designate an institution coordinator, who would be responsible for providing both the list of faculty and the institution questionnaire. The institution coordinator was then mailed a complete data collection packet, including both the institution questionnaire and instructions for compiling the list of faculty. The coordinator had the option of completing the questionnaire via the Internet or returning a paper questionnaire. The list of faculty could be provided in any format; institutions were encouraged to provide the list in an electronic format, if possible. Follow-up with coordinators was conducted via telephone, mail, and e-mail. The field period for list and institution questionnaire collection encompassed approximately 54 weeks.

Of the 959 institutions that were determined to be eligible to participate in NSOPF:99, a total of 819 institutions provided lists of their faculty and instructional staff, resulting in an unweighted participation rate of 85.4 percent. A total of 865 institutions returned the institution questionnaire, resulting in an unweighted questionnaire response rate of 90.2 percent.

## Faculty Data Collection

Because lists of faculty were received on a rolling basis, faculty were sampled in seven waves. Data collection for wave 1 began in February 1999, and data collection for wave 7 began in December 1999. Sampled faculty were given the option of completing a paper questionnaire and returning it by mail or completing the questionnaire via the Internet. Sampled faculty in each wave received a coordinated series of mail, e-mail, and telephone follow-up, including as many as two additional mailings of the questionnaire and six e-mail reminders. Telephone follow-up included telephone prompting to encourage self-administration, followed by computer-assisted telephone interviewing (CATI) for nonresponding faculty.

Of the final sample of 19,213 faculty who were determined to be eligible to participate in NSOPF:99, a total of about 17,600 respondents completed the faculty questionnaire, resulting in a weighted response rate of 83.2 percent. This response rate takes into account the reduction of the active sample through subsampling as described earlier.

## Quality Control

Quality control procedures were implemented for receipt (receiving faculty list data and processing it for sampling) and processing of faculty list data for sampling, monitoring the receipt of completed questionnaires, preparing paper questionnaires for data entry, editing paper questionnaires for overall adequacy and completeness, entering the data, flagging cases with missing or inconsistent data through automated consistency checks, coding responses, checking data entry, and preparing questionnaires, lists and other documentation for archival storage.

## Data Quality

## Item Nonresponse

One measure of data quality is item nonresponse rates. Item nonresponse occurs when a respondent does not complete a questionnaire item. Item nonresponse creates two problems for survey analysts. First, it reduces the sample size and thus increases sampling variance. This happens when respondents must be eliminated from the sample that is used for analyses because they failed to respond to a large percentage of the questionnaire items. As a result, insufficient sample sizes may hinder certain analyses such as subgroup comparisons. Second, item nonresponse may give rise to nonresponse bias. To the extent that the missing data for a particular item differ from the reported data for that item, the reported data are unrepresentative of the survey population. Item nonresponse is also worth examining because it can signal items that respondents had difficulty answering.

Item nonresponse rates were calculated by dividing the total number of responses to a question by the number of respondents eligible to respond to that item ( n ). The standard error of the item nonresponse rate (SE) equals the square root of (RATE * (1-RATE)/n). In general, this means that the larger the number of eligible respondents for a particular question and the further the nonresponse rate is from .5 , the lower the standard error. Because these estimates were conditional on selection into the sample and do not represent population estimates, for simplicity sake, the standard errors for item nonresponse rates were modeled as though the sample were a simple random sample. For questions containing multiple subitems, each subitem was counted as a unique question.

The mean item nonresponse rate for the institution questionnaire was 3.4 percent $(\mathrm{SE}=.004)$. Overall, the item nonresponse rate for the faculty questionnaire was 6.2 percent. More than half of the items on the faculty questionnaire ( 55 percent) had an item nonresponse rate of less than 5 percent, 25 percent had rates between 5 and 10 percent, and 20 percent had rates greater than 10 percent.

## Discrepancies in Faculty Counts

Another measure of data quality is the magnitude of discrepancies in faculty counts on the lists and questionnaires provided by institutions. When institutions provided discrepant data, they tended to provide more faculty on the questionnaire than on the list. As was detected in earlier rounds of NSOPF, some institutions had difficulty generating lists of part-time faculty. Without discrepancy checks, this can result in serious coverage error, with part-time faculty given less of an opportunity to participate in NSOPF:99. Similarly, earlier cycles of NSOPF indicated that some institutions were less likely to include medical faculty on their lists. Special reminders were inserted into the list collection instructions to encourage institutions to remember to include part-time faculty and medical faculty. In addition, a rigorous check was conducted to ensure the completeness of the faculty lists, with intensive follow-up if needed.

Nearly 43 percent of the institutions returning both a questionnaire and a list provided identical data on both. An additional 30 percent had discrepancies of 10 percent or less. Thus, roughly 73 percent of institutions provided data with a discrepancy of 10 percent or less. This stands in marked contrast to the previous cycle of NSOPF, where only 42 percent had discrepancies of 10 percent or less.

## FOREWORD

This report describes the methods and procedures used for the 1999 National Study of Postsecondary Faculty (NSOPF:99). Similar to the first two cycles of the National Study of Postsecondary Faculty (NSOPF), conducted in 1988 and 1993, NSOPF: 99 serves a continuing need for data on faculty and other instructional personnel, all of whom directly affect the quality of education in postsecondary institutions.

We hope that the information provided in this report will be useful to a wide range of interested readers. We also hope that the results reported in the forthcoming descriptive summary reports will encourage use of the NSOPF:99 data. We welcome recommendations for improving the format, content, and approach, so that future methodology reports will be more informative and useful.
C. Dennis Carroll

Associate Commissioner
Postsecondary Studies Division

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## CHAPTER 1. Introduction

### 1.1 Overview

The 1999 National Study of Postsecondary Faculty (NSOPF:99) was designed and conducted by The Gallup Organization. Similar to the first two cycles of the National Study of Postsecondary Faculty (NSOPF), conducted in 1988 and 1993, NSOPF:99 serves a continuing need for data on faculty and other instructional staff, all of whom directly affect the quality of education in postsecondary institutions. Faculty determine curriculum content, performance standards for students, and the quality of students' preparation for careers. In addition, faculty 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.

Each succeeding cycle of NSOPF has expanded the information base about faculty in important ways. NSOPF:99 was designed both to facilitate comparisons over time and to examine new faculty-related issues that have emerged since the last study in 1993.

Since the 1993 study, the operant definition of "faculty" for NSOPF has included instructional faculty, non-instructional faculty, and instructional personnel without faculty status. Henceforth, the term "faculty" in this report should be construed to be inclusive of all these groups.

Similarly, since the institutional target population includes only public and private not-for-profit institutions (private for-profit institutions are excluded), private not-for-profit institutions will be referred to as "private" throughout this report.

### 1.2 Organization of the Methodology Report

The 1999 National Study of Postsecondary Faculty Methodology Report [U.S. Department of Education, National Center for Education Statistics, NCES 2002-154] is designed to give readers a complete and accurate synopsis of the NSOPF:99 study and its results, and to provide sufficient detail to use the data.

The report is organized into nine chapters, and begins by introducing NSOPF:99 in the context of the earlier NSOPF:93 and NSOPF:88 studies. Chapter 2 provides details on the data collection instruments, while Chapter 3 describes the NSOPF:99 sample design and implementation. Next, Chapter 4 reviews the procedures and results for institutional recruitment and data collection. The report then examines faculty data collection and results (Chapter 5). Chapter 6 focuses on data control and data processing, Chapter 7 summarizes questionnaire item nonresponse, and Chapter 8 reviews the resolution of discrepancies between the faculty list and questionnaire datasets.

NSOPF publications and data can be accessed electronically through NCES's World Wide Website at: http://nces.ed.gov/surveys/nsopf

### 1.3 Background: NSOPF:99 Field Test

The NSOPF: 99 field test was conducted between August 1997 and July 1998. It consisted of two overlapping components, institution recruitment and an institution survey, and a faculty survey. A national probability sample of 162 institutions was asked to provide complete lists of faculty
and instructional staff, and to complete an institution questionnaire. To minimize delays in data collection, the sample of 512 faculty was drawn solely from the first 52 institutions to respond. (Ten faculty were selected from each institution, with the exception of one institution containing only two eligible faculty, both of which were selected).

Institution recruitment and data collection (for both the field test and full scale study) consisted of:

- recruiting sampled institutions to participate in the study;
- collecting a complete list of faculty from participating institutions, for use as a sampling frame;
- collecting an institution questionnaire;
- following up with institutions for return of the lists, questionnaires, and related documentation;
- evaluating the completeness and accuracy of the faculty lists; and
- processing the lists and sampling faculty.

The faculty component consisted of a faculty survey, including the initial questionnaire mailout, mail, telephone, and e-mail follow-up, and processing of questionnaires (both paper and electronic). Computer-assisted telephone interviewing (CATI) was conducted with faculty who did not complete the paper or Web versions of the questionnaire.

The overall participation rate for faculty list participation for the field test was 90 percent; 82 percent of all sampled institutions completed the institution questionnaire. A total of 83 percent of eligible faculty completed the faculty questionnaire for the field test.

The NSOPF:99 field test featured several innovations and methodological experiments. Both institution and faculty respondents were able to complete their respective versions of the questionnaire over the World Wide Web, as well as via mail and telephone. Image scanning was used to process all mail questionnaires. E-mail was used extensively to prompt both faculty and institution respondents and to communicate with respondents. (The success of these innovations in the field test led to their employment in the full-scale study.)

Four methodological experiments were also conducted as part of the field test. These included experiments to increase unit response rates, speed the return of mail questionnaires, increase data quality, and to increase the overall efficiency of the data collection process. The experiments involved the use of:

- Prenotification - the effect of a personalized prenotification letter versus no prenotification.
- Prioritized mail - sending the questionnaire packet via two-day priority mail versus first class mail.
- Streamlined instrument - the effect on data quality of using a streamlined two-column questionnaire design versus a more conventional design, similar to the 1993 instrument.
- Timing of CATI attempt - attempting a CATI interview at the time of the first telephone contact versus an interview attempt at a later contact for nonresponding faculty.

Another focus of the field test was the effort to reduce discrepancies between the faculty counts derived from the list of faculty provided by each institution and those provided in the institution questionnaire. Changes introduced to reduce discrepancies included providing clearer definitions of faculty eligibility (with consistency across forms and questionnaires) and collecting list and institution questionnaire data simultaneously with the objective of increasing the probability that . both forms would be completed by the same individual and evidence fewer inconsistencies.

The results of the field test informed the design of the full-scale study. A complete review of procedures and results of the NSOPF:99 field test appears in the 1999 National Study of Postsecondary Faculty Field Test Report (U.S. Department of Education, National Center for Education Statistics (NCES), Working Paper No. 2000-01). The Field Test Report can be accessed electronically through NCES's World Wide Website at http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=200001.

### 1.4 NSOPF:99 Full Scale Study

NSOPF:99 utilized a sample of 960 institutions and 28,576 faculty. The sample was designed to allow detailed comparisons and high levels of precision at both the institution and faculty levels. In previous rounds of the study, the sample consisted of public and private not-for-profit twoand 4 -year (and above) higher education institutions. The sample now represents all public and private not-for-profit Title IV-participating, degree-granting institutions in the 50 states and the District of Columbia. This change was made so that the NSOPF sampling universe conforms with that of IPEDS (Integrated Postsecondary Education Data System). The U.S. Department of Education no longer distinguishes among institutions based on accreditation level; rather, NCES now subdivides the postsecondary institution universe into schools that are eligible to receive Title IV federal financial assistance and those that are not. The institution sample was stratified by Carnegie classifications that were aggregated into fewer categories.

Institutional recruitment began in September 1998 when the Chief Administrative Officer (CAO) for each sampled institution was asked to designate an institution coordinator, who would be responsible for providing both the list of faculty and the institution questionnaire. The institution coordinator was then mailed a complete data collection packet, including both the institution questionnaire and instructions for compiling the list of faculty. The coordinator had the option of completing the questionnaire via the Internet or returning a paper questionnaire by mail. The list of faculty could be provided in any format; institutions were encouraged to provide the list in an electronic format, if possible.

To minimize delays in data collection while ensuring adequate representation across all strata, the institution sample included an expanded sample to ensure that there would be enough institutions to sample from, based on an estimated 15 percent of institutions that were expected to decline to participate. Four groups of faculty were oversampled: Blacks, Hispanics, Asian/Pacific Islanders, and full-time female faculty.

Key innovations implemented for NSOPF:99 included the following:

- Availability of both the institution and faculty questionnaires on the internet;
- Availability of an NCES Website allowing institution coordinators to directly access and download forms and background information;
- Use of e-mail as a tool to prompt and communicate with institutional staff and faculty respondents;
- Streamlined forms and procedures for institutional data collection;
- Use of a streamlined, scannable faculty mail questionnaire; and
- An experiment in which faculty respondents were offered small financial incentives to encourage their use of the Web questionnaire.


### 1.5 Public Use and Restricted Use Data File

A restricted use data file has been produced for the NSOPF:99 faculty component on CD-ROM.
The restricted use data file is available through individual licensing agreements to users who agree, under penalty of law, that they will not release any information that may lead to disclosure of a respondent's identity. The restricted use data file contains data for about 18,000 participating respondents from 819 participating institutions.

### 1.5.1 Data Analysis System (DAS) and documentation

The public use Data Analysis System (DAS) for NSOPF:99 provides a convenient, menu-driven system allowing researchers to produce tables of frequencies and cross tabulations and correlation matrices of the faculty data. The NSOPF:99 sample is not a simple random sample. Therefore, simple random sample techniques for estimating sample error cannot be applied to these data. The DAS calculates standard errors appropriate to this complex sample and provides all information necessary for the user to set up and run a variety of analyses. Each DAS is selfdocumenting with weighted data distributions and descriptions of each variable. Users may 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 and/or subgroup definitions. Categorical variables, such as "race" can be grouped in various ways to facilitate analysis. Table titles and variable labels can be edited by the user, and DAS output is compatible with most spreadsheet software. In addition to table estimates, DAS calculates proper standard errors and weighted sample sizes for these estimates. If the number of valid cases falls below minimum NCES statistical standards, the DAS prints the message "low-N". The DAS is available at the Website: http://nces.ed.gov/das.

### 1.5.2 Electronic codebooks on CD-ROM and documentation

Two NSOPF:99 electronic codebooks (ECBs) are available to users. One ECB consists of the restricted use faculty data file, and one for 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 "help" 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 SPSSPC 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: 99 ECBs appears in the ECB "help" files and menus on the CD-ROM.

### 1.5.3 How to obtain NSOPF:99 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, including code convention (ASCII, SAS, etc.)
This information can be found on the following NCES Website http://nces.ed.gov/pubsearch/licenses.asp.

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
1990 K Street, N.W.
Washington, D.C. 20006
(202) 502-7307

Individuals who obtain restricted-use faculty data after signing a licensing agreement with NCES can receive the following products on the 1999 NSOPF CD-ROM: the NSOPF:99 institution and faculty data files; the NSOPF:99 institution and faculty ECBs; the institution and faculty questionnaires; the faculty DAS; and material from the first published reports from the 1999 NSOPF institution and faculty data.

## CHAPTER 2. Data Collection Instruments

### 2.1 Overview

This chapter provides a brief description of the NSOPF:99 survey instruments: the institution questionnaire and the faculty questionnaire. Both instruments were developed as paper and Web questionnaires to offer respondents a choice of mode of administration. In addition, a CATI (computer assisted telephone interviewing) version of the faculty questionnaire was developed and used during follow-up efforts for nonrespondents. Copies of the paper versions of the institution and faculty questionnaires are included in Appendices A and B.

### 2.2 Development of Questionnaire Items

Gallup was principally responsible for developing and designing the faculty and institution questionnaires. The topics and content of the instruments built upon the 1993 NSOPF questionnaires and input received in meetings with members of the National Technical Review Panel (NTRP), and representatives from NCES, NEH, and NSF. Those meetings, which took place in March 1997 and October 1997, were held to reassess the relevance of policy issues covered in NSOPF:93; to discuss emerging faculty issues for potential inclusion as new survey questions in NSOPF:99; and to determine whether to maintain, revise, or delete items in the NSOPF:99 questionnaires.

Several research and policy concerns guided questionnaire development. For the purpose of trend analysis, one of the overriding objectives was to preserve as many of the 1993 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 round of the study. In order to balance these aims, it was necessary to identify, to revise, or to eliminate some questionnaire items that were considered problematic or were no longer relevant to the broader issues.

The 1993 institution and faculty questionnaires were used as a point of departure in determining which items should initially be preserved, expanded, revised, or deleted for NSOPF:99. In developing these earlier instruments a variety of related postsecondary education studies were consulted in developing the questionnaires, and some of their items were incorporated into the questionnaires for the previous field test and full-scale study. Many of these items were maintained in NSOPF:99. Tables 2.1 and 2.2 identify the sources of items in the institution and faculty questionnaires by content area and link specific questions to the 1993 instruments and by extension to the 1999 instruments.

### 2.3 Institution Questionnaire

The institution questionnaire was divided into four major sections, focusing on full-time faculty and instructional staff, part-time faculty and instructional staff, all faculty and instructional staff, and a respondent information section. The institution questionnaire included items about:

- the number of full-time and part-time faculty (i.e. instructional and non-instructional), as well as instructional personnel without faculty status, and their distributions by employment (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 number of new faculty and on career development;
- the growth and promotion potential for existing non-tenured junior faculty;
- the procedures used to assess the teaching performance of faculty and instructional staff;
- the benefits and retirement plans available to faculty; and
- the turnover rates of faculty at the institution.

Table 2.1 provides a crosswalk between the 1999 and 1993 NSOPF institution questionnaire items. It identifies the source questions incorporated from NSOPF:93 into NSOPF:99 and the status of the item in the NSOPF:99 questionnaire. Few changes were made from the 1999 field test questionnaire. See Appendix A for a copy of the 1999 Institution Questionnaire.

Table 2.1-NSOPF institution questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles

| Q. | Content area | Status of <br> item in <br> NSOPF:99 | Source <br> item in <br> NSOPF:93 | How NSOPF:99 question differs from <br> NSOPF:93 question |
| :--- | :--- | :--- | :--- | :--- |
|  | General <br> instructions | Revised | General <br> instructions | Reference date changed from October 15 to <br> November 1. Information on answering <br> electronically provided. Instructions to aid in <br> scanning provided. |
|  | Reminder before <br> Q1: Multiple <br> branches, health <br> sciences faculty, <br> comparison to <br> IPEDS | New |  |  |
| 1 | Numbers of <br> full/part-time <br> faculty/staff, Fall <br> 1997 | Revised | 1 | Change in response categories: Omitted <br> full/part-time non-instructional faculty counts. <br> Added concise definition of faculty and <br> instructional staff |
|  | Special note about <br> need for <br> consistency <br> between Q1 and <br> list counts | New |  |  |

See notes at the end of the table.

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Table 2.1-NSOPF institution questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| Section A: Full-time Faculty and Instructional Staff |  |  |  |  |
| 2 | Change in total number of fulltime faculty and instructional staff over past 5 years | New |  |  |
| 3 | Policies to decrease the number of fulltime faculty and instructional staff | New |  |  |
| 4 | Availability of tenure system | Revised | 5 | Change in response categories: Added category "Currently no tenure system, but have tenured staff." |
| 5 | Changes in fulltime faculty and instructional staff between 1996 and 1997 Fall Terms | Revised | 2 | Wording change: Did not limit counts to "permanent" faculty. Added area for respondents to explain any discrepancies between Question 5 and Question 1a. Change in response categories: Asked for separate counts for tenured; non-tenured but on tenure track; non-tenured, not on tenure track. Deleted count of faculty/staff who left because of downsizing. Added count of faculty/staff who changed from part-time to full-time status. |
| 6 | Number of staff considered for/granted tenure | No change | 8 |  |
| 7 | Maximum number of years on tenure track | No change | 9 |  |
| 8 | Changes in tenure policy in last 5 years | Revised | 10 | Changes in response categories: Added " 8 a . Changed policy for granting tenure to full-time faculty and instructional staff." Added " 8 c. Reduced the number of tenured full-time faculty and instructional staff through downsizing." Added " 8 e . Discontinued tenure system at the institution." Added " 8 f. Offered early or phased retirement to any tenured fulltime faculty or instructional staff (If yes, write in the number of full-time faculty and instructional staff who took early retirement during the past five years)." |

See notes at the end of the table.

Table 2.1-NSOPF institution questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of <br> item in <br> NSOPF:99 | Source <br> item in <br> NSOPF:93 | How NSOPF:99 question differs from <br> NSOPF:93 question |
| :--- | :--- | :--- | :--- | :--- |
| 9 | Other actions to <br> reduce number of <br> tenured faculty | Revised | 10c | Change in wording: From: "Has your <br> institution taken any other actions designed to <br> lower the percent of tenured full-time <br> instructional faculty/staff"" to: "Has your <br> institution taken any other action(s) that <br> reduced the number of tenured full-time faculty <br> and instructional staff at your institution?" |
| 10 | Number of full- <br> time positions <br> institution sought <br> to hire | Revised | 3 | Change in wording: Did not limit to number <br> of "permanent" positions seeking to fill. |
| 11 | Retirement plans <br> available to full- <br> time faculty and <br> instructional staff | Revised | 12 | Change in wording: Did not limit to <br> retirement plans available to "permanent" full- <br> time faculty and instructional staff. <br> Change in response categories: Changed <br> "Other 403B plan" to "Other 403 plan." |
| 12 | Employee benefits <br> (full-time) | Revised | 13 | Change in wording: Did not limit to benefits <br> available to "permanent" full-time faculty and <br> instructional staff. <br> Change in response categories: Split into <br> two questions. Question 12 asked whether the <br> benefits were fully, partially, or not subsidized <br> for key benefits (health insurance, life <br> insurance, disability insurance, medical <br> insurance for retirees, child care). Question 13 <br> only asked if additional benefits were available <br> to any full-time faculty or instructional staff, <br> without asking about subsidization. In 1993, <br> subsidization was asked of all benefits. Deleted <br> from the 1993 benefits were "Meals." On the <br> 1997 list, "Maternity leave" and "Paternity <br> leave" were specified to only include "Paid <br> maternity leave" and "Paid paternity leave." |
| 13 | Additional <br> employee benefits <br> (full-time) |  |  | Change in wording: Did not limit to <br> "permanent" full-time faculty and instructional <br> staff. |
| 14 | Percent of salary <br> contributed by <br> institution to <br> benefits | Collective <br> bargaining | Revised | 14 |

See notes at the end of the table.

Table 2.1-NSOPF institution questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of <br> item in <br> NSOPF:99 | Source <br> item in <br> NSOPF:93 | How NSOPF:99 question differs from <br> NSOPF:93 question |
| :--- | :--- | :--- | :--- | :--- |
| 16 | Teacher <br> assessment | Revised | 18 | Change in wording: Asked respondents to <br> distinguish whether the assessments are part of <br> department and/or institution policy. "Are any <br> of the following used as part of institution or <br> department policy in assessing..." <br> Change in response categories: Response <br> choices were changed from "Yes, No, Don't <br> Know" to "Institution Policy, Department <br> Policy, Not Used, Don't Know." |
| Section B: Part-time Faculty and Instructional Staff |  |  |  |  |

See notes at the end of the table.

Table 2.1-NSOPF institution questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| 22 | Eligibility criteria for benefits | Revised | 39,40 | Change in wording: Deleted Question 40, and asked respondents to write in the criteria that must be met. |
| 23 | Percent of salary contributed by institution to benefits | No change | 38 |  |
| 24 | Collective bargaining | No change | 43 |  |
| 25 | Teacher assessment | Revised | 42 | Change in wording: Asked respondents to distinguish whether the assessments are part of department and/or institution policy. "Are any of the following used as part of institution or department policy in assessing..." <br> Change in response categories: Response choices were changed from "Yes, No, Don't Know" to "Institution Policy, Department Policy, Not Used, Don't Know." |
| Section C: All Faculty and Instructional Staff |  |  |  |  |
| 26 | Percent of undergraduate instruction by staff type | Revised | 17,41 | Wording change: From: "What percentage of undergraduate instruction, as measured by total student credit hours taught, is carried by [full-time/part-time] instructional faculty/staff?" To: "What percentage of undergraduate student credit hours were assigned to the following staff?" <br> Change in response categories: Response categories were changed from ranges of percentages to percent of undergraduate instruction assigned to full-time faculty or instructional staff, part-time faculty or instructional staff, teaching assistants, and others. Respondents were asked to make sure categories add to 100 percent. |
|  | Glossary: Comparison to IPEDS categories | New |  |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 2.4 Faculty Questionnaire

The faculty questionnaire for NSOPF:99 was divided into seven sections - employment, academic and professional background, institutional responsibilities and workload, job satisfaction, compensation, socio-demographic characteristics, and opinions. As in the 1993 version, the 1999 questionnaire was designed 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, work at other institutions, 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;
- the number of years spent in academia, and the number of years with instructional responsibilities;
- 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 instructional techniques;
- career and retirement plans;
- differences between those who have instructional responsibilities and those who do not have instructional responsibilities, such as those engaged only in research; and
- 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 and the NSOPF:99 National Technical Review Panel (NTRP), as well as an analysis of the data collected using the field test questionnaire. Because the field test questionnaire averaged nearly one hour in length, a concerted effort was made to shorten the questionnaire. Many questions, or subparts of questions, were deleted from the field test questionnaire based on high item nonresponse or low reliability. Questions that were retained were sometimes modified to be more understandable. Some new items were added based on NTRP recommendations.

Table 2.2 provides a crosswalk between the 1999 and 1993 NSOPF faculty questionnaire items. It identifies the source questions incorporated from the 1993 NSOPF full-scale study questionnaires into the 1999 questionnaire and the status of the item in the 1999 questionnaire. As Table 2.2 indicates, 44 items were revised from the 1993 questionnaire, and 32 new items were added. See Appendix B for a copy of the 1999 Faculty Questionnaire, and Appendix C for a crosswalk of discipline codes between the 1999, 1993 and 1988 NSOPF faculty questionnaires.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
|  | General instructions | Revised | General instructions | Wording Change: Reference date changed from October 15 to November 1. Information on answering electronically and instructions to aid in scanning provided. Contact person and email address listed. |
| 1 | Instructional duties | No change | 1 |  |
| 2 | Credit status of instructional duties | No change | 1A |  |
| 3 | Principal activity | Revised | 2 | Change in response categories: Technical activities and Community/Public Service collapsed into "other" category. |
| 4 | Faculty status | Revised | 3 | Change in response categories: Combined "No, I did not have faculty status" and "No, no one has faculty status at this institution" into 1 category |
| 5 | Employment status | No change | 4 |  |
| 6 | Part-time justification | Revised | 4A | Change in response categories: Only asked whether they "preferred working on a part-time basis" and whether "a full-time position was not available." |
| 7 | Year began job | No change | 6 |  |
| 8 | Rank | No change | 9 |  |
| 9 | Year achieved rank | No change | 10 |  |
| 10 | Tenure status | Revised | 7 | Change in response categories: Categories for non-tenured changed from "Not on tenure track," and "No tenure system for my faculty status," to "Not on tenure track, although institution has a tenure system." |
| 11 | Duration of contract | Revised | 8 | Change in response categories: Changed "Unspecified duration" to "Unspecified duration, or tenured." Changed "A limited number of years" to "Two or more academic/calendar years." |
| 12 | Type of appointment | Revised | 11 | Change in response categories: Added "Postdoctoral." Changed "None of the above" to "Other (Please specify)." Allowed respondent to answer yes or no to each item instead of asking them to circle all that apply. |
| 13 | Chair of department | No change | 5 |  |

See notes at the end of the table.

Table 2.2—NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l} 1 \\ 4 \end{array}$ | Principal field of teaching | Revised | 12 | Change in response categories: Added category for "Higher Education," combined "Mathematics" and "Statistics," deleted "Military studies" and "Multi/Interdisciplinary studies," separated "Philosophy, Religion and Theology," added "Physical Education." |
| 15 | Principal field of research | Revised | 13 | Change in response categories: Added category for "Higher Education," combined "Mathematics" and "Statistics," deleted "Military studies" and "Multi/Interdisciplinary studies," separated "Philosophy, Religion and Theology," added "Physical Education." |
| 16 | Degrees obtained | Revised | 16 | Wording Change: Provided examples of each type of degree. Separated "Masters of Fine Arts, Masters of Social Work" from "Other Master's degree." Gave option for no degree. |
| 17 | Working toward a degree | New |  |  |
| 18 | Degree working toward | New |  |  |
| 19 | Primary employment | New |  |  |
| 20 | Outside consulting | New |  |  |
| 21 | Other professional employment | Revised | 17 | Wording Change: New version excludes consulting work. |
| 22 | Number of other jobs during Fall term | Revised | 17A | Wording Change: New version excludes consulting work. |
| 23 | Total jobs held in higher ed | New |  |  |
| 24 | First and most recent jobs in higher ed | Revised | 19 | Wording Change: New version asks about "First professional position in a higher education institution" and "Most recent professional position in a higher education institution." |
| $\begin{aligned} & 24- \\ & 1 \\ & \hline \end{aligned}$ | Years job held | Revised | 19 (1) | Change in response categories: Added checkbox if position currently held. |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline 24- \\ 2 \\ \hline \end{array}$ | Type of institution | Revised | 19 (2) | Change in response categories: Deleted all categories not pertaining to higher education. Split "4-year college or university, graduate or professional school" into " 4 -year doctoral granting college or university, graduate or professional school" and "4-year non-doctoral granting college or university." Split "2-year or other postsecondary institution" into " 2 -year degree granting college" and "Other postsecondary institution." |
| $\begin{array}{\|l\|} \hline 24- \\ 3 \\ \hline \end{array}$ | Employment status | No change | 19 (4) |  |
| $\begin{array}{\|l} \hline 24- \\ 4 \end{array}$ | Primary responsibility | Revised | 19 (3) | Change in response categories: Collapsed categories into IPEDS categories of <br> "Administration/Management," <br> "Instruction/Research/Public Service," and <br> "Other professional (support/service/clinical)" |
| $\begin{array}{\|l} \hline 24- \\ 5 \\ \hline \end{array}$ | Academic rank/title | New |  |  |
| $\begin{array}{\|l} \hline 24- \\ 6 \\ \hline \end{array}$ | Tenure status | New |  |  |
| 25 | Years teaching in higher ed | New |  |  |
| 26 | Number of positions outside of higher ed | New |  |  |
| 27 | Job status of those positions | New |  |  |
| 28 | First and most recent jobs outside of higher ed | Revised | 19 | Wording Change: New version asks about "First professional position outside of a higher education institution" and "Most recent professional position outside of a higher education institution." |
| $\begin{array}{\|l\|} \hline 28- \\ 1 \end{array}$ | Years job held | Revised | 19 (1) | Change in response categories: Added checkbox if position currently held. |
| $\begin{aligned} & 28- \\ & 2 \\ & 2 \end{aligned}$ | Type of employer | Revised | 19 (2) | Change in response categories: Deleted higher education categories and "Consulting, freelance work, self-owned business or private practice." |
| $\begin{aligned} & 28- \\ & 3 \end{aligned}$ | Employment status | No change | 19 (4) |  |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline 28- \\ & 4 \end{aligned}$ | Primary responsibility | Revised | 19 (3) | Change in response categories: Collapsed categories into IPEDS categories of "Administration/Management," <br> "Instruction/Research/Public Service," and <br> "Other professional (support/service/clinical)," <br> "Technical" and "Other." |
| 29 | Publications | Revised | 20 | Wording Changes: <br> Include electronic publications in the appropriate categories that are not published elsewhere. <br> Change in response categories: Total during past two years category has been broken into "Sole authorship/creative responsibility" and "Joint authorship/creative responsibility. Collapsed 14 categories into 6 categories. |
| 30 | Average time spent in activities per week | Revised | 36 | Change in response categories: Added a "specify" line to "All unpaid activities at this institution" option. |
| 31 | Allocation of work time in percentages | Revised | 37 | Change in response categories: Split teaching into undergraduate teaching and graduate teaching. Made "Service" its own category, and collapsed "Outside consulting or freelance work" and "Other non-teaching activities." |
| 32 | Committee assignments | Revised | 21 | Change in response categories: "Average number of hours per week" added. Collapsed all undergraduate committees into one item. Collapsed all graduate committees into one item. |
| 33 | Number of classes taught | Revised | 22 | Wording change: Added examples of multiple sections of the same course and lab sections of a class. |
| 34 | Number of courses taught | New |  |  |
| 35 | Number of remedial classes taught | New |  |  |
| 36 | Number of noncredit remedial classes taught | New |  |  |
| 37 | Number of continuing education classes taught | New |  |  |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| 38 | Number of noncredit continuing education classes taught | New |  |  |
| 39 | Number of students in all non-credit classes | New |  |  |
| 40 | Number of classes taught for credit | No change | 22A |  |
| 41 | Details on up to 5 credit classes | Revised | 23 | Change in response categories: Added questions, "Was this class considered a remedial class" and "Was this class taught through a distance education program?" Collapsed "lower division" and "upper division" into "undergraduate students." Replaced "All other students" with "First professional students." Collapsed "Lecture" and "discussion." Collapsed "Role playing," TV or radio", "Group projects" and "Cooperative learning projects" into "Other." Added question on "Primary medium used." |
| 42 | Undergraduate student evaluation methods | Revised | 24A | Change in response categories: Deleted "computational tools or software," "Computeraided or machine-aided instruction, and "student presentations." |
| 43 | Web sites | New |  |  |
| 44 | Use of Web sites | New |  |  |
| 45 | E-mail | New |  |  |
| 46 | Use of e-mail to correspond with students | New |  |  |
| 47 | Hours spent responding to student e-mail | New |  |  |
| 48 | Internet access | New |  |  |
| 49 | Individual instruction | Revised | 25 | Change in response categories: Collapsed "lower division" and "upper division" into <br> "undergraduate." Split "Graduate" into <br> "Graduate" and "First professional." Omitted "All other students." |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of <br> item in <br> NSOPF:99 | Source item <br> in <br> NSOPF:93 | How NSOPF:99 question differs from <br> NSOPF:93 question |
| :--- | :--- | :--- | :--- | :--- |
| 50 | Contact hours <br> with students | Revised | 27 | Wording change: Changed "informal contact <br> with students" to "contact hours with students <br> you were assigned to advise." |
| 51 | Office hours | No change | 26 | Wording change: Specified research that is <br> either "funded or non-funded." |
| 52 | Research | Revised | 28 | Change in response categories: Collapsed <br> "Applied research" and "Policy-oriented <br> research or analysis." Added "specify" box to <br> "Other." |
| 53 | Type of primary <br> research | Revised | 29 |  |
| 54 | Funded research | No change | 30 | Wording change: Specified "supported, <br> either in part or in full." |
| 55 | PI or Co-PI | No change | 31 | Wording change: Item was changed to a <br> "mark all that apply" item and follow-up items <br> were deleted. |
| 56 | Number <br> supported by <br> grants | Revised | 32 | Wording change: Instead of asking number of <br> grants for each type of funding source, only the <br> total number of grants was asked. |
| 57 | Sources of <br> funding | Revised | 33 | Wording change: Instead of asking funds for <br> each type of funding source, only the total <br> funds across all sources was asked. |
| 58 | Total number of <br> grants | Revised | 33 | Wording change: Instad of asking how <br> funds were used for each type of funding <br> source, the question was asked as a "mark all <br> that apply" item. |
| $59 a$ | Total funds | Revised | 33 | Change in response categories: Added <br> "Availability of teaching assistants." Changed <br> "personal computers" to "personal computers <br> and local networks." Changed "computer <br> networks with other institutions" to "Internet <br> connections." Added "Technical support for <br> computer-related activities." Changed <br> response scale from "Very good, good, poor, <br> very poor" to "Excellent, good, fair, poor." |
| $59 b$ | Use of funds | Revised | 33 | 34 |
| 60 | Evaluation of <br> facilities and <br> resources | Revised | 34 |  |
|  |  |  |  |  |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| 61 | Use of institutional funds | Revised | 35 | Wording change: Only asked about institutional funds, instead of "institutional or department funding." Changed "retraining for fields in higher demand" to "release time from teaching." <br> Change in response categories: Instead of asking whether funds were adequate, changed scale to "Yes; No, although funds were available; No, no funds were available or not eligible; No, don't know if funds were available." |
| 62 | Administrative committees | New |  |  |
| 63 | Hours spent on admin. <br> Committee work | New |  |  |
| 64 | Union membership | No change | 38 |  |
| 65 | Satisfaction w/ instruct. duties | Revised | 39 | Change in response categories: Added "Time available for class preparation." |
| 66 | Job satisfaction | Revised | 40 | Change in response categories: Added "The effectiveness of faculty leadership at this institution (e.g. academic senate, faculty councils, etc.)" |
| 67 | Likelihood of leaving job | No change | 41 |  |
| 68 | Age to stop working at postsecondary Institution | No change | 42 |  |
| 69 | Factors influencing possible decision to leave | Revised | 43 | Change in response categories: Deleted "Greater opportunity for administrative responsibilities." Added "Not applicable" category for "Good job opportunities for my spouse or partner" and "Good environment/schools for my children." |
| 70 | Most important factor | New |  |  |
| 71 | Option to draw on retirement | No change | 44 |  |
| 72 | Prev. retirement | New |  |  |
| 73 | Early retirement option | No change | 45 |  |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of item in NSOPF:99 | Source item in NSOPF:93 | How NSOPF:99 question differs from NSOPF:93 question |
| :---: | :---: | :---: | :---: | :---: |
| 74 | Age planning to retire | No change | 46 |  |
| 75 | Basic salary for academic year | New |  |  |
| 76 | Compensation for calendar Year | Revised | 47 | Change in response categories: Collapsed <br> "Other teaching" and "supplements." Deleted <br> "Any other income from this institution." |
| 77 | Income of spouse/ significant other | New |  |  |
| 78 | Number of persons in household | No change | 48 |  |
| 79 | Household income | Revised | 49 | Change in wording: Revised to specify "household income before taxes." |
| 80 | Number of dependents | No change | 50 |  |
| 81 | Gender | No change | 51 |  |
| 82 | Year of birth | No change | 52 |  |
| 83 | Ethnicity | Revised | 54 | Change in wording: Revised to state "What is your ethnicity?" Choices included "Hispanic or Latino," or "Not Hispanic or Latino." |
| 84 | Race | Revised | 53 | Wording change: Allowed for multiple responses. Eliminated follow up question on Asian origins and added category for "Native Hawaiian or other Pacific Islander." |
| 85 | Disability | New |  |  |
| 86 | Type of disability | New |  |  |
| 87 | Marital status | Revised | 55 | Change in response categories: Collapsed "Separated, divorced, widowed." |
| 88 | Employment of spouse/ significant other | New |  |  |
| 89 | Country of birth | No change | 56 |  |
| 90 | Citizenship status | No change | 57 |  |
| 91 | Parent and spouse education level | Revised | 58 | Change in response categories: Added category of "Spouse/Significant Other" |

See notes at the end of the table.

Table 2.2-NSOPF faculty questionnaire-content and linkage of items between 1999 and 1993 NSOPF cycles - Continued

| Q. | Content area | Status of <br> item in <br> NSOPF:99 | Source item <br> in <br> NSOPF:93 | How NSOPF:99 question differs from <br> NSOPF:93 question |
| :--- | :--- | :--- | :--- | :--- |
| 92 | Opinions | Revised | 59 | Wording change: Replaced "State or <br> federally mandated assessment requirements <br> will improve the quality of undergraduate <br> education" with "Post-tenure review of faculty <br> will improve the quality of higher education." <br> Added "This institution should have a tenure <br> system." |
| 93 | Opinions | New |  | Change in response categories: Deleted <br> "somewhat" from middle two response <br> categories. |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 2.5 Questionnaire Design and Pretesting

### 2.5.1 Streamlined questionnaire format

The faculty questionnaire was first redesigned into a "streamlined" format for the NSOPF:99 field test. As an experiment, one-half the field test respondents received an optically-scannable "streamlined" questionnaire based on design principles formulated by Jenkins and Dillman. ${ }^{3}$ The other one-half received a conventionally formatted questionnaire, similar to those fielded in 1993. The streamlined questionnaire featured the following innovations:

- a page layout split into two columns with the entire page bordered;
- response boxes which the respondent could mark with a simple " $x$ "; and
- a color scheme which offset the white response boxes against a blue page background.

This design provides a stark contrast to the traditional one-color format used in 1993, which required respondents to read across the entire page and circle their response choices.

The field test confirmed that the streamlined questionnaire has several distinct advantages over more traditional instruments:

- The streamlined questionnaire can be processed using image-scanning technology that is far more accurate and cost effective than traditional key-to-disk technology;
- The streamlined questionnaire has fewer pages, decreasing the appearance of burden to the respondent; and

[^1]- The streamlined questionnaire is easier for the respondent to read, follow and complete; the formatting emphasizes simple check-off boxes rather than dense blocks of text.

Most importantly, the field test experiment demonstrated that a streamlined format led to a significantly higher response rate for the faculty questionnaire ( 84.3 percent versus 75.9 percent). Hence, this format was adapted for all paper instruments utilized for NSOPF:99. For a discussion of scanning procedures, see Chapter 6.

Development of paper, web and CATI questionnaires. In order to provide institutions and faculty with flexibility in responding to their respective surveys, multiple versions of the two questionnaires were developed. Self-administered paper (SAQ) and self-administered Web (Web) versions of the institution questionnaire were prepared. If necessary, an institutional respondent could also complete the questionnaire by a telephone interview. In those instances, the paper version of the questionnaire was used to administer the interview. Similarly, faculty had two questionnaire options initially; they could complete a self-administered paper or a Web version of the faculty questionnaire. A CATI version of the faculty questionnaire was also developed and administered by telephone to nonresponding faculty.

The questionnaire development process involved first developing a paper version of the two questionnaires. Once the paper version was finalized and readied for printing, Web versions of the questionnaires could then be developed and tested. Adjustments in the questionnaire design and format were required to accommodate the Web technology. The Web versions of the questionnaires were written directly in HTML, allowing complete flexibility in order to reproduce the look of the paper version, but still incorporating features of Web technology to improve data collection.

The CATI version of the faculty questionnaire was the last instrument to be developed since it was intended for use with nonrespondents. The paper questionnaire was adapted for telephone administration, requiring changes to the introductory statements, rewording instructions to make them appropriate for communication by interviewers, and formatting changes to facilitate programming into a computer system.

## CHAPTER 3. Sample Design And Selection

This chapter reviews the sample design and selection procedures used for selecting institutions and faculty for NSOPF:99. It also provides information on the calculation of sample weights and the relative efficiency of the sample design.

### 3.1 NSOPF:99 Sample Design

The sample for NSOPF:99 was selected in three stages. Both the first-stage sample of institutions and the second-stage sample of faculty were stratified, systematic samples. In the initial stage, 960 postsecondary institutions were selected from the 1997-98 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) data files and the 1997 and 1995 IPEDS Fall Staff files. Each sampled institution was asked to provide a list of all of the full- and part-time faculty that the institution employed during the 1998 fall term, and 819 institutions provided such a list.

In the second stage of sampling, 28,576 faculty were selected from the lists provided by the institutions. Over 1,500 of these sample members were determined to be ineligible for NSOPF:99, as they were not employed by the sampled institution during the 1998 fall term, resulting in a sample of 27,044 faculty.

A third stage of sampling occurred in the final phases of data collection. In order to increase the response rate and complete data collection in a timely way, a subsample of the faculty who had not responded was selected for intensive follow-up efforts. Others who had not responded were eliminated from the sample, resulting in a final sample of 19,213 eligible faculty.

This chapter documents the sample selection procedures in detail. It describes:

- the definitions of the target populations of institutions and faculty for the study;
- the frames used at each stage of sample selection;
- the selection of institutions;
- institution-level nonresponse;
- the initial selection of faculty;
- the subsampling of faculty for nonresponse follow-up;
- the calculation of weights;
- variance estimation and design effects for the survey; and
- an analysis of survey nonresponse bias in the faculty dataset.


### 3.2 Institution Population and Frame

### 3.2.1 Target population

Like its 1993 predecessor, NSOPF:99 was intended to cover instructional and non-instructional faculty in certain types of postsecondary institutions. The first-stage target population consisted of postsecondary institutions that met several criteria:

- They were Title IV-participating institutions;
- They were 2-year or 4-year degree-granting institutions;
- They were public or private not-for-profit institutions;
- They offered programs designed for high school graduates;
- They were open to persons other than employees of the institution; and
- They were located in the 50 states or the District of Columbia.

This definition covered most colleges (including junior colleges and community colleges), universities, graduate, and professional schools. It excluded for-profit institutions, those that offer only programs lasting less than two years, and institutions located outside the United States (for example, in U.S. territories). In addition, it excluded institutions that offer instruction only to employees of the institutions, tribal colleges, and institutions that offer only correspondence courses. In total, 3,396 institutions met these criteria and were eligible for the NSOPF:99 sample.

### 3.2.2 Institution frame

The data used in constructing the NSOPF institution frame were taken from the 1997-98 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) data files and the 1997 and 1995 IPEDS Fall Staffing files. ${ }^{4}$ (When faculty data for 1997 were missing, data from 1995 were used instead.) These data consisted of three main types of information:

- Information used to identify and contact the institution (e.g., the institution name and address, its IPEDS identification number, chief administrative officer, and so on);
- Information used to classify the institution by sampling strata (whether the institution is public or private not-for-profit, 2-year or 4-year, and so on);
- Information used to construct a measure of size (counts of the number of faculty by various categories).

The identifying and stratification variables were drawn from the IC Survey; those used to calculate the measures of size were drawn from the Fall Staffing Survey. NCES provided Gallup

[^2]with the institution frame file, containing the set of eligible institutions and the necessary variables from the IPEDS data sets.

Some entries in the IPEDS files were "parent" records that included information from several campuses that collectively made up a single institution. For example, the parent record might have included data for all the campuses in a state community college system. These individual campuses, or "children," were also represented as separate records in the file. In such cases, we kept only the campuses where faculty were actually housed rather than the central administrative office. Three of these "parent institutions" were dropped from the frame because it was apparent that they housed no faculty of their own. Most of the parent institutions did have their own faculty and were retained on the frame.

Faculty count data were missing for 215 institutions on the frame; these data were the basis for the institution's measure of size and missing values had to be imputed. Section 3.4.2 describes how the missing values were imputed.

### 3.2.3 Stratification

Prior to sample selection, eligible institutions were classified into eight categories based on the size, type, and highest degree awarded (based on the 1994 Carnegie classification) by the institution:

- Stratum 1: Large public master's. Public master's (comprehensive) universities and colleges with at least 800 faculty;
- Stratum 2: Small public master's. Public master's universities and colleges with fewer than 800 faculty;
- Stratum 3: Private-not-for-profit master's. Private master's (comprehensive) universities and colleges;
- $\quad$ Stratum 4: Public baccalaureate. Public baccalaureate colleges, including liberal arts colleges, schools of engineering, law and health centers, and business, teacher's colleges, and other specialized schools;
- Stratum 5: Private not-for-profit baccalaureate. Private baccalaureate colleges, including liberal arts colleges, schools of engineering, law and health centers, and business, teacher's colleges, Bible colleges and theological seminaries, and other specialized schools;
- $\quad$ Stratum 6: Medical. Medical schools and medical centers;
- Stratum 7: Associates. Associates of Arts colleges;
- Stratum 8: Research and doctoral. Research universities and other doctoral institutions.

Stratum 6 consists of free-standing medical schools; many other medical schools are part of institutions included in other strata (especially Stratum 8, in which 94 institutions had an
associated medical school). First-stage sampling was carried out separately within each stratum. Four-year institutions with missing Carnegie codes were placed in Stratum 4 (if they were public) or 5 (if they were private).

### 3.3 Faculty Population and Sampling Frame

Like its predecessor, NSOPF:99 was intended to cover instructional staff at eligible institutions. The target population included not only regular full-time and part-time faculty, but also administrators and other staff (such as librarians) who had instructional responsibilities at the sample institutions. The frame for the second stage of sampling at each institution was the list of eligible staff submitted by the institution. Aside from the staff member's name and other identifying information, the lists were supposed to include gender, race/ethnicity, and program area or discipline.

It is possible to compare the number of instructional staff reported on the list with the number reported in the NSOPF institution questionnaire. When the number of faculty on the list differed from the number reported either in the NSOPF institution questionnaire or in the IPEDS data by 5 percent or more, the institution was recontacted and an attempt was made to verify the accuracy of the list. See Chapter 8 for a discussion of discrepancies.

### 3.4 First-Stage Sampling: Selection of Institutions

### 3.4.1 Allocation of the institution sample by stratum

The first-stage sample was a stratified sample that included a total of 960 sample institutions. The number of sample institutions allocated to each institutional stratum was proportional to the estimated number of faculty in that stratum. (The estimate of the number of faculty in each stratum was derived from the 1997 IPEDS data on the institutional sampling frame.) Under this allocation, three of the strata had sample sizes either equal or close to their population sizes. All of the institutions in strata 1,6 , and 8 were selected with certainty and the remaining institution selections were allocated across the remaining five strata according to their share of the total faculty. Table 3.1 shows the sample sizes by institutional stratum.

Table 3.1—Number of institutions and institution selections by stratum

| Stratum | Institutions |  | Faculty |  | Sample sizes |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |  |
| 1. Large public master's | 30 | 0.9 | 31,805 | 3.3 | 30 |
| 2. Small public master's | 242 | 7.1 | 90,241 | 9.4 | 104 |
| 3. Private not-for-profit master's | 247 | 7.3 | 62,158 | 6.5 | 71 |
| 4. Public baccalaureate | 304 | 9.0 | 38,819 | 4.1 | 45 |
| 5. Private not-for-profit baccalaureate | 1,208 | 35.6 | 91,049 | 9.5 | 105 |
| 6. Medical | 47 | 1.4 | 33,407 | 3.5 | 47 |
| 7. Associates | 1,075 | 31.9 | 281,108 | 29.4 | 323 |
| 8. Research and doctoral | 235 | 6.9 | 329,180 | 34.4 | 235 |
| Total | 3,396 | 100.0 | 957,767 | 100.0 | 960 |

NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 3.4.2 Selection procedures within the noncertainty strata

Within the five non-certainty strata, the institution sample was selected systematically, with the selection probability for each institution proportional to its measure of size.

Measure of size. The measure of size (MOS) for a given institution was a weighted sum of the number of faculty in five categories:

$$
\begin{equation*}
\operatorname{MOS}_{j}=\sum_{i} f_{i} N_{i j} \tag{1}
\end{equation*}
$$

The weight for a given category was the overall sampling fraction $\left(f_{i}\right)$ for faculty in that category. In the equation, $N_{i j}$ represents the number of faculty in category $i$ at institution $j$; these faculty counts were taken from the IPEDS data. (Where the necessary faculty counts were unavailable, they were imputed as described in the next section.) The five faculty categories were 1) Hispanic faculty; 2) non-Hispanic Black faculty; 3) Asian and Pacific Islander faculty; 4) full-time female faculty (who were not Hispanic, Black, Asian or Pacific Islander); and 5) all others. The first four of these groups were sampled at higher rates than the fifth. The values for the $f_{i}$ 's were the target number of faculty selections in each group (the sample size targets for each group are given in Table 3.3 below) divided by the estimated total number of faculty in that
group. Again, the population estimates were derived from the IPEDS data on the institution frame file (and are also given in Table 3.3). For example, the overall sampling fraction for Hispanic faculty was $1,647 / 27,393$. These are overall sampling rates that vary across the five groups of faculty, but not across schools. The MOS for a given school was the weighted sum of the five faculty counts for that school, where the weights were the $f_{i}$ 's.

The purpose of using the composite measure of size was to facilitate the oversampling of minority and women faculty at the second stage of selection. By giving a higher selection probability to institutions that included larger numbers of faculty in the oversampled subgroups, the composite measure of size helped ensure that the sample institutions included enough faculty members in each category to meet the sample size targets. Simulation results indicated that using the composite measure of size increased the number of sample institutions with at least one member of the oversampled groups.

Imputation of missing size data. The counts needed to calculate measures of size were missing for 215 of the institutions. The institutions with missing data fell into three groups. The first consisted of branch campuses (or other "child" records in the frame file), whose faculty counts were included in the record for the associated main campus or administrative office. In such cases, the faculty counts were allocated from the parent record to the linked child records in proportion to the student enrollment at each branch campus. For example, if branch campuses A, B , and C were linked to the same parent record and campus A had one-half of the total student enrollment of the three campuses, then campus A would be assigned one-half of the faculty reported on the parent record. This method was used to impute faculty counts for 80 of the institutions.

The second group of institutions with missing faculty counts consisted of institutions (typically new ones) that did not report the relevant data in the current or previous IPEDS. For these institutions, the measure of size was imputed based on their student enrollments. The imputed number of faculty (MOS) for an institution was derived in two steps. First, the number of faculty was imputed; then the measure of size was estimated, based on the imputed number of faculty. The first step-imputing the number of faculty at the institution-involved finding the ratio between the total number of faculty and the total student enrollment for the stratum (for those institutions where data for both are available). The total number of faculty (NFac) was imputed as the product of the faculty-student ratio for that institution's stratum and the enrollment at the institution (Enroll):

$$
N F a c_{i j}=\frac{\sum_{j} N F a c_{i j}}{\sum_{j} \text { Enroll }_{y}} \text { Enroll }_{i j}
$$

where the summation was across all sample institutions in the stratum. In the equation, $N F a c_{i j}$ represents the number of faculty in category $i$ at institution $j$. In the second step, the measure of size was imputed from the total number of faculty at the institution using the regression equation relating these two variables. We regressed the MOS on the total number of faculty in all the institutions where we had both; a single bivariate regression equation was fit. Measures of size were imputed for 38 institutions using this procedure. In addition, 29 institutions had the total number of faculty on the frame file but not the detailed counts; a measure of size for these institutions was calculated using the regression equation linking the MOS to the number of faculty.

For a third group of institutions, both faculty counts and student enrollment data were missing. These 68 institutions were assigned the average measure of size for institutions in their stratum. To prevent any institution from having a very large weight, institutions with measures of size below 0.28 were assigned that value as their measure of size; 0.28 corresponds to approximately the fifth percentile of the non-imputed size measures.

Selection of institutions. Once size measures had been assigned to every institution, the systematic selection of institutions from the noncertainty strata was performed. Prior to selection, the institutions in these strata were sorted by their Carnegie codes. Within the noncertainty strata, some institutions had measures of size that exceeded the sampling interval for their strata. These 65 institutions were taken into the sample with certainty; 52 of these were in stratum 7. Overall, 648 selections were made from the five noncertainty strata (following the allocation shown in Table 3.1).

### 3.4.3 Institution-level nonresponse

Sample institutions were asked to complete an institution questionnaire and to provide lists of eligible faculty for the second stage of sample selection. The design of the first-stage sample allowed for some level of non-cooperation among sampled institutions. Based on the experience in NSOPF:93, it was anticipated that only about 85 percent of the institutions (a total of 816) would provide faculty lists. Ultimately, 819 institutions provided lists; their distribution by stratum is shown in Table 3.2. Table 3.2 also shows the number of sample institutions in each stratum that completed an institution questionnaire; a total of 865 completed institution questionnaires were received.

Table 3.2-Number of responding institutions by stratum

| Stratum | Initial <br> selections |  | Institutions providing <br> faculty lists |  | Institutions <br> completing <br> questionnaire |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Number | Number | Percent | Number | Percent |  |
| 1. Large public master's | 30 | 26 | 86.7 | 28 | 93.3 |  |
| 2. Small public master's | 104 | 92 | 88.5 | 99 | 95.2 |  |
| 3. Private not-for-profit <br> master's | 71 | 57 | 80.3 | 63 | 88.7 |  |
| 4. Public baccalaureate | 45 | 35 | 77.8 | 39 | 86.7 |  |
| 5. Private not-for-profit <br> baccalaureate | 105 | 96 | 91.4 | 97 | 92.4 |  |
| 6. Medical | 47 | 36 | 76.6 | 39 | 83.0 |  |
| 7. Associates | 323 | 269 | 83.3 | 293 | 90.7 |  |
| 8. Research and doctoral | 235 | 208 | 88.5 | 207 | 88.1 |  |
| Total | 960 | 819 | 85.4 | 865 | 90.2 |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 3.5 Selection of Faculty

A total of 28,576 faculty were selected from the 819 institutions that provided faculty lists. When institutions provided the necessary data, faculty were explicitly grouped into five strata (Hispanic, Black, Asian, full-time non-minority females, and all other faculty and instructional staff) prior to carrying out sample selection. In addition, within each institution and stratum, faculty were sorted by academic program area or discipline.

### 3.5.1 Faculty-level stratification

Faculty were grouped into five strata based on their demographic characteristics:

- Hispanic faculty;
- Non-Hispanic Black faculty;
- Asian and Pacific Islander faculty;
- Full-time female faculty (who were not Hispanic, Black, Asian or Pacific Islander); and
- All other faculty.

The purpose of stratifying the faculty in this way was to allow for the oversampling of relatively small subpopulations (such as minority group members) to increase the precision of the estimates for these groups. Table 3.3 shows our estimates of the sizes of the eligible population for each faculty stratum and the target sample sizes for each one. Under a proportionate allocation, certain subgroups would not have been large enough to support separate analyses. The target allocation increased the sample sizes for the first four demographic subgroups (Hispanics, non-Hispanic Blacks, Asians, and full-time females) at the expense of the final one.

Table 3.3-Distribution of the population and sample by subgroup

| Subgroup | Population |  |  | Target sample sizes |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Number | Percent |  | Number <br> (initial) | Percent |
| Demographic subgroups |  |  |  |  |  |
|  |  |  |  |  |  |
| Hispanic | 27,393 | 3.0 |  | 1,647 | 5.5 |
| Black | 48,508 | 4.9 |  | 2,588 | 8.7 |
| Asian | 43,713 | 4.1 |  | 2,118 | 7.1 |
| Full-time females | 171,760 | 16.4 | 7,412 | 24.8 |  |
| All other | 665,242 | 71.6 |  | 16,118 | 53.9 |
|  |  |  |  |  |  |
| Total | 956,616 | 100.0 |  | 29,883 | 100.0 |

NOTE: Data are from the NSOPF frame file. The total number of faculty given here does not exactly match the corresponding figure in Table 3.1 because of missing data on faculty race, ethnicity, or gender.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 3.5.2 Method of initial selection

In the NSOPF:93, the within-institution selection procedure involved taking fixed numbers of selections from each staff-level stratum within each institution; for example, there was a target sample size of approximately eight Black and Hispanic staff per institution. When a sample institution had fewer than the desired number of staff in a particular stratum, all of the staff members in that stratum were selected for the sample. This procedure produced a relatively high level of variation in the weights (and did not completely succeed in keeping the cluster sizes constant). A different procedure was used in NSOPF:99 that allowed the sample sizes to vary across institutions but that minimized the variation in the weights within the staff-level strata. The sampling fractions for each sample institution were made proportional to the institution weight:

$$
\begin{align*}
& f_{i j}=\frac{w_{j} n_{i}}{\hat{N}_{i}}  \tag{2}\\
& \hat{N}_{i}=\sum^{m} w_{j} N_{i j}
\end{align*}
$$

The sampling fraction depended on the overall target number of selections for that stratum $\left(n_{i}\right)$, the weight for the institution $\left(w_{j}\right)$, and the estimated size of the stratum population $\left(\hat{N}_{i}\right)$; the estimated stratum size was the weighted total of the stratum counts (according to the IPEDS data) across all the cooperating sample institutions. $N_{i j}$ represents the number of faculty in category i at institution j ; these faculty counts were taken from the IPEDS data.

Missing stratification data. Carrying out this design raised two practical issues. The first involved missing data. To implement the staff-level stratification scheme required that the faculty lists classify each staff member by gender and racial/ethnic group. In total, the faculty lists submitted by the cooperating institutions included information on 596,813 staff members; at least some of the variables needed to stratify faculty were missing for 207,497 of them. In general, when these data were missing, they were missing for all staff members at a institution. When a faculty member could not be classified into one of the five strata, they were put in a sixth stratum; this stratum was sampled at rate that used the average sampling fraction (that is, $n / \hat{N}$ ) in equation 2 in place of the stratum-specific rates.

Selecting faculty on a flow basis. The other practical issue involved selecting faculty on a flow basis. As institution lists came in, they were compiled into a database; sample selection was carried out separately for eight batches of institutions. Equation 2 required an estimate of the total population size of each faculty stratum; this estimate was based on the first batch of institutions in which sampling was carried out. Because the sampling rates were based on the initial set of institutions and because so many faculty were placed in the sixth stratum, the sample sizes did not meet the targets set for four of the faculty strata. Table 3.4 shows the number of selections by stratum. Of course, the respondents among the 9,698 cases who could not be placed in a faculty stratum initially would ultimately be classified by stratum, reducing the impact of the apparent shortfalls. Although this reclassification of faculty may increase the variability of the weights (and therefore increase the variance of the estimates), it did not introduce any bias.

The initial sample sizes presented in Table 3.4 differ from the target sample sizes for two reasons: the sampling rates were based on the initial batch of schools, which included only about a quarter of the total sample; in addition, a large number of faculty could not be classified by stratum and this group had to be represented in the sample.

Table 3.4-Target and actual sample sizes for faculty by faculty strata

| Stratum | Target sample <br> size | Actual number of selections |  |
| :--- | :---: | :---: | :---: |
|  |  | Initial selections | After subsampling |
|  | 1,647 |  |  |
| Hispanic | 2,588 | 1,615 | 1,011 |
| Black | 2,118 | 1,920 | 1,168 |
| Asian | 7,412 | 1,443 | 919 |
| Full-time women | 16,118 | 4,526 | 3,504 |
| All other | - | 9,374 | 4,317 |
| Missing data | 29,883 | 9,698 | 8,894 |
| Total | 28,576 | 19,813 |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 3.6 Subsampling of Nonrespondents

During the final stages of the field period, it became clear that an acceptable response rate for the faculty survey could only be achieved either by extending the field period or by subsampling among the remaining nonrespondents. Extending the field period had the drawbacks of delaying completion of the project and increasing the memory recall problems associated with asking respondents about fall 1998 activities. A subsample of the remaining nonrespondents was drawn for intensive follow-up. Follow-up efforts were confined to these subsample cases.

The design used to carry out this subsampling attempted to reduce the variation in the final cluster sizes. This entailed taking a higher fraction of nonrespondents within institutions that had a smaller number of initial faculty selections. ${ }^{5}$ Institutions were grouped into three categories:

- Within the 85 sample institutions that had 15 or fewer initial faculty selections, all remaining nonrespondents (a total of 431) were retained in the subsample with certainty;
- Within the 225 institutions with more than 15 initial faculty selections but fewer than 15 respondents at the time of sampling, enough nonrespondents were selected to bring the subsample size for each institution to 15 (yielding a total of 1,420 subsample nonrespondents within this group of institutions);
- Within the 469 remaining institutions (all those with at least 15 respondents by the time subsampling was carried out), subsampling was carried out at a lower

[^3]rate ( 1,078 out of the 6,251 nonrespondents were selected for the subsample within those institutions).

In addition, all of the 430 nonrespondents from 39 private doctoral institutions were retained in the subsample. Altogether the subsample included 3,359 faculty selections. Table 3.5 summarizes the entire sampling process, including subsampling.

Table 3.5-Summary of sampling process

|  | Number |
| :--- | ---: |
| Institutions sampled | 960 |
| Eligible institutions | 959 |
| Institutions providing lists of faculty/instructional staff | 819 |
|  |  |
| Faculty on frame provided by institutions | 596,813 |
| Faculty sampled | 28,576 |
| Eligible faculty |  |
| Faculty subsampled $^{\text {Eligible subsampled faculty }}{ }^{1}$ | 27,044 |
| Faculty respondents $^{2}$ | 19,813 |

${ }^{1}$ See section 6.3 .1 for a description of eligible faculty.
${ }^{2}$ To protect the confidentiality of the data, this number has been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999
National Study of Postsecondary Faculty (NSOPF:99).

### 3.7 Calculation of Weights

Weights were calculated for both institution and faculty questionnaire data. Both full-sample weights and replicate weights were computed. The replicate weights effectively partition the faculty and institution samples into 64 half-samples. The replicate weights are designed to make it easy for analysts to use programs such as WesVar that calculate standard errors for statistics derived from complex samples (like NSOPF:99 sample) via the balanced half-sample (BHS) method.

### 3.7.1 Institution weights

Full-sample weights. The full-sample institution questionnaire weights were computed in four steps. In the first step, a base weight ( $\mathrm{W}_{1 \mathrm{j}}$ ) was computed for both responding and nonresponding institutions. This weight was simply the inverse of the institution's selection probability. The second step compensated for institution-level nonresponse. For the responding institutions, the base weights were multiplied by the inverse of the institution-level response rate for the stratum $\left(R_{h}\right)$ :

$$
\begin{equation*}
W_{2 h j}=W_{1 j} / R R_{h} \tag{3}
\end{equation*}
$$

For nonresponding institutions, $W_{2 h j}$ was set to zero. Separate nonresponse adjustments were calculated within institution-level stratum. Because this weight is intended for use with the institution questionnaire data, institutions were treated as respondents if they completed an
institution questionnaire. A slightly different set of institutions provided faculty lists and, for purposes of weighting the faculty data, the institutions providing faculty lists were treated as responding institutions. We computed a separate institution weight for the institutions that provided faculty lists, but used this weight only in the process of developing faculty weights (see footnote 7 below). This second institution weight is not included on the institution data file.

The institution weights emerging from equation 3 included a small number of extreme weights. In the third step of the weighting process, these extreme weights were trimmed. Of the 865 institutions with nonzero weights, only 60 had weights greater than 10 , but nine of these had weights greater than 30 . As a result, the relative variance of the weights was substantial-3.33. Based on an examination of the estimated bias and variance of 20 statistics computed from the institution questionnaire data, it was decided to trim the nine largest institutional weights to 30 . (This brought the relative variance of the weights down considerably-the final relative variance was close to 2.0. See Table 3.6.)

In the final step, the trimmed weights $\left(W_{3}\right)$ were adjusted so that the sum of the weights within each stratum agreed with the best estimate of the total number of institutions within that stratum. Equation 4 (below) shows how the weights were redistributed to compensate for trimming the extreme weights.

$$
\begin{equation*}
W_{4 h j}=W_{3 h j} \frac{\hat{N}_{h}}{\sum_{1}^{n_{h}} W_{3 h j}} \tag{4}
\end{equation*}
$$

For most strata, the estimated stratum sizes (the $\hat{N} s$ in equation 4) were simply the frame counts. In one stratum, one of the sample institutions turned out to be ineligible for the study. In that stratum, the number of eligible institutions was estimated by multiplying the frame count by the estimated eligibility rate. This estimate was rounded to the nearest whole number.

Table 3.6-Summary statistics for faculty and institution questionnaire weights

| Statistic | Faculty <br> questionnaire <br> weight | Institution <br> questionnaire weight |
| :--- | :---: | :---: |
| Mean | 60.98 | 3.92 |
| Variance | $3,133.08$ | 30.85 |
| Standard deviation | 64.29 | 5.55 |
| Minimum | 9.25 | 1.00 |
| Maximum | $1,682.83$ | 40.65 |
| Relative variance | 1.11 | 2.01 |
| Sum (rounded to whole number) | $1,073,667$ | 3,388 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

$$
\therefore \quad 36 \quad 52
$$

Institution-level replicate weights. To develop replicate weights for the institutions, the sample institutions were grouped into 63 pseudo-strata. These pseudo-strata were finer subdivisions of the eight original institution-level sampling strata. Within each of the original strata, institutions were sorted by Carnegie code and, within Carnegie codes, by the total number of faculty at the institution. Groups of institutions that shared a Carnegie code and had similar numbers of faculty were assigned to the same pseudo-stratum.

Within each of the 63 pseudo-strata, institutions were assigned at random to one or the other of two half-samples. The program WesVar was used to carry out this assignment using a balanced scheme; the program follows a Hadamard matrix that assures that estimates from pairs of halfsamples are orthogonal to each other. Sixty-four half-sample replicates were formed in this way.

A set of weights was calculated for each replicate half-sample. In the first step, the base weights for the institutions included in the half-sample were doubled and the weights for the remaining institutions were set to zero. These initial weights were then adjusted to compensate for nonresponse to the institution questionnaire, trimmed, and brought into agreement with the frame totals by stratum. These steps exactly parallel those carried out in the development of the fullsample institution weights. The final step in the computation of institution replicate weights introduced a finite population correction factor (fpc) into the weights. ${ }^{6}$ Both institutions in the $\alpha$-th half-sample and those that were not in that half-sample received some weight:

$$
W_{h j \alpha}=W_{4 h j}+\sqrt{\lambda_{h}}\left(W_{4 h j \alpha}-W_{4 h j}\right)
$$

in which $W_{4 h j}$ is the final full-sample weight for the institution (defined in equation 4 earlier), $W_{4 h j}$ is the preliminary half-sample weight (prior to the incorporation of the fpc), and $\lambda_{h}$ is the approximate finite population correction for the pseudo-stratum:

$$
\lambda_{h}=1-\left(\frac{1}{n_{h}} \sum \frac{1}{W_{4 h j}}\right)
$$

### 3.7.2 Faculty weights

Full-sample weights. Calculation of the full-sample faculty weights began with the final institution weight. ${ }^{7}$ The faculty weights then incorporated factors reflecting the conditional selection probability for the faculty member (given the selection of his or her institution), the

[^4]probability of retention into the subsample, faculty nonresponse, and random departures from the best available estimates of the total number of full- and part-time faculty at various types of institutions. The base weight for the faculty was the final institution weight times the selection probability for the faculty member:
\[

$$
\begin{equation*}
W_{5 j k}=\frac{W_{4 h j}}{\pi_{1 j k} \pi_{2 j k}} \tag{5}
\end{equation*}
$$

\]

(The final institution weight- $W_{4 h}$-was based on the institutions where faculty were sampled.) The denominator in the equation represented the initial selection probability for faculty member k in institution j ( $\pi_{l j k}$ ) times his or her probability of being retained in the subsample ( $\pi_{2 j k}$ ).

These weights were then adjusted to compensate for faculty nonresponse. Separate nonresponse adjustments were calculated for the cells formed by crossing the six faculty-level strata with the eight institution-level strata. Several of the 48 resulting cells contained few selections, and these cells were combined with neighboring cells to avoid extreme adjustment factors; ultimately, separate adjustment factors were computed for 41 cells. For the responding cases in each cell, the nonresponse adjustment was the inverse of the weighted nonresponse rate for the cell:

$$
\begin{equation*}
W_{6 j j k}=W_{5 j k} / R R_{h} \tag{6}
\end{equation*}
$$

For nonresponding faculty, $W_{6}$ was set to zero. There was a separate adjustment for list nonresponse; see the earlier discussion following Equation 3.

The final step in the computation of faculty weights brought the weights into agreement with the institution questionnaire data regarding the total number of faculty. Institutions were classified into one of nine types. The types were the eight institution-level sampling strata, with the final stratum (Research and Doctoral institutions) subdivided so that private institutions offering doctoral degrees (Carnegie codes 13 or 14) formed a separate institution type. Institutions were further classified by size, based on the total number of faculty according to the IPEDS data on the institution frame. Institutions with 270 or fewer faculty were placed in the smallest size category; those with 670 or more faculty were placed in the largest size category. The remaining institutions were classified as medium in size. The institution type variable was crossed with three size categories (based on the total number of faculty, according to IPEDS data), for a total of 27 cells. For each cell, the total number of full- and part-time faculty was estimated based on the institution questionnaire data. (In four cases, all of the faculty in a given cell were either fullor part-time. As a result, 50 population estimates were calculated, rather than 54.) The faculty weights were adjusted to agree with these estimates:

$$
\begin{equation*}
W_{7 h j k}=W_{6 h j k} \frac{\hat{N}_{j}}{\sum^{n_{j}} W_{6 h j k}} \tag{7}
\end{equation*}
$$

The best estimate of the number of faculty in a given cell (the $\hat{N} s$ in equation 7) was the weighted sum of the numbers reported by responding institutions on the institution questionnaires. ${ }^{8}$

Four hundred thirty-five faculty returned a completed questionnaire after they had been dropped from the sample during subsampling. To allow for methodological studies, these data have been included in the final faculty questionnaire data set. These faculty, however, were not included in the weighting process and have been assigned a weight of zero.

Contextual weight. Aside from the main faculty weight (to be used in analyses of faculty questionnaire data), an additional faculty weight was developed for use in "contextual" analyses that simultaneously include variables drawn from the faculty and institution questionnaires. For this weight, only the 793 institutions that both submitted a faculty list and completed an institution questionnaire were counted as respondents. Otherwise, the contextual weight followed the same steps as the main faculty weight:

- The institution base weight was adjusted for institution-level nonresponse (as in equation 3 above);
- The resulting institution weights were adjusted to agree with the frame totals (as in equation 4);
- Preliminary faculty weights were calculated by dividing the final institution weight by the product of the faculty member's initial selection probability and his or her probability of retention in the subsample (as in equation 5);
- The preliminary faculty weights were adjusted for nonresponse (as in equation 6) and to agree with estimates of the population sizes for 27 cells, based on institution type and size (as in equation 7).

Aside from the difference in what counted as a responding institution, the weighting procedure for the contextual weight differed only in one other detail from the main faculty weight; the institution-level weights were not trimmed. Trimming was not seen as necessary since the contextual institution weights were computed only as a preliminary stage in the development of the contextual faculty weights, not as a separate set of weights that analysts would use directly. (For the same reason, the institution weights used in computing the main faculty weights were also not trimmed; see footnote 7.)

Replicate faculty weights. The same half-samples used to define the institution-level weights were also used to define faculty replicates. Within each half-sample of institutions, separate adjustments were calculated first to compensate for faculty nonresponse and then to bring the resulting replicate faculty weights into agreement with the estimated number of full- and parttime faculty in each of 27 institution cells. That is, the adjustment factors defined by equations 6

[^5]and 7 were calculated anew for each half-sample. (Because of small cell sizes in some of the half-samples, the half-sample weights were adjusted to agree with 49 faculty population estimates, rather than the 50 used to adjust the full-sample faculty weights.) As in 1993, the replicate faculty weights did not incorporate finite population corrections; the impact of such corrections was likely to be small for the faculty weights.

### 3.8 Design Effects and Standard Errors

Like all estimates derived from survey data, the estimates based on the NSOPF:99 data are subject to both nonsampling and sampling errors. The nonsampling errors arise from a variety of sources, most of them representing problems in the measurement process, such as misinterpretation of the questions, forgetting of the relevant information, deliberate misreporting and so on. The sampling errors arise because the estimates are based on a sample rather than the entire population. The sampling errors include both biases (such as undercoverage of certain segments of the population due to nonresponse or inaccuracies in the sampling frame) and the random errors introduced by the sampling process. In contrast to other types of error, it is possible to estimate the magnitude of the random sampling error using the data from the survey itself. It is a far more difficult matter to assess the extent of nonsampling error or the amount of bias introduced by nonresponse or coverage problems. The two most commonly used measures of random sampling error are the variance and standard error of sample statistics. The variance of a statistic (such as a mean, proportion, or correlation coefficient) is the expected squared deviation of the sample value from the average value for the statistic across all possible samples; that is, it is the variance of the distribution of sample values across all possible samples. The standard error is just the square root of the variance. Estimates of variances and standard errors can be used to construct confidence intervals around sample values and to carry out significance tests for comparisons between sample subgroups. This section presents standard errors for a number of statistics calculated from the faculty and institution questionnaire data. It also discusses the overall efficiency of the sample design both for estimates that characterize the population as a whole and for estimates that characterize specific subgroups of the population.

Several features of the sample design-its use of stratification and unequal selection probabilities and the clustering of sample faculty within institutions-make the calculation of exact standard errors difficult. Because of the complex sample design, standard statistical packages, such as SAS or SPSS, are prone to underestimate the variability of estimates derived from the NSOPF:99 data. There are, however, a number of procedures that yield more accurate standard error estimates; these include Taylor Series approximation, balanced half-sample replication (BHS or BRR), and jackknife repeated replication (JRR). Generally, these different methods yield very similar results. ${ }^{9}$ As noted earlier, 64 sets of replicate weights have been created to allow the use of BHS with both the institution and faculty questionnaire data. In addition, the data sets include a variable (VSTRATUM) that groups similar institutions into 63 pseudo-strata for variance computation purposes. The pseudo-strata are subdivisions of the original institutional sampling strata. For purposes of estimating the variance of sample statistics, it is possible to treat the sample as though it consisted of two primary selections from each of the 63 pseudo-strata. The data set includes a variable (VREP) that groups the selections within each pseudo-stratum into two pseudo-PSUs. Analysts can use these variables to compute Taylor Series approximations of the variances and standard errors for sample statistics based on the NSOPF:99

[^6]data. ${ }^{10,11}$ The Data Analysis System (DAS) available on CD-ROM calculates variances using the Taylor Series method. Taylor Series variance estimates do not directly reflect sampling variations in the various adjustment factors incorporated in the weights; this source of variation is captured in the BRR variance estimates. As a result, the Taylor Series estimates may over- or underestimate the variances.

Efficiency of the NSOPF:99 sample. The standard for assessing the efficiency of a sample design is the simple random sample. In a simple random sample, all cases have an equal chance of selection, the selections are not clustered in any way, and the sample is not stratified. The NSOPF:99 sample design deviates from all three of these features of simple random samples. The impact of such departures from simple random sampling on the variance of sample estimates is often measured by the design effect; the design effect is the ratio between the actual variance of a statistic (typically, estimated using the BHS or Taylor Series procedures) and the variance that would have been obtained had a simple random sample (of the same size) been selected instead. The larger the design effect, the larger the variance of the statistic relative to what would have been obtained under a simple random sample. For example, a design effect of 2.0 indicates that the statistic is twice as variable as it would have been, had it been derived from a simple random sample.

Tables 3.7 and 3.8 present standard errors and design effects (DEFF) for 32 statistics based on the NSOPF: 99 faculty data and 30 statistics based on the institution questionnaire data. The items were selected randomly from the questionnaires. Most of the items selected were "closed" questions that presented the respondent with a list of answer categories. The proportions in the tables combine answer categories so that the estimates span a wide range (from 9.0 to 96.2 percent).

The standard error estimates were calculated via BHS. The standard errors for the institution questionnaire estimates incorporate a finite population correction (since nearly one-quarter of all eligible institutions were included in the NSOPF:99 sample). The average design effect for the 32 faculty estimates was 2.45 ; the corresponding figure for the 30 institution estimates was 1.78 . The faculty figures are somewhat lower than the design effects observed in NSOPF:93 (when the average design effect for estimates based on all faculty was 3.52 ). The design effects for the institution estimates were somewhat larger than in the 1993 study (when the average was 1.52 ). ${ }^{12}$

[^7]Researchers who do not have access to software for computing estimates of standard errors can use the mean design effects presented in Tables 3.7 and 3.8 to approximate the standard errors of statistics based on the NSOPF:99 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):

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

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:

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

where Var is the simple random sample variance, $n$ is the size of the sample, and DEFT is the mean root design effect.

Table 3.7-Design effects (DEFFs) and root design effects (DEFTs) for faculty statistics

| Item | Estimate (percent) | $\begin{array}{\|c\|} \hline \text { Design } \\ \text { s.e. } \\ \text { (percent) } \\ \hline \end{array}$ | DEFF | DEFT | Number | $\begin{gathered} \text { SRS } \\ \text { s.e. } \\ \text { (percent) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1: Percent with instructional duties | 96.2 | 0.24 | 2.758 | 1.661 | 17600 | 0.14 |
| Q11: Percent with tenure or appt. with unspecified duration | 39.2 | 0.57 | 2.416 | 1.554 | 17600 | 0.36 |
| Q13: Percent who served as dept. chair | 9.1 | 0.30 | 1.924 | 1.387 | 17600 | 0.21 |
| Q16d2: Percent with degree in selected fields | 60.4 | 0.54 | 1.496 | 1.223 | 12060 | 0.44 |
| Q19: Percent regarding position as main job | 69.6 | 0.68 | 3.865 | 1.966 | 17600 | 0.34 |
| Q24a5b: Percent Associate or Full at first job | 13.0 | 0.60 | 2.710 | 1.646 | 8390 | 0.36 |
| Q24b6b: Percent at institution with tenure system at prior job | 87.3 | 0.76 | 2.343 | 1.531 | 4490 | 0.49 |
| Q28blt: Percent left prior noneducation job before 1991 | 39.1 | 0.87 | 2.329 | 1.526 | 7410 | 0.56 |
| Q29b2: Percent with no soleauthored nonrefereed works | 77.2 | 0.53 | 2.767 | 1.664 | 17600 | 0.31 |
| Q30b: Percent with no unpaid activities at institution | 62.7 | 0.50 | 1.852 | 1.361 | 17600 | 0.36 |
| Q31b2: Percent preferring no grad teaching | 55.1 | 0.58 | 2.395 | 1.548 | 17600 | 0.37 |
| Q33: Percent teaching one class in Fall term | 35.5 | 0.57 | 2.503 | 1.582 | 17600 | 0.36 |
| Q41a2d: Percent with no TA in $1^{\text {st }}$ class taught this term | 85.4 | 0.48 | 2.653 | 1.629 | 14600 | 0.29 |
| Q41b2c: Percent meeting over 3 hours per week in $2^{\text {nd }}$ class this term | 13.8 | 0.51 | 2.433 | 1.560 | 11170 | 0.32 |
| Q41c2b: Percent teaching course for over 3 credits as $3^{\text {rd }}$ class | 20.2 | 0.61 | 1.755 | 1.325 | 7550 | 0.46 |
| Q41d2a: Percent meeting under 16 weeks in $4^{\text {th }}$ class this term | 90.1 | 0.64 | 2.149 | 1.466 | 4750 | 0.43 |
| Q4le1: Percent teaching $5^{\text {th }}$ class this term in selected areas | 49.1 | 1.23 | 1.633 | 1.278 | 2680 | 0.95 |
| Q41e5: Percent teaching $5^{\text {th }}$ class this term face-to-face | 88.8 | 1.11 | 3.329 | 1.825 | 2680 | 0.60 |
| Q44c: Percent posting practice exams on Web | 25.5 | 1.01 | 2.516 | 1.586 | 4650 | 0.63 |
| Q49b2: Percent with no grad student contact hours | 81.1 | 0.45 | 2.307 | 1.519 | 17600 | 0.29 |
| Q57b: Percent with no foundation funding | 72.9 | 0.99 | 2.527 | 1.590 | 5080 | 0.61 |

See notes at the end of table.

Table 3.7-Design effects (DEFFs) and root design effects (DEFTs) for faculty statistics Continued

| Item | Estimate <br> (percent) | Design <br> s.e. <br> (percent) | DEFF | DEFT | Number | SRS <br> s.e. <br> (percent) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Q60b: Percent rating <br> (ab/research space 'poor' | 9.0 | 0.38 | 3.119 | 1.766 | 17600 | 0.21 |
| Q60n: Percent rating library <br> (fair' or 'poor' | 32.5 | 0.58 | 2.743 | 1.656 | 17600 | 0.35 |
| Q62c2: Percent chairing no <br> governance committees | 91.6 | 0.30 | 2.015 | 1.419 | 17600 | 0.21 |
| Q66a: Percent not 'very <br> satisfied' with work load | 61.2 | 0.57 | 2.393 | 1.547 | 17600 | 0.36 |
| Q67c: Percent 'not at all likely' <br> to take part-time job outside <br> postsecondary education | 82.8 | 0.38 | 1.807 | 1.344 | 17600 | 0.28 |
| Q69i: Percent rating good job for <br> spouse 'not important' | 30.8 | 0.68 | 2.909 | 1.706 | 13450 | 0.39 |
| Q75b1: Percent with salary <br> based on < 12 months | 69.8 | 0.71 | 2.404 | 1.551 | 10160 | 0.45 |
| Q76j: Percent getting no <br> honoraria | 85.6 | 0.44 | 2.750 | 1.658 | 17600 | 0.26 |
| Q77: Percent whose spouses <br> have no income | 14.4 | 0.44 | 2.074 | 1.440 | 13130 | 0.30 |
| Q90a: Percent permanent <br> residents from selected <br> countries |  |  |  |  |  |  |
| Q93a: Percent disagreeing that <br> it's harder to get external funds | 32.9 | 0.59 | 2.752 | 1.659 | 17600 | 0.35 |

NOTE: DEFF and DEFT are the design effect and root design effect. Design S.E. (standard error) are the estimated standard errors from the BHS method; SRS S.E. are the standard error estimates assuming the data were from a simple random sample. To protect the confidentiality of the data, some numbers have been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 3.8-Design effects (DEFFs) and root design effects (DEFTs) for institution statistics

| Item | Question: response number | Estimate (percent) | Design s.e. (percent) | DEFF | DEFT | Number | SRS s.e. (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FT faculty: Change over five years | A2A: 1 | 44.0 | 2.85 | 2.855 | 1.690 | 865 | 1.69 |
| FT faculty: <br> Percent increased | A2B: 57 | 97.9 | 0.94 | 3.648 | 1.910 | 865 | 0.49 |
| FT faculty: <br> Reduced courses | A3D: 1 | 15.8 | 1.16 | 0.876 | 0.936 | 865 | 1.24 |
| FT faculty: Tenure-track fall 97 | A5A2: 17 | 57.2 | 2.98 | 3.129 | 1.769 | 865 | 1.68 |
| FT faculty: Nontenured changed PT to FT | A5B3: 1 | 83.7 | 1.27 | 1.017 | 1.008 | 865 | 1.26 |
| FT faculty: Total hired | A5C4: 13 | 77.3 | 1.34 | 0.888 | 0.942 | 865 | 1.43 |
| FT faculty: Tenured, left for other reasons | A5E1: 3 | 92.3 | 0.30 | 0.112 | 0.335 | 865 | 0.91 |
| FT faculty: Total on tenure-track | A5F2: 43 | 76.7 | 1.46 | 1.034 | 1.017 | 865 | 1.44 |
| FT faculty: Max. years on tenure track | A7A: 4 | 17.3 | 1.76 | 1.408 | 1.187 | 647 | 1.49 |
| FT faculty: Replaced tenured w/ fixed term | A8D: 1 | 15.6 | 2.19 | 2.567 | 1.602 | 705 | 1.37 |
| FT faculty: No. sought for F98 | A10: 25 | 87.4 | 1.10 | 0.945 | 0.972 | 865 | 1.13 |
| FT faculty: State retirement plan available | AllC1: 1 | 45.7 | 1.05 | 0.380 | 0.617 | 865 | 1.69 |
| FT faculty: Other retirement plan subsidized | Al1E2: 2 | 73.9 | 4.17 | 2.265 | 1.505 | 252 | 2.77 |
| FT faculty: Disability insurance available | A12C1: 1 | 90.4 | 1.97 | 3.885 | 1.971 | 865 | 1.00 |
| FT faculty: Child care subsidized | A12E2: 2 | 30.7 | 3.33 | 1.404 | 1.185 | 270 | 2.81 |

[^8]Table 3.8-Design effects (DEFFs) and root design effects (DEFTs) for institution statistics Continued

| Item | Question: response number | Estimate (percent) | Design s.e. (percent) | DEFF | DEFT | Number | SRS s.e. (percent) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FT faculty: Wellness plan available | Al3A: 1 | 57.3 | 3.32 | 3.895 | 1.974 | 865 | 1.68 |
| FT faculty: Paid maternity leave available | Al3F: 1 | 58.2 | 2.14 | 1.621 | 1.273 | 865 | 1.68 |
| FT faculty: Union representation | A15A: 1 | 25.0 | 1.46 | 0.981 | 0.991 | 865 | 1.47 |
| FT faculty: Other student performance measures for assessment | A16D: 4 | 82.4 | 1.59 | 1.500 | 1.225 | 865 | 1.29 |
| FT faculty: Other evaluations for assessment | A16I: 4 | 26.5 | 2.40 | 2.549 | 1.597 | 865 | 1.50 |
| PT faculty: Other 403 plan subsidized | B18B2: 2 | 29.1 | 3.54 | 2.011 | 1.418 | 332 | 2.50 |
| PT faculty: Other retirement plans available | B18E1: 1 | 23.3 | 2.69 | 2.251 | 1.500 | 557 | 1.79 |
| PT faculty: Dental ins. Available | B20B1:2 | 96.4 | 0.78 | 1.511 | 1.229 | 861 | 0.63 |
| PT faculty: Life insurance subsidized | B20D2: 2 | 85.5 | 2.34 | 1.328 | 1.153 | 302 | 2.03 |
| PT faculty: Cafeteria-style plan available | B20G1: 1 | 8.8 | 1.13 | 1.365 | $1.169^{\circ}$ | 861 | 0.96 |
| PT faculty: Housing benefit available | B21D: 2 | 97.7 | 0.74 | 2.141 | 1.463 | 861 | 0.51 |
| PT faculty: <br> Employee <br> Assistance <br> Program available | B21I: 1 | 24.7 | 2.10 | 2.034 | 1.426 | 861 | 1.47 |
| PT faculty: <br> Student <br> evaluations for assessment | B25A: 2 | 73.9 | 1.42 | 0.898 | 0.947 | 861 | 1.50 |
| PT faculty: Dean evaluations for assessment | B25F: 3 | 54.5 | 2.06 | 1.465 | 1.210 | 861 | 1.70 |

Se notes at end of table.

Table 3.8-Design effects (DEFFs) and root design effects (DEFTs) for institution statistics Continued

| Item | Question: <br> response <br> number | Estimate <br> (percent) | Design s.e. <br> (percent) | DEFF | DEFT | Number | SRS s.e. <br> (percent) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| All faculty: <br> percent UG <br> instruction <br> assigned to PT <br> faculty |  |  |  |  |  |  |  |

NOTE: DEFF and DEFT are the design effect and root design effect. Design S.E. (standard error) are the estimated standard errors from the BHS method; SRS S.E. are the standard error estimates assuming the data were from a simple random sample.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Subgroup estimates and certainty institution strata. Table 3.9 displays average design effects ("DEFF") for the same statistics from the faculty data as were shown in Table 3.7. The top row of Table 3.9 shows the average for the same 32 statistics presented in Table 3.7. These statistics were based on the entire faculty sample; the additional rows in Table 3.9 show the average design effects for the same statistics calculated for various subgroups of the sample. For example, the second panel of the table shows the average of the design effects for statistics derived from male faculty (the second row of the table) and female faculty (the third row).

There is considerable variation in the average design effect for the different subgroups. In part, this reflects the difference in the size of the different groups. The mean design effects for subgroups tend to be smaller as subgroup sample sizes become smaller (especially when the subgroups crosscut the different sample institutions). For example, the average design effect for male faculty is smaller than the average for all faculty ( 2.26 for the males versus 2.45 for all faculty. Similarly, the average design effects are smaller for Black faculty ( 2.14 , on average) than for White faculty (2.25).

In addition, certain subgroups of institutions-those in Stratum 1 (Large Public Masters Institutions), Stratum 6 (Medical Schools), and Stratum 8 (Research and Doctoral Institutions)were selected into the sample with certainty. Of the 312 institutions making up these strata, 274 completed an institution Questionnaire and 270 provided lists for faculty sampling. For analyses involving the institution questionnaire data, there is no random sampling variability within these strata (except for any random variation produced by the decision to take part in the study). The sampling rates are quite high in some of the other institutional strata as well. To avoid overestimating the variance of institution-level statistics, analysts should use BHS in conjunction with the institution replicate weights described earlier. These weights incorporate a finite population correction. Analysts using Taylor Series methods to estimate variances of institutionlevel statistics should also include a finite population correction. Within SUDAAN, it is possible to specify that PSUs (here, institutions) were selected without replacement and to provide population size estimates for each stratum; the resulting standard errors will appropriately reflect the finite population correction. Pages 3-2 - 3-11 of the SUDAAN User's Manual ${ }^{13}$ give a

[^9]description of how this is done (see also pp. 3-20 - 3-21). The key steps are to specify that the design is a stratified, without replacement design (DESIGN=STRWOR) and to create a variable that represents the population size for each school-level stratum (these population figures are given in the first column of Table 3.1 above).

When using SUDAAN to compute faculty-level statistics, the user has the option to use either a with replacement or without replacement design. Although it is never incorrect to use a withoutreplacement design, the large number of cases in the faculty file will yield similar estimated standard errors with either design. Given the additional complexity of specifying a withoutreplacement design in SUDAAN, most users will opt to use a with-replacement design when using the faculty file.

Table 3.9-Summary statistics for design effects (DEFFs) and root design effects (DEFTs), by subgroup

|  | DEFF |  |  |  |  | DEFT |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Minimum | Maximum | Mean | Median | Minimum | Maximum | Mean | Median |  |
| Average | 0.842 | 3.961 | 2.451 | 2.470 | 0.917 | 1.990 | 1.554 | 1.572 |  |
| Males | 1.297 | 3.520 | 2.259 | 2.220 | 1.139 | 1.876 | 1.492 | 1.490 |  |
| Females | 1.290 | 5.071 | 2.318 | 2.035 | 1.136 | 2.252 | 1.502 | 1.427 |  |
| American Indian | 0.868 | 3.736 | 2.030 | 1.866 | 0.931 | 1.933 | 1.401 | 1.366 |  |
| Asian | 1.186 | 13.258 | 3.253 | 2.713 | 1.089 | 3.641 | 1.731 | 1.647 |  |
| Black | 0.836 | 3.345 | 2.137 | 2.050 | 0.914 | 1.829 | 1.444 | 1.432 |  |
| Hispanic | 1.240 | 4.406 | 2.832 | 2.875 | 1.113 | 2.099 | 1.666 | 1.696 |  |
| White | 0.871 | 3.050 | 2.251 | 2.251 | 0.933 | 1.747 | 1.489 | 1.500 |  |
| Tenured | 1.101 | 5.749 | 2.431 | 2.387 | 1.049 | 2.398 | 1.539 | 1.545 |  |
| On tenure track | 1.081 | 3.130 | 1.926 | 1.759 | 1.040 | 1.769 | 1.374 | 1.326 |  |
| Not on tenure track | 0.621 | 5.165 | 2.317 | 2.097 | 0.788 | 2.273 | 1.498 | 1.448 |  |
| No tenure system | 0.975 | 4.837 | 2.490 | 2.266 | 0.987 | 2.199 | 1.549 | 1.505 |  |
| Full professor | 1.255 | 8.703 | 2.814 | 2.623 | 1.120 | 2.950 | 1.637 | 1.619 |  |
| Associate professor | 1.099 | 4.918 | 2.409 | 2.173 | 1.049 | 2.218 | 1.531 | 1.474 |  |
| Assistant professor | 0.945 | 7.304 | 2.237 | 2.044 | 0.972 | 2.703 | 1.462 | 1.430 |  |
| Instructor | 0.887 | 2.895 | 2.110 | 2.200 | 0.942 | 1.702 | 1.441 | 1.483 |  |
| Lecturer | 0.897 | 12.139 | 3.173 | 2.971 | 0.947 | 3.484 | 1.723 | 1.723 |  |
| Other | 0.778 | 3.182 | 1.730 | 1.741 | 0.882 | 1.784 | 1.299 | 1.319 |  |
| Not applicable | 0.725 | 5.565 | 2.331 | 2.190 | 0.852 | 2.359 | 1.499 | 1.480 |  |
| Public research | 0.618 | 7.398 | 2.782 | 2.120 | 0.786 | 2.720 | 1.606 | 1.456 |  |
| Private research | 0.719 | 8.077 | 3.102 | 2.743 | 0.848 | 2.842 | 1.682 | 1.656 |  |
| Public doctoral | 0.438 | 23.988 | 3.243 | 2.602 | 0.662 | 4.898 | 1.660 | 1.613 |  |
| Private doctoral | 0.371 | 9.323 | 2.520 | 1.916 | 0.609 | 3.053 | 1.456 | 1.383 |  |
| Public master's | 0.699 | 14.907 | 2.671 | 2.112 | 0.836 | 3.861 | 1.541 | 1.453 |  |
| Private masters | 0.238 | 5.171 | 2.177 | 2.181 | 0.488 | 2.274 | 1.422 | 1.477 |  |
| Private liberal arts | 0.519 | 9.437 | 2.761 | 2.320 | 0.721 | 3.072 | 1.577 | 1.523 |  |
| Public associates | 1.058 | 4.485 | 2.114 | 2.035 | 1.029 | 2.118 | 1.433 | 1.427 |  |
| Other | 0.802 | 21.183 | 3.783 | 2.619 | 0.895 | 4.603 | 1.808 | 1.618 |  |
| Part-time | 1.399 | 6.239 | 2.402 | 2.055 | 1.183 | 2.498 | 1.522 | 1.434 |  |
| Full-time | 1.138 | 3.315 | 2.222 | 2.176 | 1.067 | 1.821 | 1.477 | 1.475 |  |

NOTE: Each summary statistic is based on 32 design effects (derived from the same 32 statistics displayed in
Table 3.7). Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 3.9 Measures of Bias

In this section, the potential for bias (the variance between a survey estimate and the actual value of its corresponding population parameter) caused by patterns of nonresponse in the NSOPF faculty dataset is examined. Survey nonresponse bias occurs whenever the responses that sampled nonparticipants would have given (had they participated) differ systematically from those reported for respondents.

For NSOPF:99, NCES policy standards require an analysis of survey nonresponse bias anytime an overall response rate of less than 70 percent is reported for any analysis categories with overall response rate defined as the weighted list participation rate multiplied by the weighted faculty response rate. For NSOPF:99, the overall response rate was 73.4 percent, with an 88.4 percent response rate for institution list participation and an 83.2 percent response rate among sampled faculty from those institutions (see Table 3.10 showing response rates by analysis categories and Table 3.11 showing response rates by institution type). Nonresponse analysis was conducted for four analysis categories that had overall response rates of 70 percent or below. They include private not-for-profit research ( 60.1 percent), private not-for-profit doctoral, including private medical institutions ( 64.6 percent), private comprehensive ( 67.4 percent) and the Public 2 -year institutions ( 68.0 percent).

Table 3.10-Overall faculty response rates, by analysis categories

| Analysis category | Institution <br> participation <br> rate | Faculty <br> response rate <br> (weighted) | Overall <br> response rate <br> (weighted) |
| :--- | :---: | :---: | :---: |
| Public, research | 95.3 | 85.1 | 81.1 |
| Private, research | 77.5 | 77.6 | 60.1 |
| Public, doctoral | 85.0 | 84.8 | 72.1 |
| Private, doctoral | 82.8 | 78.0 | 64.6 |
| Public, comprehensive | 88.4 | 86.6 | 76.6 |
| Private, comprehensive | 81.8 | 82.4 | 67.4 |
| Private, liberal arts | 85.5 | 87.0 | 74.4 |
| Public, 2-year | 84.6 | 80.6 | 68.2 |
| Other | 96.2 | 84.1 | 80.9 |
| Total | $\mathbf{8 8 . 4}$ | $\mathbf{8 3 . 2}$ | $\mathbf{7 3 . 5}$ |

NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 3.11-Overall faculty response rates, by detailed level and control of institution

| Institution type | Institution <br> participation <br> rate <br> (weighted) | Faculty <br> response rate <br> (weighted) | Overall <br> response rate <br> (weighted) |
| :--- | :---: | :---: | :---: |
| Public, research | 94.0 | 85.1 | 80.0 |
| Private, research | 77.5 | 77.6 | 60.1 |
| Public, other Ph.D. | 87.5 | 88.5 | 77.4 |
| Private, other Ph.D. | 86.7 | 81.6 | 70.7 |
| Public, comprehensive | 87.7 | 86.6 | 75.9 |
| Private, comprehensive | 85.0 | 82.4 | 70.0 |
| Public, liberal arts | 96.7 | 87.2 | 84.3 |
| Private, liberal arts | 87.1 | 87.0 | 75.8 |
| Public, 2-year | 85.7 | 80.6 | 69.1 |
| Private, 2-year | 96.3 | 81.6 | 78.6 |
| Public, medical | 79.3 | 76.7 | 60.8 |
| Private, medical | 73.7 | 68.7 | 50.6 |
| Private, religious | 96.6 | 94.8 | 91.6 |
| Public, other | 95.7 | 90.1 | 86.2 |
| Private, other | 96.6 | 75.8 | 73.2 |
| Total | $\mathbf{8 8 . 4}$ | $\mathbf{8 3 . 2}$ | 73.5 |

NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Since survey data for nonrespondents is not available, nonresponse bias cannot be accurately measured. However, a test for the likelihood of survey nonresponse bias, both overall and within these four stratum was conducted by: 1) comparing sample frame variables for respondents and nonrespondents, and 2) comparing data received early in the field period to data received at the end of the field period, under the assumption that later respondents may be more reflective of nonrespondents.

### 3.9.1 Comparison of sample characteristics for respondents and nonrespondents

A limited number of variables were provided on the sample frame that could be informative as to whether respondents were any different, demographically, from nonrespondents to the faculty survey. The analysis involved examining the overall distribution of respondents and nonrespondents among three demographic variables (gender, employment status and race/ethnicity) using the demographic information provided by each respondent's institution on their list of faculty.

Table 3.12 shows the number of respondents and nonrespondents by gender, employment status and race/ethnicity, and their percentage distributions, with unweighted and weighted response rates. Unfortunately, many institutions did not report demographic information about individual faculty; hence for each of these variables, between 30 and 38 percent of faculty are coded as unknown. Because institutions that did not provide gender were also less likely to provide
contact information, the response rate for "unknowns" is considerably lower than for faculty for whom demographic information was provided.

Among cases where gender information was provided by the institution, there is a negligible difference in response patterns by gender. Women were only slightly more likely to respond to the faculty survey ( 86.3 percent weighted response rate) than were men ( 85.6 percent) $(\mathrm{F}=.36$ ).

There was, however, a more significant pattern of nonresponse by employment status. Full-time faculty were significantly more likely to complete a questionnaire ( 87.7 percent weighted response rate) than were part-time faculty ( 80.7 percent) ( $\mathrm{F}=30.0$ ). The lower response rate among part-time faculty was likely a result both of higher noncontact rates (with greater mobility of the part-time population, their limited time on campus, and the difficulties institutions have in providing current information about their part-time faculty) as well as higher refusal rates (with part-time faculty feeling less of a sense of obligation to participate). Final weight adjustments were utilized to reduce nonresponse bias as a result of this response pattern.

When comparing response patterns by race/ethnicity, no differences emerged. Black (nonHispanic) faculty had roughly the same response rates ( 81.1 percent) as White, non-Hispanic faculty ( 83.4 percent) ( $\mathrm{F}=1.04$ ). There was no significant difference between response patterns of Hispanic (82.4 percent), Asian/Pacific Islander (81.7) and White, non-Hispanic faculty (83.4 percent).

Table 3.12-Distribution of respondents and nonrespondents by demographic group

| Demographics of respondents and nonrespondents | Nonrespondents | Percentage distribution of nonrespondents | Respondents | Distribution of respondents | Total eligible sample | Distribution of eligible sample | Response rate (unweighted) | $\begin{gathered} \text { Response } \\ \text { rate } \\ \text { (weighted) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |  |  |  |  |
| Male | 480 | 30.0 | 7,250 | 41.2 | 7,727 | 40.2 | 93.8 | 85.6 |
| Female | 390 | 24.3 | 5,950 | 33.8 | 6,348 | 33.0 | 93.7 | 86.3 |
| Unknown | 730 | 45.6 | 4,400 | 25.0 | 5,138 | 26.7 | 85.6 | 77.5 |
| Employment Status |  |  |  |  |  |  |  |  |
| Full-time | 570 | 35.6 | 9,680 | 55.0 | 10,249 | 53.3 | 94.4 | 87.7 |
| Part-time | 490 | 30.6 | 4,450 | 25.3 | 4,948 | 25.8 | 89.9 | 80.7 |
| Unknown | 540 | 33.8 | 3,470 | 19.7 | 4,016 | 20.9 | 86.4 | 77.6 |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| White, non-Hispanic | 750 | 46.9 | 8,020 | 45.6 | 8,773 | 45.7 | 91.4 | 83.4 |
| Black, non-Hispanic | 90 | 5.6 | 1,040 | 5.9 | 1,133 | 5.9 | 91.8 | 81.1 |
| Hispanic | 100 | 6.3 | 860 | 4.9 | 963 | 5.0 | 89.3 | 82.4 |
| Asian/Pacific Islander | 80 | 5.0 | 800 | 4.5 | 878 | 4.6 | 91.1 | 81.7 |
| American Indian/ Alaska Native | 10 | 0.6 | 90 | 0.5 | 101 | 0.5 | 89.1 | 77.0 |
| Unknown | 570 | 35.6 | 6,790 | 38.6 | 7,365 | 38.3 | 92.2 | 83.6 |
| Total | 1,600 | 100 | 17,600 | 100 | 19,213 | 100 | 91.6 | 83.2 |

NOTE: To protect the confidentiality of the data, some numbers have been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary
Faculty (NSOPF:99).

### 3.9.2 Comparison of responses between early and late responders

Nonresponse bias was also examined by comparing data received early in the field period to data received throughout the rest of the field period. The pattern of mean response was modeled to key items by the date the survey was received or completed for the four low response strata, as well as for the sample overall.

In the figures that follow, the potential for nonresponse bias is modeled based on the pattern of mean response by date of response for full-time or part-time respondents overall, and in the four analysis categories with low response (private research, private doctoral, private comprehensive, and Public 2-year). The length of field period was subdivided into 10 groupings; the first nine are spaced at 30 -day intervals from the date the first questionnaire request was mailed to the sample member, which varied by wave of data collection; the final grouping collapses the last 150 days of the field period into one group. (A much larger proportion of responses were, of course, collected during the early part of the field period for each wave). Response time was measured as the number of days between the mailing date of the first questionnaire to the date the individual responded.

These figures show the pattern of cumulative mean response (using unweighted means, or averages) for the selected strata by date of survey completion for the following variables:

- Percentage indicating their principal activity was teaching
- Percentage teaching classes for credit
- Percentage of time spent teaching undergraduates
- Percentage of faculty who indicated their rank was assistant professor
- Percentage who held a Ph.D.
- Percentage of faculty in the humanities
- Percentage of faculty who indicated they were tenured
- Mean age of faculty and instructional staff

Plotted lines in each figure represent the cumulative mean response for the sampled population overall, and the four selected analysis categories. If mean responses from respondents early in the field period are consistent with respondents throughout the entire field period, then there is likely little or no bias caused by collecting additional responses late in the field period. This is indicated by the plot of the cumulative mean response remaining relatively flat throughout data collection.

Significance testing was performed, comparing the responses from the first 30 days of data collection to the overall responses, including the first 30 days and those who responded after 5 more months after the initial mailing. We did not detect any bias between early responders and late responders. This was true even when different strata were analyzed, with one exception. There was a lower percentage of part-time Humanities faculty in private comprehensive institutions among early responders than late responders.

Figure 3.1-Cumulative percentage of full-time faculty and instructional staff who indicated that their principal activity was teaching, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.2-Cumulative percentage of part-time faculty and instructional staff teaching classes for credit, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.3-Cumulative mean percentage of time spent by full-time faculty and instructional staff teaching undergraduates, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.4-Cumulative percentage of full-time faculty and instructional staff who indicated that their rank was assistant professor, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.5-Cumulative percentage of part-time faculty and instructional staff who indicated that their highest degree was a Ph.D., by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.6-Cumulative percentage of part-time faculty and instructional staff who indicated their field of teaching was Humanities, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.7-Cumulative mean age of full-time faculty and instructional staff, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 3.8-Cumulative percentage of full-time faculty and instructional staff who indicated that they were tenured, by selected types of institutions and by response time: Fall 1998


NOTE: The "overall" data represent results from all institutions, not just the institution types shown on the chart. Sample excluded for-profit institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

## CHAPTER 4. Institutional Recruitment And Data Collection: Procedures And Results

### 4.1 Overview

This chapter reviews the procedures used to recruit participating institutions and to collect complete and accurate lists of faculty and institution questionnaires from the total sample of 960 institutions. This task presented several special challenges:

- For the faculty sample to be complete and accurate, lists of faculty had to be inclusive of all targeted groups-including both instructional and non-instructional faculty (full- and parttime) and all those with instructional duties as of November 1, 1998. As in NSOPF:93, this was problematic for many institutions that do not maintain accurate files of part-time or contractual instructors without faculty status.
- Counts obtained from faculty lists had to be consistent with counts provided on the institutional questionnaire. In the 1993 study, this proved problematic, in part because the questionnaire and list request were not mailed to the institutions at the same time. ${ }^{14}$
- To expedite data collection for the faculty component, lists of faculty had to provide complete and timely contact information for faculty, including home addresses and telephone numbers, if possible. Faculty results in the 1993 and 1999 field tests confirm the positive impact of obtaining home address and telephone information on faculty response rates. ${ }^{15}$ Unfortunately, requesting this contact information leads to delays at some institutions that must clear such requests with their Faculty Senate or policy review panels, and causes initial refusals at other institutions that have institutional prohibitions against the release of such information. (Institutions are assured they may participate without providing personal information about faculty.)
- Strained faculty/administration relations at some postsecondary institutions (including statewide systems engaged in labor negotiations with faculty, etc.) resulted in an increased reluctance to release any information about faculty, or even to ask them to participate in a research survey.
- The request for NSOPF data competed with other data requests, including another major faculty study, regional accreditation procedures, and mandatory requests from state and local authorities and governing boards. As a result, many institutions gave minimal priority to any information request that was not mandatory. Moreover, many institutions had key resources tied up in updating personnel software systems and/or preparing fixes for the anticipated "millennium bug."

Based on the combined findings of the 1998 field test, and the results of the 1993 study, Gallup implemented several new procedures to address these challenges:

[^10]- An additional 146 institutions were included in the sample frame from the inception of the study to adjust for the estimated 15 percent of institutions that were likely to refuse to participate. This was in direct response to the difficulties encountered in 1993, when a replacement sample had to be drawn late in the field period. Adding an additional pool of schools into the sampling frame at the outset would allow the recruitment and data collection process to proceed on schedule.
- The reference date for the fall term was changed from October 15 to November 1. Because rosters of part-time and continuing education faculty are often finalized later in the fall term than comparable rosters of full-time faculty, it was assumed that a later reference date would result in more inclusive lists. The change in reference date also meant that data collection would have to start two weeks later.
- The deadline for receiving faculty lists was moved to December 15 , six weeks after the reference date and initial mailing to institution coordinators. This schedule was based on the recommendations of a focus group of institutional staff conducted after the 1993 study, which suggested that institutions need from four to six weeks to comply with such a request.
- As in the field test, instructions for preparing the list of faculty and the institution questionnaire were mailed directly to the coordinator at the same time, increasing the likelihood that the same individual would complete both requests. Moreover, the separate role of "institution respondent" was eliminated; the institution coordinator now was asked to prepare (or supervise preparation of) both the institution questionnaire and the list of faculty.
- E-mail prompts were used to notify coordinators of pending deadlines. The field test demonstrated that e-mail prompts were an efficient and effective way to prompt institutional coordinators.
- Coordinators were given the option of completing the institution questionnaire on the World Wide Web or a paper version of it. Use of the Web questionnaire results in higher data quality and greatly reduces the time needed to process the data.
- Discrepancies between faculty counts in the list and questionnaire and other major list irregularities were followed up by the project coordinator, and were resolved prior to sampling whenever possible.
- Institutions that declined to provide home addresses for their entire faculty lists were recontacted and asked to supply home addresses and telephone numbers for only the sampled faculty.
- Refusal aversion and conversion was conducted with third parties representing faculty concerns (such as faculty unions and Faculty Senate representatives) when necessary to secure the institution's participation.
- Institutions were offered a specially prepared "peer report" based on their institution questionnaire data to make participation more attractive to them.
- The number of forms was reduced and procedures streamlined to minimize burden to the institution.


### 4.2 Institution Recruitment: Follow-up with the CAO's (Chief Administrative Officer) Office

### 4.2.1 Mailing to the CAO

An initial mailing of the information packet was sent to the CAO via two-day priority mail on September 3, 1998. The purpose of the mailing was to introduce the CAO to the study and to secure the name of an appropriate individual to serve as institution coordinator (i.e., the individual at the school who would be responsible for the completing the data request). The mailing contained the following items:

Cover letter. The cover letter to the CAO, printed on NCES letterhead and signed by the Commissioner of NCES, asked the institution to designate an individual to serve as institution coordinator for the study. The letter explained the purpose of the study, outlined the confidentiality laws that protect data released by institutions and faculty respondents, and provided an estimate of burden. The letter noted that participating institutions would be eligible to receive a specially prepared "peer report" that compared data from their institution to other higher education institutions in the same Carnegie classification as well as other schools nationally. The letter requested that the CAO return the enclosed Confirmation Form (or name an institution coordinator) within five days.

Confirmation form. This form requested that the CAO name an institution coordinator who would be responsible for providing the faculty list, completing the institution questionnaire, and assuring that the total number of faculty reported on the list of faculty was consistent with faculty counts in the institution questionnaire. It also requested contact information (including e-mail addresses) for both the CAO and the coordinator.

Publications request form. This document described the NSOPF publications available from NCES, including the customized "peer reports" available to participating institutions and provided a form for requesting the public use data file from the 1993 study, any of the reports available from the 1993 study, as well as reports planned for the 1999 study.

Informational brochure. The brochure provided additional background information about NSOPF and its objectives, including highlights of findings from NSOPF:93, and the list of endorsing organizations. Information about the sponsors and project staff was also included (see Appendix D).

All materials prominently displayed the NSOPF:99 toll-free number and e-mail address to ensure that the institution staff had timely access to project staff to answer questions and resolve problems in preparing the list. The project coordinator responded to all incoming calls and emails.

### 4.2.2 Initial telephone contact and follow-up with the CAO's office

A select group of Gallup interviewers was trained on September 8, 1998 to conduct follow-up with the CAO's office. Interviewers were chosen for their persuasive talents and experience in conducting surveys with elite populations. The training included instruction in refusal aversion,
dealing with gatekeepers and other institutional staff, and answering questions about the study. Calling began the same afternoon.

The chief purpose of the call was to prompt the CAO's office to provide the name, title, mailing and e-mail addresses for the individual chosen to serve as the institution coordinator. This could be done by giving the information directly to the interviewer over the telephone, or by faxing or mailing the completed Confirmation Form to Gallup within five days.

### 4.3 Mailings to the Institution Coordinator

Mail procedures for NSOPF:99 differ in three significant ways from those used in NSOPF:93:

- The data collection packet was preceded by a notification letter. ${ }^{16}$
- The data collection packet was mailed directly to the coordinator. ${ }^{17}$
- The mailing contained both the institution questionnaire and the list collection packet. The coordinator was asked to complete and return all materials at the same time. ${ }^{18}$

The notification letter was mailed to each designated coordinator on October 5, 1998. The letter introduced the coordinator to the study, described the desired schedule for the study, and described the roles and duties of the institution coordinator. The NSOPF brochure accompanied the letter. The project toll-free number and e-mail address was featured on all materials, and coordinators were encouraged to call or e-mail any questions or concerns.

A complete data collection packet was mailed to the institution coordinators on October 23, 1998. The mailing was timed to immediately precede the November 1, 1998 reference date for the fall term. The packet contained the following materials:

Introductory letter to the institution coordinator. This letter (see Appendix D) informed the institution coordinator that his/her school had been randomly selected to participate in the study, and explained the role of the designated institution coordinator. December 15, 1998 was given as the initial deadline for return of the faculty lists.

How to prepare the faculty list. This document provided complete instructions on preparing the faculty list, specifying who should be included or excluded as faculty and what information should be provided about each faculty member.

How to submit electronic lists of faculty. These instructions provided the institution with guidelines on preparing and documenting electronic lists so that they could be easily understood

[^11]and worked with by Gallup operators and programmers. It also provided a place for the institution to specify any additional information needed to read or process the list.

Commonly asked questions. A separate document provided the coordinator with answers to questions frequently raised in previous NSOPF studies.

Affidavit of nondisclosure. The NCES Affidavit of Nondisclosure and Confidentiality affirmed that the institution coordinator would maintain the confidentiality of any information which identified individual respondents.

Informational brochure. This was the same document mailed to the CAO-see above.
Institution questionnaire. The institution questionnaire was substantially redesigned into a streamlined, optically-scannable format. (The contents of the questionnaire are discussed in Chapter 2.)

### 4.4 List Collection Procedures

The survey packet mailed to coordinators instructed them to provide a list of full- and part-time faculty and instructional staff, which would include all personnel who had faculty status or instructional responsibilities during the 1998/1999 fall term (i.e., the term which included the reference date November 1, 1998). The list could be provided in any format (paper or electronic); however, institutions were instructed to provide an electronic list if possible. Electronic lists could be submitted on diskette, or sent by e-mail or FTP (file transfer protocols). Institutions were instructed that the total count of faculty derived from their list should match the counts of full- and part-time faculty provided in the accompanying institution questionnaire. An instruction booklet sent to each institution provided background information on how the definition of faculty compared to the definition used in the IPEDS study. For each individual listed, the institution was also instructed to provide the following information:

Information for sampling and analysis. The following sampling information was requested to aid in sample design and selection of faculty: name, academic discipline, department/program affiliation, full-time/part-time status, gender and race/ethnicity. Institutions were also asked to code the IPEDS job classification of each individual on the list to facilitate comparison of list data with faculty questionnaire data. Employee IDs were requested in order to eliminate possible duplicates from the sample.

Contact information. To facilitate data collection, institutions were asked to provide both the faculty member's institution and home mailing address, telephone number(s), and an e-mail address.

Institutions were instructed to return their institution questionnaire at the same time as they submitted their list of faculty, but they were allowed to submit materials as they were completed. Institutions also had the option of completing the questionnaire on the World Wide Web or via a paper questionnaire included in their data collection packet. In addition, they were asked to sign, notarize, and return the NCES Affidavit of Nondisclosure. Institutions providing electronic lists were asked to complete a form documenting the preparation and layout of the faculty list.

### 4.5 Mail and Telephone Follow-up with the Coordinator

Follow-up with coordinators was conducted via telephone, mail and e-mail. The field period for list collection encompassed approximately 54 weeks. (Section 4.7 includes a discussion of factors influencing the duration of the field period.)

### 4.5.1 E-mail prompts

Approximately 84 percent of all institutions provided an e-mail address for the institution coordinator. E-mail prompts were periodically sent to nonresponding coordinators, reminding them to generate their lists and complete the questionnaire by the deadline. The first prompt was sent on November 6, 1998 just after most schools returned from holiday break. Subsequent emails were sent on December 11, 1998, February 17, 1999 and May 6, 1999. The project coordinator continued to use e-mail to prompt and communicate with specific coordinators throughout the field period.

### 4.5.2 Telephone prompting

Telephone prompting to the institution coordinators began on November 2, 1998, following the training of a select team of interviewers located in Gallup's Lincoln, Nebraska facility. The interviewers were trained to prompt for completion of all materials (including the list of faculty and accompanying documentation, institution questionnaire, and the Affidavit of Nondisclosure). Full-scale prompting continued until February 3, 1999, when all non-participating institutions were forwarded to the project coordinator for review and possible refusal conversion (see Section 4.5.3 for a description of refusal conversion procedures).

### 4.5.3 Refusal conversion

Refusal conversion was handled by a team consisting of the project coordinator and two executive interviewers selected for their persuasive talents and experience in working with elite populations. The project coordinator reviewed all refusals. Approximately 285 of the 960 institutions ( 30 percent of the sample) indicated their refusal or inability to participate at some point in the course of the field period; other non-cooperating institutions were treated as "hidden refusals" and were also handled by this same team.

After February 3, 1999 all pending institutions were turned over to this team for intensive followup and refusal conversion. Refusal conversion efforts focused primarily on securing a usable list of faculty. Refusal converters were authorized to offer compensation to institutions for staff time used in production of the list, to negotiate with institutions that had difficulty in providing specific items of data requested, and to provide any additional assistance as necessary.

On May 28, 1999 a letter was mailed to all institutions that had not yet sent a list or institution questionnaire. The letter again offered Gallup's assistance in collecting faculty data (including an offer of compensation for staff time used in preparation of the list).

As in earlier cycles of the study, lack of time and staff was the reason most frequently given for refusing to participate, and was also cited by those institutions who were cooperative but unable to comply with the request for data in a timely manner. For these institutions, state and federally mandated reporting requirements, along with the school's own internal reporting requirements, were cited as having precedence over voluntary studies such as NSOPF. Compensation (which
was requested by only a small number of institutions) did not address the overriding issue for most of these institutions, which is that staff resources were simply not available to work on the request.

A number of institutions cited their commitment to take part in a major university-sponsored study that was being fielded at the same time as NSOPF:99. These institutions were concerned that responding to another study might compromise their results, or unfairly burden faculty. Some of these institutions agreed to participate only if the deadline for institutional participation was extended into June 1999 or late summer when they were likely to have more time to handle the request.

Several institutions also expressed considerable concern over the release of "confidential" information on faculty-particularly home addresses and telephone numbers. This was generally a temporary concern, since institutions were assured they could participate without releasing this information. However, a handful of institutions declined to even release the names of faculty; in two instances, schools were allowed to sample "anonymously" by assigning all faculty numerical identifiers and forwarding questionnaires to the faculty themselves.

Increasingly, institutions referred research requests to their Faculty Senate for approval, or if they had concerns about releasing information about faculty, to their legal counsel or an institutional review board. These procedures create difficulties, since such parties often did not have access to complete information about the study or knowledge of the confidentiality laws that protected faculty responses. Hence, it was sometimes necessary to contact faculty representatives and others outside of the school's official administration to secure an institution's participation. These calls were handled exclusively by the project coordinator. In one instance, a statewide university system was involved in ongoing labor negotiations with the union representing faculty and was initially warned by the union that any faculty surveys conducted during negotiations would be considered an unfair labor practice. By contacting union representatives directly, Gallup was able to address the union's concerns and, ultimately, secure their support for the study.

Despite increased resistance to survey participation at postsecondary institutions, the above refusal conversion efforts resulted in 85 percent of institutions ultimately agreeing to participate, with participation defined as providing a list of faculty and instructional staff.

### 4.5.4 Telephone prompting and interviewer-assisted data collection for the institution questionnaire

Telephone prompting for the institution questionnaire was coordinated with prompts for the list of faculty. Coordinators were encouraged to return the list and questionnaire at the same time. Coordinators who had mailed their list of faculty but had not sent the institution questionnaire continued to receive telephone and e-mail prompts until the questionnaire was received. On August 11, 1999, a team of specially trained interviewers began calling institution coordinators to collect the data by telephone, if possible, or to prompt for its immediate completion and return. Institutions who had already completed the list of faculty were prioritized; however, all institutions with outstanding questionnaires were contacted for this effort. A training session was conducted to acquaint interviewers with the instrument; they were provided with additional study time to review relevant project materials and the training manual. Interviewers were trained to identify likely sources of information within institutions, answer questions about the study, and avert refusals.

Because the institution questionnaire was not designed as a telephone interview, and asked for factual information that may require the compilation of records data, data collection was seldom completed in one interview session. Typically, the more general benefits questions would be answered on the initial call; faculty counts and percentages would be faxed later, or retrieved in a subsequent call. It was often necessary as well to collect data from more than one source at the institution.

If institutions were part of a state-wide, city-wide or multi-campus system in which benefits data were the same for all schools in the system, benefits data for multiple institutions could sometimes be collected from a single system-wide source (i.e., a system-wide benefits or institution research office). In some circumstances, these data could also be abstracted from common elements of data supplied by a sister institution.

### 4.6 Data Reconciliation and Retrieval

### 4.6.1 Data reconciliation

Once both list and questionnaire data were received, a list discrepancy module within the SMS (Survey Monitoring System) compared faculty counts from the two datasets, and flagged institutions with a discrepancy in faculty counts greater than five percent overall, or five percent in the part-time counts. (See Chapter 8 for a discussion of discrepancies in faculty counts.) If questionnaire data were not yet available, list counts were compared to data collected through the Integrated Postsecondary Education Data System (IPEDS). Follow-up with these institutions was conducted by a team consisting of the project coordinator and two executive interviewers with demonstrated experience in working with CAOs and coordinators on earlier phases of the project. Data were considered reconciled if:

- A new list was provided, closely matching the institution questionnaire counts
- The institution questionnaire counts were corrected to match the list counts
- Corrections were made both to the list and to questionnaire counts to provide matching numbers

Although these efforts delayed list processing and sampling efforts, they paid clear dividends in data quality. A total of 234 ( 29 percent of participating institutions) were flagged for data reconciliation. Of this number, 96 ( 41 percent) were able to provide a new, more complete list and/or corrected faculty counts. In 1993, only 73 institutions ( 7.5 percent) were contacted prior to sampling to resolve discrepancies with IPEDS (since questionnaire data were not available at the time); the effort was halted when only 15 percent of the institutions were able to resolve their discrepancies. Clearly, fielding the questionnaire and list request at the same time not only reduced the number of discrepancies between the datasets, but also made many of those discrepancies that did occur far easier to identify and resolve.

Some institutions were able to confirm the accuracy of counts provided in the institution questionnaire, but could not correct their lists. Frequently, for example, institutions did not maintain accurate records of some types of faculty (particularly part-time instructors, instructors hired on a term-by-term basis and continuing education faculty). Once it was confirmed that
these lists could not be corrected (even after Gallup offered assistance and/or compensation for providing more accurate data), these institutions were processed with the discrepancy intact. For a more detailed analysis of list/questionnaire discrepancies, see Chapter 8 .

### 4.6.2 Retrieval of list data

When lists arrived that were difficult or impossible to process, they were forwarded to the project coordinator who followed up with the school to retrieve a usable list. Examples of inadequate lists include: electronic lists in unknown or unrecognizable formats; electronic lists in formats that could not be processed electronically; lists with incomplete or indecipherable column headings; electronic files that contained corrupted data; illegible paper lists; and paper lists that were too large or fragmented to be processed efficiently.

All follow-up for these lists was conducted by the project coordinator. A total of 56 lists required additional follow-up with the school-either to secure a replacement list or to retrieve information essential to processing the list. In every case, the necessary data were retrieved to allow the lists to be processed.

### 4.6.3 Retrieval of affidavits

On June 7, 1999, a letter and a copy of the Affidavit of Nondisclosure and Confidentiality was mailed to 212 coordinators who had supplied a list of faculty, but had not sent in the accompanying affidavit. A signed affidavit was required before the identities of any sampled faculty could be released to the coordinator and before the coordinator could be enlisted to prompt or mail prompts to nonresponding faculty. The letter was followed by a telephone call from a Gallup executive interviewer requesting the affidavit. A total of 63 ( 30 percent) of the 212 coordinators returned affidavits as a result of this effort. Overall, 544 of the 819 participating institutions ( 67 percent) returned a signed and notarized affidavit.

### 4.6.4 Retrieval of faculty contact information

On February 10, 1999, a team of executive interviewers was trained to contact institution coordinators who had provided the signed NCES Affidavit of Nondisclosure, but had not provided home address or telephone numbers for faculty. The purpose of the call was to retrieve home contact information for just the sampled faculty on the list. Most institutions not providing this information had institutional prohibitions against any release of faculty addresses and telephone numbers. Fewer than five percent of the institutions contacted for retrieval responded by providing home addresses for some or all of the selected faculty. Others, however, provided more detailed campus address information, or provided forwarding information for those faculty no longer on campus. A second wave of retrieval calls for home contact information was conducted in June 1999. An assessment of the number of home addresses and telephone numbers received can be found in Table 4.4.

### 4.6.5 Inbound contacts

Institutions were encouraged to call the project toll-free number if they had any questions or anticipated any significant delays. Approximately 1,600 messages were received by telephone and 600 messages by e-mail (the latter number includes 218 lists received as e-mail attachments). Although the actual number of contacts varied by school, on average, each institution made about 2.3 queries about the study. A large proportion of calls and e-mails were direct responses to telephone and e-mail prompts. Particularly with the e-mail prompts, it was common for respondents to reply immediately to each prompt. Questions asked by institution contacts concerned project deadlines, format of lists, information to be included on the list, questions about particular items on the questionnaire and questions about using the Web questionnaire.

### 4.6.6 Data from supplementary sources

In 1993, a course catalog and faculty directory was requested from each participating institution. The prevalence of this information on the World Wide Web made it unnecessary to request this information directly from institutions for NSOPF:99. For the duration of the field period, Gallup subscribed to a service operated by the Career Guidance Foundation, a not-for-profit organization that offered copies of course catalogs online for most American institutions, as well as links to the institution's Website, if available. Institutional Web sites (usually containing at least partial directories of faculty and staff) could also be accessed directly. These sources were routinely reviewed by Gallup staff for useful contact information not provided on the list supplied by the institution, such as current e-mail addresses, department and faculty telephone numbers, and so on. In the event that an institution suggested the most complete (or only) list of faculty they could provide was contained in a faculty directory or course catalog online, the information could be immediately reviewed for usability and downloaded to expedite processing.

### 4.7 Results of Institutional Recruitment

As indicated in Table 4.1 below, NSOPF:99 achieved an overall institution participation rate of 85.4 percent. It required 54 weeks to achieve this goal, about 24 weeks longer than the amount of time required for NSOPF:93. (The field period in 1993, moreover, was a full 10 weeks longer than in 1988.) The later start date necessitated by a November 1 reference date for data collection may have played some role in the longer field period. The deadline date for NSOPF:99 was a full eight weeks later than the one set for NSOPF:93. Moreover, the proximity of the deadline date to the end of the fall term meant that schools that had not completed the list and questionnaire by the December 15 deadline were unlikely to return to the request until late in the winter/spring term as each new academic term places heavy demands on staff time and resources, making prompt cooperation more difficult. The decision to mail both the list and institution questionnaire at the same time also delayed returns at some institutions.

Table 4.1—Institution participation rates by NSOPF cycle

| NSOPF <br> Cycle | Institutional <br> sample | Number <br> providing list | Participation rate <br> (unweighted <br> percent) | Length of <br> effort |
| :--- | :---: | :---: | :---: | :---: |
| 1987 Field test | 105 | 96 | 91.4 | 9 weeks |
| 1988 Full-scale study | 480 | 449 | 93.5 | 24 weeks |
| 1992 Field test | 136 | 121 | 89.0 | 28 weeks |
| 1993 Full-scale study | 962 | 817 | 84.9 | 34 weeks |
| 1998 Field test | 162 | 146 | 90.1 | 30 weeks |
| 1999 Full-scale study | 960 | 819 | 85.4 | 54 weeks |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1988, 1993 and 1999 National Study of Postsecondary Faculty (NSOPF:88, NSOPF:93; NSOPF:99).

Significant delays were also caused by two other factors. First, a number of institutions had already committed to participating in another major faculty study, which was fielded virtually at the same time as NSOPF:99. These institutions were reluctant to burden faculty with another study, and were also concerned about jeopardizing the response rates of the study to which they were already committed. Hence, they were likely to refuse or insist on delaying their participation until the completion of the other study.

Secondly, many institutions had key staff and resources tied up in ensuring that their computer systems and software were Y2K compliant. As part of this effort, many institutions also chose to switch to new personnel software. While these software upgrades are likely to improve the ease of list collection for future rounds of NSOPF, they made faculty records needed to create a complete faculty list inaccessible for much of 1999.

As in 1993, however, the length of the field period required to complete data collection can be mostly attributed to several interrelated factors:

Increased resistance to surveys. As discussed in Section 4.5.3, many institutions felt overburdened by research requests, and expressed reluctance to participate in any surveys that were not mandated by state or federal agencies, or required for accreditation. The reasons for this include unwillingness to commit limited institution staff and resources to such efforts, and concern that such surveys may present a burden to faculty. A growing number of institutions routinely submit requests to their Faculty Senate for approval; moreover, some institutions refused because of a reluctance to ask for approval from their Faculty Senate.

Time and staff constraints. Many cooperative and sympathetic institutions failed to comply with the NSOPF: 99 data request in a timely manner because they did not have staff available to complete the request. These institutions requested multiple deadline extensions; some were unable to comply despite the extended length of the field period.

Difficulties in compiling the information requested. As in 1993, readily accessible, reliable lists of part-time faculty and instructional staff did not exist at many institutions. Instructional staff without faculty status (who may teach only sporadically, or for a single term) may be listed only in files that do not indicate which academic terms they taught in, or in files where they were
not clearly distinguishable from other kinds of institutional staff. Institutions often claimed that it would be too labor intensive to create a list of these individuals from scratch.

The request for faculty contact information (such as home addresses and telephone numbers) posed a special problem for some institutions, since such requests increased the likelihood that the survey had to be submitted for approval to an institutional review board, legal counsel, and/or the Faculty Senate. Typically, the approval process was quite time-consuming, and often led to a decision being taken based on incomplete or inaccurate information about the study. Institutions that refused participation because of institutional prohibitions or concerns about the release of "confidential" information were assured that such information could be omitted. If, however, the school's Faculty Senate initiated the refusal, the school administration was often reluctant to revisit or appeal the matter.

In combination, the above obstacles posed serious constraints on the ability to win the participation of sampled institutions in a timely manner. Persistence and intensive refusal conversion efforts were required to obtain the mandated 85 percent participation rate. The only remedy available was to provide institutions with more time and propose alternative remedies that might encourage their cooperation at a later date.

### 4.8 Characteristics of Institution Participants

Tables 4.2 and 4.3 illustrate institution participation rates by institution type and by level and control, respectively. Using weighted figures, an overall participation rate of 88.4 percent was achieved. Weighted participation rates varied from a high of 96.7 percent for "public, liberal arts" schools to a low of 73.7 percent for "private, medical" colleges (see Table 4.2). Although they represented a small number of schools, medical institutions were particularly resistant to releasing data about their faculty and, hence, comprised the least responsive strata. When institutions are collapsed by level and control (see Table 4.3), only one sector (private four year) falls short of rounding to the mandated 85 percent response rate. "Private, other" schools had the highest (weighted) participation rate at 96.6 percent whereas "private, 4 -year" schools had the lowest at 84.1 percent.

Table 4.2-Institution participation by institution type

| Institution type | Eligible <br> sample | Participating <br> institutions | Participation <br> rate <br> (unweighted) | Participation <br> rate (weighted) |
| :--- | ---: | :---: | :---: | :---: |
| Public, research | 87 | 82 | 94.3 | 94.0 |
| Private, research | 40 | 31 | 77.5 | 77.5 |
| Public, other Ph.D. | 64 | 56 | 87.5 | 87.5 |
| Private, other Ph.D. | 45 | 39 | 86.7 | 86.7 |
| Public, comprehensive | 137 | 120 | 87.6 | 87.7 |
| Private, comprehensive | 77 | 63 | 81.8 | 85.0 |
| Public, liberal arts | 19 | 18 | 94.7 | 96.7 |
| Private, liberal arts | 72 | 61 | 84.7 | 87.1 |
| Public, 2-year | 329 | 275 | 83.6 | 85.7 |
| Private, 2-year | 9 | 8 | 88.9 | 96.3 |
| Public, medical | 29 | 23 | 79.3 | 79.3 |
| Private, medical | 19 | 14 | 73.7 | 73.7 |
| Private, religious | 6 | 5 | 83.3 | 96.6 |
| Public, other | 6 | 5 | 83.3 | 95.7 |
| Private, other | 20 | 19 | 95.0 | 96.6 |
| Total | $\mathbf{9 5 9}$ | $\mathbf{8 1 9}$ | $\mathbf{8 5 . 4}$ | $\mathbf{8 8 . 4}$ |

NOTE: Sample excluded for-profit institutions. Public other institutions include medical and specialized institutions. Private other institutions include medical, religious and specialized institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 4.3-List participation by level and control of institution

| Level and control | Eligible <br> sample | Total <br> completed | Participation rate <br> (unweighted) | Participation rate <br> (weighted) |
| :--- | ---: | :---: | :---: | :---: |
| Public, 4-year | 302 | 273 | 90.4 | 90.6 |
| Public, 2-year | 314 | 262 | 83.4 | 84.6 |
| Public, other | 55 | 44 | 80.0 | 90.2 |
| Private, 4-year | 225 | 185 | 82.2 | 84.1 |
| Private, 2-year | 8 | 7 | 87.5 | 96.1 |
| Private, other | 55 | 48 | 87.3 | 96.6 |
| Total | $\mathbf{9 5 9}$ | $\mathbf{8 1 9}$ | $\mathbf{8 5 . 4}$ | $\mathbf{8 8 . 4}$ |

NOTE: Sample excluded for-profit institutions. Public and private 4-year institutions include comprehensive, liberal arts, research, and other Ph.D. institutions. Other institutions include medical and specialized institutions. Private other institutions include medical, religious and specialized institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 4.4 details the type of sampling and contact information that was received from participating institutions on their faculty lists. In general, whenever an institution supplied information it was usually for all faculty although there were some very glaring discrepancies. In the case of campus addresses and telephone numbers, Gallup could often supplement what was
received from the institution by conducting its own lookup of the institution's Website for this information. Other types of information could not be supplemented in this manner. When data provided for any faculty are considered, the highest data item ( 99.8 percent) was in providing the names of faculty, whereas the lowest item ( 38.6 percent) was for a home telephone number. Typically, institutions provided less contact information (i.e., campus telephone [ 63.8 percent], home address [ 48.3 percent], and home telephone [ 38.6 percent], e-mail address [ 40.5 percent]) and relatively more sampling information (i.e., department [ 88.8 percent], discipline [ 56.1 percent], race/ethnicity [ 63.7 percent], gender [ 87.5 percent], employment status [ 86.1 percent]). Institutional restrictions, coupled with increased concerns about confidentiality, resulted in the release of less identifying information. Moreover, many institutions that were willing, in principle, to supply this information were not always able to supply it for all faculty. Only eight percent of institutions supplied a home telephone number for all faculty. (The same was true for e-mail addresses [ 8.2 percent].) Many institutions reported that they did not have complete address information for contractual faculty not located on campus. Others had policies that permitted individual faculty to request that their contact information not be given out, or agreed to supply home addresses for sampled faculty only.

E-mail addresses were often supplied for full-time faculty only; part-time faculty may use a shared, departmental e-mail address, or not have access to an institution e-mail account. Institutions often did not supply e-mail addresses because of the difficulty of merging directory information with other information from other databases; however, e-mail addresses for most full-time faculty were generally available at the institution's Website.

All institutions provided at least a main campus address where faculty received their mail. At smaller institutions, a more detailed individual campus address was simply not necessary. However, some institutions had confidentiality concerns or institutional prohibitions against releasing even individual campus addresses or telephone numbers. Others could not merge directory files with other faculty information. Part-time faculty often did not have a telephone number listed in the campus directory, and had to be contacted through a main or department telephone number.

Table 4.4-Data items provided by participating institutions

| Requested <br> information | Data provided <br> for any faculty <br> (unweighted <br> percent) | Data provided <br> for all faculty <br> (unweighted <br> percent) | Data provided for <br> any faculty in 1993 <br> (unweighted percent <br> where available) |
| :--- | :---: | :---: | :---: |
| Name | 99.8 | 99.8 | 98.9 |
| Individual campus <br> address | 77.0 | 66.9 | 89.8 |
| Individual campus <br> telephone | 63.8 | 35.6 | $*$ |
| Home address | 48.3 | 28.9 | $* 2.6$ |
| Home telephone | 38.6 | 7.6 | $*$ |
| E-mail address | 40.5 | 8.2 | $* *$ |
| Department | 88.8 | 75.3 | $*$ |
| Discipline | 56.1 | 38.9 | $* * 87.8$ |
| Race/ethnicity | 63.7 | 54.4 | 74.4 |
| Gender | 87.5 | 81.8 | 89.5 |
| Employment status | 86.1 | 83.1 | 87.8 |
| Employee ID | 46.5 | 40.5 | 53.5 |

*Total percentage not reported in 1993
**Not collected in 1993
***May include department and discipline combined
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 4.5 illustrates the type of lists that were received from participating institutions. Approximately two-thirds ( 64.9 percent) of institutions supplied a list in an electronic format (i.e., diskette, electronic e-mail or FTP) and the remaining one-third ( 35.1 percent) submitted paper lists. Of those submitting electronic lists, 26.7 percent supplied the list as an e-mail attachment, a feature that was not available as an option to institutions in 1993.

Table 4.5-Type of lists received

| Type of list | Number of <br> Institutions | Percent <br> (unweighted) | Percent in 1993 <br> (unweighted) |
| :--- | :---: | :---: | :---: |
| Paper | 287 | 35.1 | 32.2 |
| Electronic | 532 | 64.9 | 67.8 |
| Diskette | 304 | 37.1 | 66.2 |
| Electronic (e-mail) | 218 | 26.7 | $<1$ percent |
| Electronic (FTP) | 9 | 1.1 | $<1$ percent |
| CD-ROM | 1 | $<1$ percent | 0 |
| Tape | 0 | 0 | 1.0 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 4.6 shows the type of lists returned by the type of institution. Public 4 -year institutions were most likely to return lists electronically ( 77.5 percent submitted a list either by diskette or by e-mail), and Public 2-year and private other institutions were most likely to return paper lists (45.1 percent and 47.4 percent, respectively).

Table 4.6-Type of lists received by level and control

| Level and control | Total | Paper (percent) | Electronic <br> (percent) |
| :--- | ---: | :---: | :---: |
| Public, 4-year | 275 | 22.2 | 77.5 |
| Public, 2-year | 275 | 45.1 | 54.9 |
| Public, other | 28 | 39.3 | 60.7 |
| Private, 4-year | 195 | 36.4 | 63.6 |
| Private, 2-year | 8 | 37.5 | 62.5 |
| Private, other | 38 | 47.4 | 52.6 |

NOTE: Sample excluded for-profit institutions. Public and private 4 -year institutions include comprehensive, liberal arts, research, and other Ph.D. institutions. Other institutions include medical and specialized institutions. Private other institutions include medical, religious and specialized institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999
National Study of Postsecondary Faculty (NSOPF:99).

### 4.9 Data Collection Results: Institution Questionnaire

Table 4.7 compares institution questionnaire response rates for all three cycles of NSOPF. A 90.2 percent unweighted response rate was achieved for NSOPF:99, similar to the response rate achieved for NSOPF:93 ( 90.6 percent) and slightly higher than the rate for NSOPF:88 (88.3 percent). Institutions were more likely to complete an institution questionnaire ( 90.2 percent) than they were to submit a faculty list ( 85.4 percent). The completion of the questionnaire was often delayed for many of the same reasons as the list, as well as due to the need to collect data from multiple offices. The number of respondents needed to complete the institution questionnaire ranged from one to five, with an average of 1.9 respondents, similar to the 1.8 respondents needed to complete the 1993 questionnaire.

Table 4.7-Institution questionnaire response rates by NSOPF cycle

| NSOPF cycle | Number <br> eligible | Completed <br> questionnaires | Response rate <br> (unweighted) |
| :--- | :---: | :---: | :---: |
| 1987 Field test | 105 | 84 | 80.0 |
| 1988 Full-scale study | 480 | 424 | 88.3 |
| 1992 Field test | 120 | 94 | 78.3 |
| 1993 Full-scale study | 962 | 872 | 90.6 |
| 1998 Field test | 162 | 132 | 81.5 |
| 1999 Full-scale study | 959 | 865 | 90.2 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1988, 1993 and 1999 National Study of Postsecondary Faculty (NSOPF:88, NSOPF:93; NSOPF:99).

Tables 4.8 and 4.9 display institution response rates by institution type and by level and control, respectively. Weighted response rates ranged from a high of 100 percent for the small number of "public, other" and "private, other" schools to a low of 68.4 percent for "private, medical" institutions. The low questionnaire response rate for private medical schools reflected their low participation rates for the faculty list (see Table 4.2). With the exception of the private medical schools, "private, research" institutions ( 80.0 percent) and the "private, other Ph.D." institutions that had an 82.2 percent response, all of the other institution types exceeded the 85 percent mandated response rate target.

When institutions are collapsed by level and control, "private, 2-year" schools had the highest response rate ( 96.1 percent) whereas "private, 4 -year" schools had the lowest ( 89.7 percent)-see Table 4.9. This pattern is also reflected in their participation rates for the faculty list-see Table 4.3. Every sector exceeded the mandated 85 percent response rate target.

Table 4.8-Institution questionnaire results by institution type

| Institution type | Eligible <br> sample | Total <br> completes | Response rate <br> (unweighted) | Response rate <br> (weighted) |
| :--- | ---: | :---: | :---: | :---: |
| Public, research | 87 | 81 | 93.1 | 92.9 |
| Private, research | 40 | 32 | 80.0 | 80.0 |
| Public, other Ph.D. | 64 | 57 | 89.1 | 89.1 |
| Private, other Ph.D. | 45 | 37 | 82.2 | 82.2 |
| Public, comprehensive | 137 | 129 | 94.2 | 93.3 |
| Private, comprehensive | 77 | 68 | 88.3 | 87.8 |
| Public, liberal arts | 19 | 18 | 94.7 | 96.7 |
| Private, liberal arts | 72 | 66 | 91.7 | 92.5 |
| Public, 2-year | 329 | 298 | 90.6 | 92.8 |
| Private, 2-year | 9 | 8 | 88.9 | 96.3 |
| Public, medical | 29 | 27 | 93.1 | 93.1 |
| Private, medical | 19 | 13 | 68.4 | 68.4 |
| Private, religious | 6 | 5 | 83.3 | 96.6 |
| Public, other | 6 | 6 | 100.0 | 100.0 |
| Private, other | 20 | 20 | 100.0 | 100.0 |
| Total | $\mathbf{9 5 9}$ | $\mathbf{8 6 5}$ | $\mathbf{9 0 . 2}$ | $\mathbf{9 2 . 8}$ |

NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 4.9-Institution questionnaire results by level and control

| Level and control | Eligible <br> sample | Total <br> completes | Response rate <br> (unweighted) | Response rate <br> (weighted) |
| :--- | :---: | :---: | :---: | :---: |
| Public, 4-year | 302 | 282 | 93.4 | 93.9 |
| Public, 2-year | 314 | 286 | 91.1 | 93.0 |
| Public, other | 55 | 48 | 87.3 | 91.4 |
| Private, 4-year | 225 | 195 | 86.7 | 89.7 |
| Private, 2-year | 8 | 7 | 87.5 | 96.1 |
| Private, other | 55 | 47 | 85.5 | 95.7 |
| Total | $\mathbf{9 5 9}$ | $\mathbf{8 6 5}$ | $\mathbf{9 0 . 2}$ | $\mathbf{9 2 . 8}$ |

NOTE: Sample excluded for-profit institutions. Public and private 4 -year institutions include comprehensive, liberal arts, research, and other Ph.D. institutions. Other institutions include medical and specialized institutions. Private other institutions include medical, religious and specialized institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Finally, Table 4.10 provides a breakdown of completed questionnaires by mode of survey administration. Approximately 17 percent of institution questionnaires were completed with interviewer assistance. These questionnaires were receipted as paper questionnaires. With the introduction of the Web questionnaire, a medium that was not available in previous rounds of NSOPF, nearly one-third of the institutions completed their questionnaire on the World Wide Web ( 30.9 percent). The remainder completed a paper questionnaire ( 69.1 percent).

Table 4.10-Institution questionnaire by mode of survey administration

| Mode | Number of <br> institutions | Response rate <br> (unweighted) |
| :--- | :---: | :---: |
| Web | 267 | 30.9 |
| Paper | 598 | 69.1 |
| Total | 865 | 100.0 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

## CHAPTER 5. Data Collection Procedures

### 5.1 Overview

This chapter reviews procedures and results for the NSOPF:99 faculty survey. Survey questionnaires were mailed to 28,576 faculty, sampled from 819 participating institutions. (Due to limitations on the duration of the field period, the final sample size was later reduced to 19,813 through subsampling, as described in Chapter 3.) Sample members were given the option of completing a paper self-administered questionnaire and returning it by mail or completing the questionnaire via the Internet. Follow-up activities included both telephone prompting to encourage self-administration, followed by computer-assisted telephone interviewing (CATI) for nonresponding faculty. As part of the study, an experiment was conducted to determine if small financial incentives could increase use of the Web-based version of the questionnaire.

### 5.2 Data Collection Plan

### 5.2.1 Schedule

OMB approval for faculty data collection was received on December 22, 1998. The field period for the Faculty Survey extended from February 4, 1999 through March 24, 2000. Questionnaires were mailed to faculty in batches or waves, as lists of faculty and instructional staff were received, processed and sampled (see Chapter 4 for an explanation of list collection procedures). The first wave of questionnaires was mailed on February 4, 1999. The seventh and final wave was mailed on December 1, 1999. Table 5.1 shows the overall schedule of data collection for all three components of the study-list collection, institution questionnaire and faculty questionnaire.

Table 5.1-General chronology of NSOPF:99 data collection

| Year | Institution data collection | Faculty survey |
| :---: | :---: | :---: |
| 1998 | September: Mailing to CAOs, telephone follow-up to CAOs October: Mailing to coordinators, telephone follow-up begins to retrieve lists and questionnaires <br> November: Follow-up to coordinators continues <br> December 15: Initial deadline for list and questionnaire return | December: OMB approval for faculty data collection received |
| 1999 | May: Refusal conversion mailing <br> June: Retrieval of home address information for faculty begins <br> August: Interviewers begin collecting institution questionnaire on telephone <br> November: List collection ends <br> December: Data collection for institution questionnaire ends | February: Wave 1 mailing ( $\mathrm{n}=6,591$ ) March: Wave 2 mailing ( $\mathrm{n}=2,901$ ) May: Wave 3 mailing ( $\mathrm{n}=2,827$ ) <br> July: Wave 4 mailing ( $\mathrm{n}=1,316$ ) August: Wave 5 mailing ( $\mathrm{n}=1,587$ ) <br> October: Wave 6 mailing ( $\mathrm{n}=1,857$ ) <br> December: Wave 7 mailing ( $\mathrm{n}=1,716$ ) |
| 2000 |  | March: Faculty data collection ends |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 5.2.2 Faculty follow-up procedures

As shown in Table 5.2, sampled faculty in each wave received a coordinated series of mail, email, and telephone follow-up, as described below. Mailings were sent to the home address of the faculty respondent, if available; otherwise the questionnaire packet was sent to the individual's campus address. (See Appendix E for correspondence sent to faculty respondents.) E-mail prompts were sent to all faculty for whom an e-mail address was provided. (E-mail addresses were provided for approximately 38 percent of sampled faculty.) Telephone follow-up consisted of initial prompts to complete the mail or Web questionnaire. A telephone interview was attempted for nonrespondents to the mail, e-mail, and telephone prompts.

Table 5.2-Schedule of mail, e-mail and telephone follow-up

|  | Wave 1 | Wave 2 | Wave 3 | Wave 4 | Wave 5 | Wave 6 | Wave 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mailing 1 | 2/4/99 | 3/19/99 | 5/7/99 | 7/6/99 | 8/30/99 | 10/19/99 | 12/1/99 |
| Postcard | 2/18/99 | 3/26/99 | 5/14/99 | 7/13/99 | 9/10/99 | 10/26/99 | ---- |
| Mailing 2 | 3/5/99 | 4/9/99 | 5/28/99 | 8/31/99 | 9/17/99 | 11/9/99 | 12/17/99 |
| Mailing 3 | 3/23/99 | 4/22/99 | 6/18/99 | 9/17/99 | 2/7/00 | 2/7/00 | 2/7/00 |
| E-mail 1 | 3/31/99 | 5/13/99 | 8/26/99 | 10/13/99 | 10/13/99 | 11/24/99 | 2/18/00 |
| Telephone follow-up | 4/23/99 | 6/17/99 | 8/4/99 | 10/11/99 | 11/12/99 | 12/14/99 | 1/17/00 |
| Mailing 4 | 8/18/99 | 8/18/99 | 8/18/99 | 2/7/00 | ---- | ---- | $\cdots$ |
| E-mail 2 | 8/26/99 | 8/26/99 | 11/24/99 | 11/24/99 | 11/24/99 | 1/7/00 | 2/29/00 |
| E-mail 3 | 11/24/99 | 11/24/99 | 1/7/00 | 1/7/00 | 1/7/00 | 2/18/00 | ---- |
| E-mail 4 | 1/7/00 | 1/7/00 | 2/18/00 | 2/18/00 | 2/18/00 | 2/29/00 | ---- |
| Mailing 5 | 2/7/00 | 2/7/00 | ---- | ---- | ---- | ---- | ---- |
| E-mail 5 | 2/18/00 | 2/18/00 | 2/29/00 | 2/29/00 | 2/29/00 | ---- | ---- |
| E-mail 6 | 2/29/00 | 2/29/00 | ---- | ---- | ---- | ---- | ---- |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 5.3 shows the percent targeted for the four primary mailings prior to the start of telephone follow-up and the percent of respondents targeted for each follow-up, including telephone follow-up. Note that for waves 5 through 7, telephone follow-up preceded the wave 3 mailing. This was necessary to achieve a response from these waves within schedule constraints. For all other waves, telephone follow-up followed the third questionnaire mailing.

Table 5.3-Key follow-up dates and percent of original sample targeted

| Mail wave | Initial <br> mailing <br> (percent) | Postcard <br> prompt <br> (percent) | Second <br> mailing <br> (percent) | Third <br> mailing <br> (percent) | Telephone <br> prompt <br> (percent) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| One | $2 / 14 / 99$ | $2 / 18 / 99$ | $3 / 5 / 99$ | $3 / 23 / 99$ | $4 / 23 / 99$ |
|  | $(100.0)$ | $(100.0)$ | $(100.0)$ | $(64.5)$ | $(57.7)$ |
| Two | $3 / 19 / 99$ | $3 / 26 / 99$ | $4 / 9 / 99$ | $4 / 23 / 99$ | $6 / 17 / 99$ |
|  | $(100.0)$ | $(100.0)$ | $(100.0)$ | $(66.6)$ | $(57.1)$ |
| Three | $5 / 7 / 99$ | $5 / 14 / 99$ | $5 / 28 / 99$ | $6 / 18 / 99$ | $8 / 4 / 99$ |
|  | $(100.0)$ | $(97.8)$ | $(85.4)$ | $(72.4)$ | $(66.6)$ |
| Four | $7 / 6 / 99$ | $7 / 13 / 99$ | $8 / 31 / 99$ | $9 / 17 / 99$ | $10 / 11 / 99$ |
|  | $(100.0)$ | $(96.8)$ | $(72.2)$ | $(70.3)$ | $(61.4)$ |
| Five | $8 / 30 / 99$ | $9 / 10 / 99$ | $9 / 17 / 99$ | $2 / 7 / 00$ | $11 / 12 / 99$ |
|  | $(100.0)$ | $(93.6)$ | $(89.4)$ | $(44.0)$ | $(67.0)$ |
| Six | $10 / 19 / 99$ | $10 / 26 / 99$ | $11 / 9 / 99$ | $2 / 7 / 00$ | $12 / 14 / 99$ |
|  | $(100.0)$ | $(98.6)$ | $(87.8)$ | $(50.8)$ | $(71.8)$ |
| Seven | $12 / 1 / 99$ | --- | $12 / 17 / 99$ | $2 / 7 / 00$ | $1 / 17 / 00$ |
|  | $(100.0)$ |  | $(97.8)$ | $(61.8)$ | $(73.9)$ |

NOTE: Percentages are based on the original sample, not the final sample size after subsampling.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Mail follow-up. Mail follow-up for nonrespondents included a postcard and several questionnaire re-mailings. All questionnaire mailings were sent directly to the faculty member's home address where available, and campus address if no home address was provided (with the exception of the third mailing, which was forwarded to the nonresponding faculty member's home address by the institution coordinator, if the institution had not supplied a home address). Questionnaires were accompanied by a letter that provided the Web address to access the Internet version of the questionnaire and a personal identification (PIN) code to be used to access the Web questionnaire. Postcards included time-sensitive information about approaching deadlines, deadline extensions and financial incentives (when applicable). The toll-free telephone number and project e-mail address was printed on all materials.

E-mail follow-up. E-mail, like the prompt postcard, was used to disseminate time-sensitive information about approaching deadlines, deadline extensions and financial incentives (when applicable). Faculty received as many as six e-mail prompts. E-mail prompts were usually spaced apart by a minimum of four weeks.

Telephone prompting. The first training for interviewers to conduct telephone prompting was conducted on April 8, 1999. Additional interviewers were trained and added as the sample size increased during the field period. The first telephone prompts were made on April 23, 1999, to contact nonrespondents in the first wave of data collection. For the first contact with nonrespondents, interviewers were trained to prompt for the completion of the survey, to encourage use of the Web questionnaire, and to attempt a CATI interview only if the interviewer sensed reluctance on the respondent's part to complete one of the self-administered versions. After the second prompt to a sampled faculty member, interviewers were instructed to switch to a strategy of encouraging CATI interviews whenever possible.

CATI interviews. For waves 1 through 4, interviewers offered a CATI interview as a preferred option after the second prompt. This schedule was truncated for later waves. For waves 5 through 7 , interviewers were instructed to attempt a telephone interview at the time of the first call in order to complete data collection more quickly.

On August 16,1999 an abbreviated CATI questionnaire was submitted to OMB and approved for use by interviewers. Beginning in September 1999 the abbreviated telephone questionnaire was offered to faculty as a routine part of refusal conversion effort whenever faculty indicated that the length of the questionnaire was cited as a reason for nonresponse. A similar questionnaire and procedure was used in NSOPF:93.

Inbound contacts. The letter that accompanied all faculty mailings encouraged sample members to contact the project coordinator through either a toll-free number or the project e-mail address if they had any questions or required any assistance. Approximately 1,000 telephone calls and 800 e-mails were received during the field period. Most e-mails from faculty were direct responses to e-mail prompts; similarly, telephone calls were often responses to mail or telephone prompts. Other reasons for calling included questions about specific questionnaire items, questions concerning eligibility for the study and problems in accessing the Web questionnaire. The project coordinator answered all calls and e-mails. Problems in accessing the Web questionnaire were, when necessary, forwarded to technical staff.

### 5.2.3 Coordinator follow-up and assistance

As in 1993, institution coordinators who agreed to sign and notarize the NCES Affidavit of Nondisclosure and Confidentiality were asked to provide assistance in prompting, contacting and locating sampled faculty. This assistance often proved critical at institutions that did not provide home addresses and telephone numbers, particularly during the summer months when faculty could not be reached on campus. Coordinator assistance took three forms:

Forwarding survey materials to respondents. Institution coordinators were asked to mail the third questionnaire packet to the home (or summer address) of any nonresponding faculty for whom a home address was not available (see Appendix F).

Coordinator prompting. After multiple attempts to seek cooperation from faculty, institution coordinators were asked to personally contact nonresponding faculty to encourage them to complete the questionnaire. Early in the field period, several respondents contacted Gallup with complaints that they felt the prompts they received from their institution were coercive, or that they seemed to compromise their confidentiality. Therefore to ensure that all coordinator prompts were conducted in a manner that would not raise faculty concerns, Gallup supplied coordinators with a sample prompt letter (Appendix F), which they could copy and distribute to faculty. The letter stressed the voluntary nature of the study, and underscored the absolute confidentiality of data they provided (i.e., that the faculty member's responses to the questionnaire would never be identified to the institution). No further faculty complaints were received after this letter was introduced.

Updating contact and eligibility information. As noted in Chapter 4, an effort was made to contact institution coordinators who had not supplied home addresses and telephone numbers for the entire sample, and ask them to supply this information only for sampled faculty. In addition,
coordinators were asked to confirm the eligibility of current faculty, that is, whether they were employed at the institution during the fall semester, 1998. Ineligible faculty who were erroneously included on the list of faculty could then be removed from the active sample.

### 5.2.4 Faculty locating

A majority of institution coordinators did not supply home addresses and telephone numbers for their faculty (see Chapter 4 for a discussion of the types and amount of information supplied). Moreover, complete and timely information was often not supplied for part-time faculty, a group who comprised the most mobile and difficult-to-reach part of the sample. Given the length of the field period, which extended through the summer months and well into academic year 2000, a major locating effort was critical to the success of the study.

Gallup's locating strategy was to first utilize directory assistance, and public electronic databases to find home telephone listings for as many sampled respondents as possible. The remaining list of sampled respondents without home telephone numbers was then turned over to a team of experienced, specially trained locators, who used institutional contacts (including human resources, academic affairs staff and individual departments), and online resources (including campus directories, white page directories, public records and general internet searches) to locate more difficult-to-find faculty. Schools with more than 10 nonrespondents were given priority for this effort.

When contacting institutions, locators also checked on faculty eligibility and current employment status. They collected information on current campus numbers and sometimes collected other information that could be helpful to interviewers (such as department name, faculty schedules, other outside employment, etc.). The locating effort stretched across the entire data collection period, starting with directory assistance lookups prior to the questionnaire mailings followed by mail, e-mail, and telephone contacts with nonrespondents to obtain additional information about their whereabouts.

### 5.2.5 Refusal conversion

All interviewers were trained to both avert and convert refusals. The NSOPF training manual provided responses to the most frequent objections, including lack of time, concern over eligibility, concerns about confidentiality, and so on. In addition, interviewers had two tools to assist them in converting refusals:

Incentives. On November 19, 1999, a proposal to offer larger incentives to all nonresponding sample members-regardless of mode of completion-was submitted to OMB for approval. The new incentive structure was implemented on November 24, 1999 with a postcard to faculty announcing that a $\$ 25$ incentive was now being offered. The rationale for this strategy was based on methodological literature suggesting that larger incentives could increase the overall response rate. In February and March, as data collection neared the final deadline, project staff were given flexibility to increase the amount of the incentives. The vast majority of respondents accepted the first offer of a $\$ 25$ payment; higher incentives were used to convert only the most resistant nonrespondents. Although these larger amounts were offered to all faculty, their primary aim was to increase participation of medical and health science faculty, two groups whose high nonresponse was particularly troublesome. It was felt that medical faculty, whose time is very
limited, would only respond to a higher incentive. (See also Section 5.3 below for a discussion of the incentive experiment.)

Abbreviated questionnaire. If a respondent refused or was unlikely to complete a questionnaire because of time considerations (perceived response burden), interviewers were authorized to conduct an abbreviated telephone interview (see Appendix G). The vast majority of CATI interviews were, in fact, done as abbreviated interviews. One reason for this is that respondents with the time to do the long CATI usually preferred to complete the questionnaire on the World Wide Web. Out of about 2,670 CATI interviews, about 2,610 were completed using the abbreviated questionnaire.

### 5.3 Incentive Experiment to Increase Web Usage

Despite the fact that most faculty have access to the Internet, only eight percent of the respondents in the field test chose to complete the faculty questionnaire over the Internet. ${ }^{19}$ In order to increase usage of the Web questionnaire, it was proposed that an offer of a small financial incentive be used to motivate respondents.

The Web questionnaire offered numerous advantages, the most important of which is that it streamlined data processing in several ways: first, it speeds up the collection of data; second, like the CATI, it reduced the need for data cleaning and editing, since edit checks are built-in as part of the Web questionnaire's design. Third, it eliminated the steps of scanning and database preparation that would be required for a self-administered paper questionnaire. Ultimately, it resulted in speedier returns at lower costs and with better data quality.

Thus, to encourage use of the Web questionnaire, an experiment was submitted to OMB for inclusion in the full-scale study, and approved. The experiment was designed to split a subsample of 13,022 faculty into four treatment groups. As Table 5.4 indicates, a total of 7,411 sampled faculty were offered no incentive to use the Web questionnaire; 2,800 were offered a $\$ 2$ incentive; 1,408 were offered a $\$ 5$ incentive; and 1,403 were offered a $\$ 10$ incentive. This experiment was administered throughout the data collection period to all waves of faculty.

Table 5.4-Participation rate and Web completions, by experimental group

| Incentive <br> group | Total <br> sample in <br> experiment | Total <br> completed | Response <br> rate | Total <br> Web <br> completes | Percent Web <br> completes |
| ---: | :---: | :---: | :---: | :---: | :---: |
| No incentive | 7,411 | 4,110 | 55.4 | 1,030 | 25.1 |
| $\$ 2$ | 2,800 | 1,550 | 55.3 | 530 | 34.2 |
| $\$ 5$ | 1,408 | 790 | 56.0 | 260 | 32.9 |
| Total | 1,403 | 760 | 54.4 | 280 | 36.8 |
|  | 13,022 | 7,210 | 55.3 | 2,100 | 29.1 |

NOTE: To protect the confidentiality of the data, some numbers have been rounded. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

[^12]As Table 5.5 illustrates, the use of incentives had no measurable impact on whether faculty members responded to the survey; response rates were roughly the same regardless of whether an incentive was offered or the amount of the incentive. This finding was not surprising, since an experiment offering three sets of incentives or no incentives conducted for the 1992 field test produced similar results. ${ }^{20}$ However, among survey participants, the offer of an incentive did produce a statistically significant increase in the number completing the questionnaire over the World Wide Web. Although the $\$ 10$ group had, by a small margin, the highest Web response rate, the size of the incentive does not appear to matter much, at least over the small range tested.

Table 5.5-Comparison of response propensity within experimental groups

| Comparison | Chi-square | DF | p-value |
| :--- | ---: | :---: | ---: |
| Participation vs. non-participation | 0.7609 | 3 | .8588 |
| Web participation vs. other modes | 76.98 | 3 | $<.0001^{*}$ |
| *Significant at .05 |  |  |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

The results of this experiment indicate that small incentives can be used effectively to motivate respondents to choose a Web questionnaire over a paper version. Such incentives, however, will have little or no impact on the decision whether or not to participate.

### 5.4 Faculty Questionnaire Response Rates

### 5.4.1 Response rates by NSOPF cycle

Table 5.6 compares the unweighted response rate for NSOPF: 99 with all previous rounds of NSOPF, and the weighted response rate with that of NSOPF:93. As Table 5.6 shows, the weighted response rate ( 83.2 percent) is close to that achieved in 1993 ( 84.4 percent). The unweighted response rate ( 91.6 percent) is much higher than the weighted response rate largely due to the reduction of the active sample to 19,813 through subsampling. The weighted response, which takes into account the subsampling procedure, provides a more appropriate comparison.

[^13]Table 5.6-Faculty response rates, by NSOPF cycle

| NSOPF cycle | Final <br> eligible <br> sample | Completed <br> cases | Response rate <br> (unweighted) | Response rate <br> (weighted) |
| :--- | ---: | ---: | ---: | ---: |
| 1987 Field test | 235 | 160 | 68.1 | $*$ |
| 1988 Full-scale | 11,013 | 8,832 | 76.1 | $*$ |
| 1992 Field test | 605 | 495 | 81.8 | $*$ |
| 1993 Full-scale | 29,764 | 25,780 | 86.6 | 84.4 |
| 1998 Field test | 471 | 386 | 82.0 | $*$ |
| 1999 Full-scale | 19,213 | 17,600 | 91.6 | 83.2 |

* Weighted response rate not available.

NOTE: To protect the confidentiality of the data, some numbers have been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1988, 1993, 1999 National Study of Postsecondary Faculty (NSOPF:88, NSOPF:93, NSOPF:99).

### 5.4.2 Characteristics of faculty questionnaire response and nonresponse

Table 5.7 shows the general characteristics of faculty by mode of data collection. Over one-half ( 54 percent) of the respondents completed their questionnaire on paper (about 9,450). Almost one-third ( 31 percent) of the respondents completed their questionnaire via the World Wide Web (about 5,480 ). The remaining 15 percent completed their questionnaire with an interviewer over the telephone (about 2,670 ). These respondents had been prompted to participate several times by letter and e-mail to participate, and telephone interviewing was used as a final prompt to induce cooperation.

Table 5.7-Faculty characteristics by mode of data collection

|  | Paper (percent) | Web (percent) | Phone (percent) |
| :---: | :---: | :---: | :---: |
| Gender |  |  |  |
| Male | 60.1 | 56.4 | 61.5 |
| Female | 39.9 | 43.6 | 38.5 |
| Institution Type |  |  |  |
| Public, research | 15.9 | 18.1 | 22.6 |
| Private, research | 7.3 | 4.9 | 6.3 |
| Public, other Ph.D. | 4.9 | 5.9 | 7.3 |
| Private, other Ph.D. | 3.7 | 2.9 | 2.6 |
| Public, comprehensive | 13.8 | 12.8 | 11.8 |
| Private, comprehensive | 5.7 | 7.6 | 7.9 |
| Public, liberal arts | 1.4 | 2.0 | 1.7 |
| Private, liberal arts | 6.8 | 7.9 | 8.7 |
| Public, 2-year | 31.6 | 29.0 | 22.8 |
| Private, 2-year | 0.7 | 1.4 | 0.9 |
| Public, medical | 2.9 | 2.9 | 2.9 |
| Private, medical | 1.4 | 0.9 | 0.7 |
| Private, religious | 0.6 | 1.6 | 1.1 |
| Public, other | 0.6 | 0.3 | 0.5 |
| Private, other | 2.7 | 1.8 | 2.1 |
| Race |  |  |  |
| American Indian/Alaska Native | 0.7 | 0.6 | 0.4 |
| Asian and/or Pacific Islander | 5.5 | 4.7 | 5.0 |
| Black or African American | 7.0 | 4.7 | 3.4 |
| White | 86.5 | 89.1 | 90.5 |
| More than one race | 0.2 | 1.0 | 0.8 |
| Age |  |  |  |
| Under 35 | 10.0 | 7.9 | 12.3 |
| 35-44 | 27.5 | 22.2 | 30.2 |
| 45-54 | 34.7 | 34.5 | 36.0 |
| 55-64 | 20.6 | 26.1 | 18.2 |
| 65-70 | 5.1 | 6.5 | 2.7 |
| 71+ | 2.1 | 2.9 | 0.7 |
| Program area |  |  |  |
| Business, law and communications | 12.5 | 10.9 | 11.2 |
| Health sciences | 16.3 | 15.3 | 15.1 |
| Humanities | 17.4 | 17.1 | 14.3 |
| Natural sciences and engineering | 20.0 | 20.6 | 26.6 |
| Social sciences and education | 13.5 | 19.1 | 17.0 |
| Occupationally specific programs | 4.6 | 2.6 | 2.6 |
| All other programs | 15.8 | 14.4 | 13.3 |

See notes at the end of the table.

Table 5.7-Faculty characteristics by mode of data collection - Continued

|  | Paper <br> (percent) | Web <br> (percent) | Phone <br> (percent) |
| :--- | :---: | :---: | :---: |
| Faculty characteristics |  |  | 78.8 |
| Percentage indicating their principal <br> activity is teaching | 78.0 | 85.6 | 81.2 |
| Percentage teaching classes for credit | 40.6 | 49.4 | 44.8 |
| Percentage of time spent teaching <br> undergraduates | 13.8 | 14.1 | 18.5 |
| Percentage of faculty who indicated <br> their rank was assistant professor | 33.5 | 40.7 | 45.3 |
| Percentage who held a Ph.D. | 16.6 | 16.9 | 13.6 |
| Percentage of faculty in the <br> humanities | 27.2 | 33.2 | 31.9 |
| Percentage of faculty who indicated <br> they were tenured |  |  |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Tables 5.8 and 5.9 show the faculty response rates by type of institution and control. In general, faculty from 4-year institutions were more likely to respond than faculty from 2-year institutions ( $\mathrm{F}=8.68$ ) and there was no reliable difference between faculty from public and private institutions in their overall likelihood to respond ( $\mathrm{F}=1.83$ ). The lowest response rates were from faculty in private medical schools and "private, other" institutions, while the highest rates were from private religious institutions and public "other" schools. Schools in this category include other specialized or professional schools, such as other health professions, engineering schools, business schools, art and music schools, law schools, and teachers colleges.

Table 5.8-Faculty response rates, by institution type

| Institution type | Eligible <br> sample | Completed <br> cases | Response <br> rate <br> (weighted) |
| :--- | ---: | ---: | ---: |
| Public, research | 3,884 | 3,630 | 85.1 |
| Private, research | 1,115 | 1,010 | 77.6 |
| Public, other Ph.D. | 1,231 | 1,160 | 88.5 |
| Private, other Ph.D. | 814 | 670 | 81.6 |
| Public, comprehensive | 2,894 | 2,720 | 86.6 |
| Private, comprehensive | 1,308 | 1,220 | 82.4 |
| Public, liberal arts | 360 | 330 | 87.2 |
| Private, liberal arts | 1,352 | 1,270 | 87.0 |
| Public, 2-year | 4,899 | $\mathbf{4 , 3 9 0}$ | 80.6 |
| Private, 2-year | 185 | 160 | 81.6 |
| Public, medical | 415 | 380 | 76.7 |
| Private, medical | 193 | 150 | 68.7 |
| Private, religious | 140 | 130 | 94.8 |
| Public, other | 103 | 990 | 90.1 |
| Private, other | 320 | 290 | 75.8 |
| Total | $\mathbf{1 9 , 2 1 3}$ | $\mathbf{1 7 , 6 0 0}$ | $\mathbf{8 3 . 2}$ |

NOTE: Sample excluded for-profit institutions. To protect the confidentiality of the data, some numbers have been rounded. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 5.9-Faculty response rates, by level and control

| Level and control | Eligible <br> sample | Completed <br> cases | Response rate <br> (weighted) |
| :--- | ---: | ---: | ---: |
| Public, 4-year | 8,369 | 7,840 | 86.2 |
| Public, 2-year | 4,899 | 4,390 | 80.6 |
| Public, other | 518 | 470 | 78.7 |
| Private, 4-year | 4,589 | 4,170 | 82.5 |
| Private, 2-year | 185 | 170 | 81.6 |
| Private, other | 653 | 560 | 78.6 |
| Total | $\mathbf{1 9 , 2 1 3}$ | $\mathbf{1 7 , 6 0 0}$ | $\mathbf{8 3 . 2}$ |

NOTE: Sample excluded for-profit institutions. Public other institutions include medical and specialized institutions. Private other institutions include medical, religious and specialized institutions. To protect the confidentiality of the data, some numbers have been rounded. SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 5.10 shows the faculty response rates by wave. In general, response rates declined in later waves. Wave 1 is significantly higher than the overall response rate, and waves 6 and 7 are significantly lower (all p-values $=0.000$ ).

Table 5.10-Faculty response rates, by wave

| Wave | Response rate (weighted) |
| :---: | :---: |
| 1 | 88.9 |
| 2 | 84.1 |
| 3 | 85.1 |
| 4 | 81.7 |
| 5 | 80.4 |
| 6 | 75.7 |
| 7 | 77.0 |
| Total | $\mathbf{8 3 . 2}$ |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 5.11 breaks down the response rate by sampling characteristics, as reported on the lists of faculty provided by the institutions (see Section 3.9 .1 for additional discussion of nonresponse by sampling characteristics). Unfortunately, not all schools provided complete demographic information, so a substantial portion of the sample is reported as unknown.

Among those respondents for whom demographic information was provided, the response rates did not differ between female faculty and male faculty ( $\mathrm{F}=.36$ ), nor between white faculty and minority faculty ( $\mathrm{F}=1.70$ ).

The response rate for part-time faculty ( 80.7 percent) is, not surprisingly, lower than for full-time faculty ( 87.7 percent) $(\mathrm{F}=30.0$ ). This reflects, in part, the fact that part-time faculty are much more mobile, and traditionally harder-to-reach. Based on extensive locating attempts, Gallup learned that many of the sampled part-time faculty were no longer working at the institution when data collection began, and that many were spending limited time on campus even when they were teaching, and did not have their own campus phone extension or e-mail address. Moreover, because teaching is, for many, not a primary career, part-time faculty are often apt to feel that faculty surveys "do not apply" to them.

An interesting result from table 5.11 is that for gender and employment status, the response rates are significantly lower for those respondents whose gender or employment status are unknown ( $\mathrm{F}=38.17$ and $\mathrm{F}=24.22$, respectively). One possibility is that institutions that did not provide this information were also less likely to provide complete contact information that led to lower response rates.

Table 5.11-Faculty response rates, by sampling characteristics

| Individual <br> characteristic | Subgroup | Eligible <br> sample | Completed <br> cases | Response rate <br> (weighted) |
| :--- | :--- | ---: | ---: | :---: |
| Gender | Male | 7,727 | 7,250 | 85.6 |
|  | Female | 6,348 | 5,950 | 86.3 |
|  | Unknown | 5,138 | 4,400 | 77.5 |
| Race | White, non-Hispanic | 8,773 | 8,020 | 83.4 |
|  | Black, non-Hispanic | 1,133 | 1,040 | 81.1 |
|  | Hispanic | 963 | 860 | 82.4 |
|  | Asian/Pacific Islander | 878 | 800 | 81.7 |
|  | American Indian/Alaska Native | 101 | 90 | 77.0 |
|  | Unknown | 7,365 | 6,790 | 83.6 |
|  | Full-time | 10,249 | 9,680 | 87.7 |
|  | Part-time | 4,948 | 4,450 | 80.7 |
|  | Unknown | 4,016 | 3,470 | 77.6 |
|  |  | $\mathbf{1 9 , 2 1 3}$ | $\mathbf{1 7 , 6 0 0}$ | $\mathbf{8 3 . 2}$ |

NOTE: To protect the confidentiality of the data, some numbers have been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999
National Study of Postsecondary Faculty (NSOPF:99).
Table 5.12 shows the response rates by availability of contact information. Respondents that had a home address, e-mail address, or a home phone number all had much higher response rates than respondents where this information was unavailable ( $\mathrm{F}=92.97, \mathrm{~F}=28.56$ and $\mathrm{F}=42.42$, respectively). The widest difference is between home address ( 88.8 percent) and no home address (77.8 percent).

Given increasing resistance to the release of home contact information by institutions, the higher response rate for the group having an e-mail address is somewhat encouraging. However, the results here closely parallel the results for full-time ( 87.7 percent) vs. part-time ( 80.7 percent). It is not clear, therefore, if the higher response rate can be largely credited to the effectiveness of email prompting, or the fact that long-term, fuli-time faculty (who are, in general, easier to reach) are simply more likely to have an e-mail address.

Table 5.12-Faculty response rates, by availability of contact information

|  | Cligible <br> sample | Completed <br> cases | Response rate <br> (weighted) |
| :--- | ---: | :---: | :---: |
| Home address | 10,349 | 9,840 | 88.8 |
| No home address | 8,864 | 7,760 | 77.8 |
| Home phone number | 9,606 | 9,020 | 87.1 |
| No home phone | 9,607 | 8,580 | 79.6 |
| E-mail address | 8,252 | 7,740 | 86.7 |
| No e-mail address | 10,961 | 9,860 | 80.9 |
| Total | $\mathbf{1 9 , 2 1 3}$ | $\mathbf{1 7 , 6 0 0}$ | $\mathbf{8 3 . 2}$ |

NOTE: To protect the confidentiality of the data, some numbers have been rounded.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

## CHAPTER 6. Data Control and Data Processing

### 6.1 Overview

This chapter describes the procedures used to prepare faculty list data for sampling and to transform responses from the faculty and institution questionnaires into computerized data files. A total of 819 lists were processed and used to sample faculty. A total of 865 institution questionnaires (including 598 paper and 267 Web questionnaires) and about 17,600 faculty questionnaires were processed (including about 9,450 paper, $5,480 \mathrm{Web}$, and 2,670 computerassisted telephone interviews).

The procedures reviewed in this chapter include:

- receipt and processing of faculty list data for sampling,
- monitoring the receipt of completed questionnaires,
- preparing paper questionnaires for data entry,
- editing self-administered questionnaires for overall adequacy and completeness,
- entering the data,
- flagging cases with missing or inconsistent data through automated consistency checks,
- coding responses,
- conducting quality control checks of data entry, and
- preparing documents for archival storage.


### 6.2 Faculty List Processing and Preparation for Sampling

The sampling frame for the faculty survey was created from faculty lists provided by 819 participating institutions. Each participating institution was asked to provide a list (either in electronic or paper format), documentation of the list, and the names of institution staff involved in preparing the list. NSOPF:99 project staff were given specific steps to follow for list processing:

1. Receive lists and review each for completeness and readability.
2. Check to see if a list requires special handling (such as only providing home addresses for sampled faculty or anonymous sampling). If special handling was required, the project coordinator worked with the institution to fulfill their request.
3. Separate lists into those that could be immediately processed, lists that required follow-up before processing, and lists that could not be read or processed at all. An example of a list needing follow-up would be one in which certain key variables were missing and needed to be retrieved or where supporting documentation was missing. Examples of inadequate lists included: electronic lists in unknown or unrecognizable formats; lists which systematically excluded some faculty or included large numbers of ineligible faculty; electronic lists in formats that could not be processed electronically; electronic files that contained corrupted data; illegible paper lists; and paper lists that were too large to be efficiently processed.
4. Reformat and recode all lists to generate faculty counts. All electronic lists were reformatted and were read into a common database so that faculty counts could be generated. Minimal sampling information from hard copy lists was entered into the database in order to generate faculty counts.
5. Generate faculty counts. Counts of full-time, part-time, male, female, and counts by race/ethnicity were entered into the survey monitoring system (SMS) so that discrepancies between the list and other sources of information could be detected (see Chapter 9 for a complete description of discrepancy procedures).
6. Run a discrepancy report for each institution. A special module of the SMS was used to compare counts of faculty provided on the list with counts reported in the institution questionnaire. If the questionnaire had not yet been received, faculty counts were also compared with the most recent IPEDS data (NCES's Integrated Postsecondary Education Data System) for the institution. In some instances, the numbers of faculty on the list differed greatly from those provided on the questionnaire or in 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 that had completely omitted part-time faculty from their list.
7. Either prepare to select faculty sample, or resolve the discrepancy. If the discrepancy between the list and questionnaire was minimal (see Chapter 9 for a description of thresholds), the list was sent to the project staff responsible for sampling. If there was a discrepancy, the project coordinator immediately contacted the institution in order to resolve the discrepancy. If an obvious source of the discrepancy was evident, an attempt was made to confirm the diagnosis of the source of the discrepancy and to retrieve corrected sampling information. If, on the other hand, no obvious source of error was identified, the staff explained the problem to the institution coordinator and attempted to establish a reason for the discrepancy.
8. Select faculty samples. Faculty were sampled from the processed lists using the established selection formula-see Chapter 3 for a discussion of faculty sampling. For electronic lists, the relevant information for sampled faculty was loaded into the SMS. For hard copy lists, information that had not already been entered for sampling purposes was then entered into the SMS for sampled faculty.
9. Compare sampled faculty to 1998 Field Test. Lists of sampled faculty at participating institutions were crosschecked against lists of field test participants to ensure that they were not selected again for NSPOF:99. To minimize respondent burden, individuals who participated in the NSOPF:99 field test were not re-sampled for the full-scale study.

### 6.3 Receipt Control and Monitoring of Institution and Faculty Questionnaires

When completed faculty and institution paper questionnaires were received, receipt control staff checked each document for completeness and assigned a disposition code indicating whether the case was complete (a questionnaire was considered complete if the first six pages of the questionnaire containing employment and academic background questions and the demographic questions at the end of the questionnaire were answered). If a questionnaire was returned as
undeliverable, faculty directories and/or address information supplied by the 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 so that a new package and future packages could be mailed to the corrected address.

When Web questionnaires were received, project staff reviewed the completeness of the data. If the respondent had started, but not yet completed their questionnaire, project staff first checked the SMS to confirm that the respondent had not already returned a paper questionnaire. If not, a reminder e-mail message was sent to the respondent, asking them to complete their questionnaire on the Web. If a questionnaire had been received, no further follow-up was needed for the respondent, and the Web data were not used.

When telephone prompting began for faculty in a given wave, all cases with dispositions other than "SAQ completed," "Web version completed," "ineligible," and "deceased" were updated in the telephone management system, which delivered pending cases to interviewers for prompting and interviewing. The SMS was updated daily with paper and Web completes, and weekly for telephone (CATI) completes. The telephone management system was updated on a weekly basis to remove cases that returned a paper or Web questionnaire during the week. Similarly, once a telephone interviewer collected the data using the CATI instrument, the case was removed from the telephone management system and was updated in the SMS as a completed interview.

### 6.3.1 Faculty questionnaire eligibility review

At the close of data collection for the faculty survey, all completed faculty questionnaires were reviewed to determine whether any respondents were ineligible. This review included several checks. First, among the questionnaires that were returned blank, many sampled faculty wrote on the questionnaire that they were research assistants, teaching assistants, or were not employed by the institution during the 1998 fall term. Upon receipt of these questionnaires, the data record for the sampled faculty member was updated in the SMS as ineligible, and no further contact was made with that individual.

Second, the responses to Questions 1 and 4 were checked. If the respondent indicated they did not have instructional responsibilities at Question 1, this was confirmed by checking whether they taught any classes (Question 33), served on any thesis or dissertation committees (Question 32), provided individual instruction (Question 49), or whether they advised any students (Question 50). If the respondent had neither instructional duties (Question 1) nor faculty status (Question 4), they were deemed ineligible and their questionnaire data record was deleted. This process resulted in 270 cases being deleted.

### 6.4 Data Entry and Coding

### 6.4.1 Data entry

The three modes of questionnaire administration each required separate systems for data capture.
All paper questionnaires were scanned using a combined Optical Character Recognition and Image Capture System. The system uses a complex software product, FAQSS (Fast and Accurate Questionnaire Scanning System), developed by Optimum Solutions Corporation to process questionnaires. The system permits both higher quality and greater efficiency than even CADE
(computer assisted data entry), and much greater quality than traditional data entry. The system is programmed so that each character is read and assigned a confidence level. All characters with less than a 100 percent confidence level were automatically sent to an operator for manual verification. Gallup verifies the work of each operator and the recognition engines on each batch of every questionnaire to ensure that the quality assurance system is working properly. Also, 100 percent of handwritten responses (as opposed to check marks) were manually verified.

All Web-administered questionnaires used Gallup's proprietary Web survey software. When respondents submitted their survey forms, the results were saved in an Oracle database. This database was then converted into SAS for data editing, imputation and analysis. Each respondent was assigned a unique access code. Respondents without a valid access code were not permitted to enter the Website. A respondent could return to the survey Website at a later time to complete a survey that was left unfinished in an earlier session. When respondents entered the Website using the access code, they were immediately taken to the same point in the survey item sequence that they had reached during their previous session. If a respondent, re-using an access code, returned to the Website at a later time after completing the survey in a previous session, they were not allowed access to the completed Web survey data record.

All telephone interviews used CATI (computer-assisted telephone interviewing) technology. The CATI program was altered from the paper questionnaire to ensure valid codes, perform skip patterns automatically, and make inter-item consistency checks where appropriate. The quality control program for CATI interviewing included project specific training of interviewers, regular evaluation of interviewers by interviewing supervisors, and regular monitoring of interviewers.

### 6.4.2 Faculty questionnaire coding

Four categories of open-ended questions required coding in the faculty questionnaire: academic discipline, IPEDS codes, country of educational institution or birth, and "other specify" questions. Academic discipline was partially pre-coded by either the respondent or the interviewer. All other coding was done as a post-processing step. As described further below, many open-ended responses were coded automatically using SAS software.

Academic discipline. Respondents were asked about their academic discipline for their principal teaching field, principal research field, degree fields, and courses taught (Questions Q14, Q15, Q16D1, Q16D2, Q16D3, Q16D4, Q18B, Q41A1, Q41B1, Q41C1, Q41D1, and Q41E1).
Respondents were given a list of field codes in the questionnaire that they could enter for the paper and Web questionnaires. For the CATI version of the questionnaire, if the respondent did not have the list of field codes readily available, they were asked to give the name of the field, which was then coded according to the procedures below.

After all questionnaires were collected, project staff checked all responses where both a field name and code were provided to make sure the code agreed with the field name. When the code did not agree with the field name, the code was corrected.

All questionnaires where only a field name was given were coded in a two-stage process. The first step was to use SAS to match field names with the code frame from the questionnaire. This was done by first processing the frame and the responses to produce a keyword list by removing extraneous spaces and punctuation and enumerating acceptable variants. An example is the code 182 - Broadcasting \& Journalism - was transformed into two keywords "BROADCASTING"
and "JOURNALISM." Then the keywords from the frame and the questionnaires were matched using SAS and codes attached to the questionnaire responses. The second step involved taking the responses that could not be matched and coding the field names using manual look-up procedures.

After all codes were assigned, the file was checked against the master list of discipline codes. All discrepancies were double checked and corrected if necessary.

IPEDS codes. All respondents were asked the name and location of the institution for their four highest degrees and any degree they were currently working toward (Questions Q16E1, Q16E2, Q16E3, Q16E4, and Q18E).

The coding of institution names was similar to the two-step process used for the academic field questions. Once all the questionnaires were received, the institution names were collected and run through a SAS program that attempted to match the name and city of the verbatim entry with an electronic file of the 1997 IPEDS directory. This directory included the IPEDS code, city, state abbreviation, and institution name for almost 3,400 institutions. Approximately 40 percent were matched with this program. Project staff then separated foreign institutions from the other U.S. institutions. The other U.S. institutions were hand matched to IPEDS codes. The foreign institutions were given their country code as explained below. Some institutions were unclear or were not listed in the IPEDS directory. These responses were coded as "Non-U.S. unknown" or "U.S. not listed."

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 if respondents wrote "Pennsylvania State University" without specifying a branch campus (e.g., Fayette Campus), their institution was coded as Pennsylvania State University - Main Campus. 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 to code the case. Staff consulted reference books, university catalogs and crosschecked respondents' answers to find the name of the institution to which to assign the answer.

After all codes were assigned, the file was checked against the master list of IPEDS and country codes. All discrepancies were double checked and corrected if necessary.

Country codes. The names of countries were coded for two sets of questions: the country of highest degree for non-U.S. institutions, and for country of birth and/or citizenship (Questions Q16E1, Q16E2, Q16E3, Q16E4, Q18E, Q89A, and Q90A). The code frame was constructed from the NSOPF:93 frame with additional codes added if necessary. All countries were hand coded by project staff after all questionnaires had been collected. Responses were sorted by the country, city, and institution name (verbatim) fields to expedite coding. Where the name of a country was missing, the city and/or institution name was sometimes used to determine country (e.g., "The Sorbonne" in "Paris" would have been coded as "France"). Geographic reference sources were sometimes consulted when coding archaic country names, such as Holland or Ceylon. After all codes were assigned, the file was checked against the master list of country codes. All discrepancies were double checked and corrected if necessary.
"Other specify" and verbatim text. Other questions where respondents were asked to specify their answers were also hand coded by project staff (Questions Q3 (principal activity), Q8 (academic rank), Q12E1 (clinical title or job), Q12F1 (research title or job), Q12H1 (other title or job), Q30B1 (type of unpaid activity), Q44F1 (use of Website), Q53 (type of primary research), Q57 (other source of funding), Q75B (other basis for income), and Q76 (other type of income). The coding frames for these questions from NSOPF: 93 were used with additional codes added to the frame when necessary. These codes were also checked against the master list of codes. All discrepancies were double checked and corrected if necessary.

No coding was performed on the institution questionnaire data.

### 6.5 Editing and Imputation

### 6.5.1 Faculty and institution questionnaire editing

Both the faculty and institution questionnaire data were edited using seven principles designed to improve data quality and consistency.

Menu items. For many questions there were several sub-items listed where the respondent was asked to give a response for each sub-item. These questions were cleaned with several procedures. First if the main question had an "NA" (Not Applicable) check box and that box was checked, all of the sub-items were set to a value of "no" or "zero" depending on the wording of the question. Second, if the respondent had filled out one or more of the sub-items with a "yes" response or a positive number but had left other sub-items blank, the missing sub-items were set to "no," "zero," or "don't know" depending on the question wording. If all sub-items were missing and there was no "NA" box, or the "NA" box was not checked, the case was flagged and the data values were imputed for that question. Examples of these types of questions are Question 21 in the institution questionnaire and Question 29 in the faculty questionnaire. See section 6.5.2 for a description of imputation methods.

Inter-item consistency checks. Many types of inter-item consistency checks were performed on the data. One procedure was to check groups of related items for internal consistency and to make adjustments to make them consistent. For example, in questions that asked about a spouse in the faculty questionnaire (Questions 66i, Q76i, and 77a) if respondents indicated that they did not have a spouse in one or more of the questions, the other questions were checked for consistency and corrected as necessary. Another procedure checked "NA" boxes. If the respondent had checked the "NA" box for a question but had filled in any of the sub-items for that question the "NA" box was set to blank. For example, this procedure was used with Question 21 in the institution questionnaire and Question 16 in the faculty questionnaire. A third procedure was to check filter items for which more detail was sought in a follow-up open-ended or closed-ended question. If detail was provided, then the filter question was checked to make sure the appropriate response was recorded. For example, this procedure was used with Question 11 in the institution questionnaire and Question 12E in the faculty questionnaire.

Percent items. All items where respondents were asked to give a percentage were checked to make sure they summed to 100 percent. The editing program also looked for any numbers between 0 and 1 to make sure that respondents did not fill in the question with a decimal rather than a percentage. All fractions of a percent were rounded to the nearest whole percent. An example of this type of item is Question 31 in the faculty questionnaire.

### 6.5.2 Faculty questionnaire imputation

Data imputation for the faculty questionnaire was performed in four steps. The imputation method for each variable is specified in the labels for the imputation flags in the faculty dataset.

Logical imputation. The logical imputation was conducted during the data cleaning steps as explained in the immediately preceding section.

Cold deck. Missing responses were filled in with data from the sample frame whenever the relevant data were available. Examples include gender, race, and employment status.

Hot deck. This procedure selected non-missing values from "sequential nearest neighbors" within the imputation class. All questions that were categorical and had more than 16 categories were imputed with this method. An example is Question Q14 - principal field of teaching. The imputation class for this question was created using faculty stratum and instructional duty status (Q1).

Regression type. This procedure employed SAS PROC IMPUTE ${ }^{21}$. All items that were still missing after the logical, cold deck, and hot deck imputation procedures were imputed with this method. Project staff selected the independent variables by first looking through the questionnaire for logically related items and then by conducting a correlation analysis of the questions against each other to find the top correlates for each item.

### 6.5.3 Institution questionnaire imputation

Data imputation for the institution questionnaire used three methods. The imputation method for each variable is specified in the labels for the imputation flags in the institution dataset. Logical imputation was also performed in the cleaning steps described in the preceding section.

Within-class mean. The missing value was replaced with the mean of all non-missing cases within the imputation class. Continuous variables with less than 5 percent missing were imputed with this method. For example this method was used for questions A1A (number of full-time faculty and instructional staff), A2B (percentage increase in full-time faculty), and A2C (percentage decrease in full-time faculty).

Within-class random frequency. The missing value was replaced by a random draw from the possible responses based on the observed frequency of non-missing responses within the imputation class. All categorical questions were imputed with this method, since all categorical items had less than 5 percent missing data. For example this method was used to impute missing values in question A2A (change in full-time faculty over past 5 years).

Hot deck. As with the faculty imputation, this method selected non-missing values from the "sequential nearest neighbor" within the imputation class. Any questions that were continuous variables and had more than 5 percent missing cases were imputed with this method. Question A1B was also imputed with hot deck even though it had less than 5 percent missing. The imputation classes were created first by sorting the file by a collapsed stratum variable with the

[^14]following categories: doctoral institutions (strata 1, 6, 7, and 15), public non-doctoral institutions (strata $3,5,8,12$, and 14), private non-doctoral institutions (strata $2,4,11$, and 13), and 2 -year institutions (strata 9 and 10). The file was then sorted by faculty size. The computer program then proceeded sequentially through the missing values and replaced the missing values with the nearest non-missing value in cases above the case with the missing value but still within the imputation class.

A special procedure was used to impute Question 5 (change in full-time counts of faculty between the 1997 and 1998 fall terms). The procedure consists of four steps. First missing values were filled with zeros if the row totals were within 5 percent. Secondly, if one number in a row was missing and the total was more than 5 percent off, the missing value was filled with the difference as long as that number was positive. If that number would be negative, the missing value was filled with zero. The first step was then repeated with the column formulas. If two or more values were missing in a row or a column the missing values were filled in by first taking the percentage of $\mathrm{AF}_{-} 4$ from a donor case and then filling in with that percentage of the respondent's A5F_4. Imputed values were then cleaned in the manner described above.

A few other survey items in the institution questionnaire were treated as special cases. Question A7B (previous maximum number of years to be on tenure track) was not imputed because of the high number of missing values. The missing values were assumed to be NAs. Questions A16AA16I (full-time instructional assessment) and B25A-B25I (part-time instructional assessment) were not imputed. Missing values for these questions were filled with don't know. Questions C26A-C26E (percent of undergraduate teaching assigned to various staff) were only imputed where IPEDS indicated that there were undergraduates at that institution.

### 6.6 Derived Variables

For NSOPF:99 a total of 37 institution-level and 281 faculty-level derived variables were constructed in order to simplify access to standard queries useful to analysts as well as to enhance substantive analysis. Since research questions often require independent or control variables, this set of derived variables has been added to the faculty and institution data files.

Multiple sources of data were used to create institution-derived variables, including the 1997 IPEDS, the "Carnegie classification" system, and NSOPF:99 sampling information.

### 6.7 Storage and Protection of Completed Instruments

Whenever questionnaires were not being processed, they were stored in a locked and protected area. Access was limited to authorized project staff that had a signed, notarized NCES Affidavit of Nondisclosure on file.

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 removable media 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 paper 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 that have a signed, notarized NCES Affidavit of Nondisclosure on file.

## CHAPTER 7. Questionnaire Item Nonresponse

### 7.1 Item Nonresponse: Definition and Considerations

This chapter examines the item nonresponse rates for NSOPF:99 Faculty and Institution Questionnaires. Item nonresponse occurs when a respondent does not complete a questionnaire item. Item nonresponse creates two problems for survey analysts. First, it reduces the sample size and thus increases sampling variance. This happens when respondents must be eliminated from the sample that is used for analyses because they failed to respond to a large percentage of the questionnaire items. As a result, insufficient sample sizes may hinder certain analyses such as subgroup comparisons. Second, item nonresponse may give rise to nonresponse bias. To the extent that the missing data for a particular item differ from the reported data for that item, the reported data are unrepresentative of the survey population. Item nonresponse is also worth examining because it can signal items that respondents had difficulty answering.

There are four goals of the analysis below. The first goal is to quantify the mean level of item nonresponse overall as well as for key variables. The second goal is to find nonresponse patterns by item characteristics. The third goal is to analyze the item nonresponse by mode of questionnaire administration. The fourth goal is to examine aggregate item nonresponse levels by respondent characteristics.

The impact of bias associated with item nonresponse can be reduced to an extent through the use of data editing and imputation. Data editing utilizes inter-item consistency checks to fill in missing values. For example, a missing response to a filter question may often be inferred from the existence and nature of responses to dependent questions related to the filter. For more information on both the editing and imputation procedures used, see Chapter 6. The analysis below uses data files that were subjected to data editing, but not data imputation.

The faculty data file was examined for high rates of item nonresponse in each case during the editing phase. Cases where more than 60 percent of all questions were missing and where more than 44 percent of critical questions were missing ( $\mathrm{n}=298$ ) were ruled incomplete and eliminated from the data file.

Item nonresponse rates (RATE) were calculated by dividing the total number of responses to an item by the number or respondents eligible to respond to that question (n). The standard error of the item nonresponse rate (SE) equals the square root of (RATE * (1-RATE)/n). In general, this means that the larger the number of eligible respondents for a particular question and the further the rate is from .5 , the lower the standard error. Because these estimates were conditional on selection into the sample and do not represent population estimates, for simplicity sake, the standard errors for item nonresponse rates were modeled as though the sample were a simple random sample. For questions containing multiple sub-items, each sub-item was counted as a unique question. All of the analyses in this chapter were performed on weighted data. Mean nonresponse in the tables below was calculated by taking the average of the rates for a given set of questions. The standard errors were also calculated by taking the average of the standard errors for a given set of questions.

In the NSOPF:99 data several codes were used to distinguish between legitimate and nonlegitimate missing items for imputation. These codes were:

Don't know: If "don't know" was provided as a legitimate response category to a question the response was not counted as missing. If a "don't know" category was not provided, and the respondent wrote it in or gave it as their response during a telephone interview, the response was recoded to missing. (In the telephone interview, a respondent could always reply "don't know," but unless a "don't know" option was offered in the paper version, it was not read to the respondent in the telephone interview and could only be volunteered as a response.)

Not applicable: For some questions "not applicable" was provided as a legitimate response category; these were always coded as "not applicable", and not counted as missing. Similarly, "not applicable" was sometimes provided as a response category for a filter question, allowing the respondent to skip out of sub-items. The sub-items were given a "legitimate skip" code and not treated as missing. However, if a respondent wrote in "not applicable" or gave it as their response during a telephone interview, the response was recoded to missing. (In the telephone interview, a respondent could always reply "not applicable," but unless a "not applicable" option was offered in the paper version, it was not read to the respondent in the telephone interview and could only be volunteered as a response.)

Legitimate skip: Many respondents could legitimately skip questions that did not apply to them. In these cases the missing responses were coded as legitimate skip and not counted as missing.

### 7.2 Institution Questionnaire Item Nonresponse

There were 865 respondents to the institution questionnaire. The questionnaire had 144 items and the median time to complete it was 90 minutes. Slightly more than one-half of the questionnaires were completed by only one respondent; the mean number of respondents was 1.94 . A full list of items with their individual nonresponse rates and standard errors can be found in Appendix H .

### 7.2.1 Item nonresponse by questionnaire topic and position

Table 7.1 shows the average item nonresponse by content area within the questionnaire. This table shows that the highest nonresponse was in Section C ( 9.8 percent). This section contained Question 26 only, which asks for the percentage of undergraduate student credit hours assigned to full-time faculty and instructional staff, part-time faculty and instructional staff, teaching assistants, and others.

The nonresponse rate for Section A, which asked questions about institutional policies for fulltime faculty and instructional staff, was also slightly above the total average rate ( 3.6 percent). Question 5, which consisted of 24 sub-items, was the primary cause of the high levels of nonresponse for this section. Question 5 provides information about the change in numbers of full-time faculty over the past year. Not including this question, which had an overall nonresponse rate of 6.6 percent, the average nonresponse for Section A was only 2.5 percent ( $\mathrm{SE}=0.003$ ).

Table 7.1—Mean item nonresponse rates for institution questionnaire, by content area (weighted)

| Content area | Section and questions | Number <br> of items | Mean <br> percent <br> missing | SE |
| :--- | :--- | ---: | ---: | ---: |
| Policies regarding full- <br> time faculty and <br> instructional staff | Section A: Questions <br> A1A-A16I | 92 | 3.6 | .003 |
| Policies regarding part- <br> time faculty and <br> instructional staff | Section B: Questions <br> B17-B25I | 48 | 2.6 | .004 |
| Policies regarding all <br> faculty and instructional <br> staff | Section C: Questions <br> C26A-C26D | 4 | 9.8 | .005 |
| Total |  | $\mathbf{1 4 4}$ | $\mathbf{3 . 4}$ | $\mathbf{. 0 0 4}$ |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 7.2 shows the item nonresponse rates by position in the questionnaire. The items were divided into equal thirds ( 48 items each) and then the average item nonresponse rates were calculated. This table shows that items in the first third of the questionnaire had the highest average nonresponse rates. However, this result was driven by the high nonresponse rates to Question 5, which asked the respondent for a detailed account of changes in the faculty population between the Fall 1997 and Fall 1998 term. The question asked the respondent to report the number of tenured, tenure track and non-tenure faculty for both 1997 and 1998, and to record the number who changed from part-time to full-time status, the number who were hired, or who left due to retirement or other reasons between these two terms. Without this question the average nonresponse rate for the first third would have been 3.5 percent ( $\mathrm{SE}=0.003$ ).

Table 7.2-Mean item nonresponse rates for institution questionnaire, by questionnaire third (weighted)

| Questionnaire section | Questions | Number of <br> items | Mean <br> percent <br> missing | SE |
| :--- | :--- | ---: | ---: | :---: |
| First third | Questions A1A-A11A1 | 48 | 5.0 | .004 |
| Middle third | Questions A11A2-B18B1 | 48 | 1.9 | .003 |
| Last third | Questions B18B2-C26D | 48 | 3.3 | .004 |
| Total |  | $\mathbf{1 4 4}$ | $\mathbf{3 . 4}$ | $\mathbf{. 0 0 4}$ |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Institution survey item nonresponse by critical items. Table 7.3 shows the average missing data rates for the 14 items designated as critical and the 130 items designated as non-critical questionnaire items (see Appendix H for a list of critical items on the institution questionnaire). The average item nonresponse was higher for the critical items ( 5.4 percent) than for the noncritical items ( 3.2 percent).

Table 7.3-Mean item nonresponse rates for critical items on the institution questionnaire (weighted)

| Questionnaire section | Number of <br> items | Mean <br> percent <br> missing | SE |
| :--- | :---: | ---: | ---: |
| Critical items | 14 | 5.4 | .004 |
| Non-critical items | 130 | 3.2 | .004 |
| Total | $\mathbf{1 4 4}$ | $\mathbf{3 . 4}$ | $\mathbf{. 0 0 4}$ |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 7.2.2 Items with high item nonresponse

Seven items had item nonresponse rates greater than 10 percent. Only one item had a nonresponse rate greater than 20 percent-question 8 (Variable A8F2, which asked about changes in tenure policies and reduction of tenured and tenure track faculty) had an item nonresponse rate of 26 percent. The other items that had high nonresponse rates were questions 5 and 26.

For question 5 (changes in the number of full-time faculty and instructional staff between the 1998 and 1999 Fall terms), it is likely that many institutions simply were not able to compile this information and, in particular, did not have adequate records to provide the question sub-items.

Question 26 asked what percentage of undergraduate student credit hours were assigned to different categories of staff such as full-time, part-time, and teaching assistants. Fifteen respondents wrote in the space below question 26 that the data were not available. This is the most likely reason for the high nonresponse for this item. Both questions 5 and 26 required very detailed information from the respondent. If an institution did not routinely compile this data in the manner requested, the records necessary to provide an accurate response were often not readily accessible. Questions such as these are far more difficult to answer than the more general policy-type questions.

Question 23 also had a moderately high nonresponse rate of 16 percent. Question 23 asked for the average percentage of salary that was contributed by the institution to the benefits of parttime faculty and instructional staff. In many instances, respondents were likely to have skipped this item intentionally, to reflect that their part-time faculty were not extended benefits. It should also be noted, however, that the term "part-time faculty" usually encompasses a wider range of staff than "full-time" faculty and these staff may receive widely varying levels of benefits. "Parttime" often includes temporary or contractual staff without faculty status, non-instructional staff teaching on "overload", retired faculty who continue to teach part-time, and long-term staff whose eligibility for benefits may be linked to workload, duration of employment and/or faculty status. Hence, it may not be possible for some institutions to arrive at one figure that accurately reflects an average of the benefits received by all part-time faculty and instructional staff.

### 7.3 Faculty Questionnaire Item Nonresponse

A total of about 17,600 respondents completed the faculty questionnaire, which consisted of six sections and 369 items and took on average 51 minutes to complete for the paper and Web versions and 55 minutes to complete for the CATI version. An abbreviated version of the questionnaire was routinely administered via CATI to respondents who voiced concern over the length of the questionnaire, or the time they had available to complete it. Because of respondent reluctance to complete the full questionnaire, the abbreviated questionnaire was administered to most CATI respondents. Out of 2,670 completed CATI interviews, about 2,610 were completed using the abbreviated questionnaire. This shortened version of the questionnaire contained 202 items, and took approximately 31 minutes, on average, to complete. The items not included in the abbreviated questionnaire were imputed according to the procedures outlined in section 6.5. A total of about 5,480 respondents completed the questionnaire on the World Wide Web.

In order to calculate rates of item non-response, we computed the ratio of missing responses to all eligible respondents. For the numerator, we computed the total of all responses that required imputation. This total did not include responses that were filled in as the result of editing, nor did it include responses that were derived from logical imputation (e.g., as the result of the imputation of another item.) For the denominator, we computed the number of cases that were eligible to answer the question. A respondent may not have been eligible to answer a question if they were either never asked (specifically, if they received the shortened CATI questionnaire) or skipped that question because of their response to a previous question. The final non-response rate was weighted using the faculty base weights.

Overall, the item nonresponse rate for the faculty questionnaire was 6.2 percent. More than half of the items on the questionnaire ( 55 percent) had an item nonresponse rate of less than 5 percent, 25 percent had rates between 5 and 10 percent, and 20 percent had rates greater than 10 percent. See Appendix I for a list of item nonresponse rates and standard errors for critical items and for a selection of 45 items with low (less than 5 percent), medium ( 5 to 10 percent), and high (more than 10 percent) item nonresponse rates. A complete list of item nonresponse rates can be found on the restricted-use CD-ROM file.

### 7.3.1 Nonresponse by item topic and administration mode

Nonresponse by topic. Table 7.4 shows that items in section C, regarding other institutional responsibilities, including resources and administrative committee work, had the highest levels of item nonresponse on the faculty questionnaire, with a mean item nonresponse rate of 11.1 percent. The compensation questions in section E had comparably high levels of item nonresponse, with a mean of 10.8 . Other segments of the survey had mean item nonresponse rates ranging from 2.3 percent to 8.9 percent.

Table 7.4-Mean item nonresponse rates for faculty questionnaire, by topic (weighted data)

| Section/questionnaire content area | Questions | Number <br> of items | Mean <br> percent <br> missing | SE |
| :--- | :--- | ---: | ---: | ---: |
| A: Nature of employment | $1-15$ | 24 | 5.2 | 0.028 |
| B: Academic/professional background | $16 \mathrm{Al}-29 \mathrm{C} 6$ | 76 | 7.2 | 0.042 |
| C1: Hours, academic committees, and class load | $30 \mathrm{~A}-41 \mathrm{E} 5$ | 97 | 4.1 | 0.024 |
| C2: Student evaluation methods, web and e-mail <br> usage, individual instruction, and office hours | $42-51$ | 27 | 7.3 | 0.044 |
| C3: Research | $52-59 \mathrm{~B}$ | 18 | 8.9 | 0.059 |
| C4: Institutional resources, administrative <br> committees, and union membership | $60-64$ | 30 | 11.1 | 0.034 |
| D: Job satisfaction issues | $65 \mathrm{~A}-74$ | 41 | 6.6 | 0.029 |
| E: Compensation | $75 \mathrm{~A}-80$ | 29 | 10.8 | 0.042 |
| F: Sociodemographic characteristics | $81-90$ | 10 | 2.3 | 0.017 |
| G: Opinions | $91 \mathrm{~A}-93 \mathrm{~F}$ | 17 | 7.3 | 0.032 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Nonresponse by critical items. As shown in Table 7.5, mean nonresponse was lower for critical items than for non-critical items, despite the fact that for this cycle of NSOPF, no retrieval of critical items was conducted (see Appendix I for a list of critical items on the faculty questionnaire).

Table 7.5-Mean item nonresponse rates for critical items on the faculty questionnaire (weighted data)

| Questionnaire content area | Number <br> of items | Mean <br> percent <br> missing | SE |
| :--- | ---: | ---: | ---: |
| Critical | 22 | 2.3 | 0.017 |
| Non-critical | 347 | 7.0 | 0.035 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Nonresponse by mode. There are clear differences by mode in patterns of nonresponse. The majority of questionnaires were completed on paper; hence, the mean nonresponse rate of paper questionnaires was closest to the rate of nonresponse overall.

The lowest mean item nonresponse rate was for Web respondents-see Tables 7.6 and 7.7. This is clearly linked to the distinct advantages of the Web questionnaire: first, the Web questionnaire guided respondents automatically through the correct skip pattern, and prompted respondents to enter a response (including "not applicable" or "don't know) wherever one was required. Second, it allows respondents to complete the questionnaire at whatever time proved most convenient to them without having to set an appointment in advance. Third, the questionnaire could be completed in multiple sittings if required-again without the need to schedule repeated appointments with an interviewer.

Web respondents had higher mean nonresponse rates than their paper counterparts in the sociodemographic section of the questionnaire. This may reflect, in part, greater reluctance on the part of some respondents to answer personal questions over the Web. Some respondents might have had concerns that this information had the potential to identify them to their employers, or to third parties. However, some sections containing sensitive questions (for example, those about compensation) had slightly lower mean nonresponse on the Web version than on paper. Since questions about sociodemographic characteristics appear near the end of the questionnaire, respondent fatigue might have also played a role here. Some Web respondents exited prior to the end of the questionnaire, and never returned to complete it; these incomplete questionnaires were reviewed on an individual basis to determine whether they contained sufficient data to classify the questionnaire a complete.

Telephone respondents had the lowest mean nonresponse in five sections of the questionnaire, and the highest mean nonresponse in three sections of the questionnaire. Item nonresponse was higher for telephone respondents on sections dealing with job satisfaction, compensation, and opinions. One factor, as in 1993, is a possible reluctance of some respondents to disclose demographic details and/or specific attitudes and ideas in an interview setting. Second, there was an increase in nonresponse from the first third to the last third of the questionnaire ( 5.7 percent to 8.0 percent) that must be at least partially attributed to respondent fatigue.

Table 7.6-Mean item nonresponse rates for faculty questionnaire, by questionnaire third and mode (weighted data)

|  |  |  | Mail <br> (weighted <br> n=503,133) |  | Phone <br> (weighted <br> n=288,290) |  | Web <br> (weighted <br> n=282,245) |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Questionnaire by <br> thirds | Questions | Number <br> of items | Mean <br> percent <br> missing | SE | Mean <br> percent <br> missing | SE | Mean <br> percent <br> missing | SE |
| First third | $1-32 \mathrm{C} 1$ | 123 | 8.7 | 0.052 | 5.7 | 0.273 | 5.0 | 0.055 |
| Middle third | $32 \mathrm{C} 2-60 \mathrm{D}$ | 123 | 6.3 | 0.049 | 2.1 | 0.130 | 2.3 | 0.043 |
| Last third | $60 \mathrm{E}-93 \mathrm{~F}$ | 123 | 10.0 | 0.044 | 8.0 | 0.224 | 5.9 | 0.051 |
| TOTAL | $1-93 \mathrm{~F}$ | 369 | 8.4 | 0.048 | 5.3 | 0.209 | 4.4 | 0.050 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 7.7-Mean item monresponse rates for faculty questionnaire, by section and mode (weighted data)

| Section/ questionnaire content area | Questions | Number of items | Mail(weighted$n=503,133$ ) |  | Phone(weighted$n=288,290$ ) |  | Web(weighted$\mathrm{n}=282,245$ ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mean percent missing | SE | Mean percent missing | SE | Mean percent missing | SE |
| A: Nature of employment | 1-15 | 24 | 5.4 | 0.036 | 1.2 | 0.062 | 5.0 | 0.048 |
| B: Academic/ professional background | $\begin{aligned} & \hline 16 \mathrm{Al-} \\ & 29 \mathrm{C} 6 \end{aligned}$ | 76 | 8.3 | 0.058 | 8.1 | 0.412 | 5.0 | 0.061 |
| C1: Hours, academic committees, and class load | 30A-41E5 | 97 | 6.5 | 0.040 | 1.3 | 0.046 | 2.0 | 0.030 |
| C2: Other institutional responsibilities (including web usage) | 42-51 | 27 | 9.5 | 0.064 | 4.7 | 0.230 | 3.5 | 0.054 |
| C3: Research | 52-59B | 18 | 10.9 | 0.079 | 3.6 | 0.338 | 5.5 | 0.091 |
| C4: Other institutional responsibilities (including resources and administrative committees) | 60-64 | 30 | 15.6 | 0.046 | 1.3 | 0.058 | 3.6 | 0.039 |
| D: Job satisfaction issues | 65A-74 | 41 | 7.7 | 0.039 | 10.5 | 0.257 | 4.6 | 0.045 |
| E: Compensation | 75A-80 | 29 | 11.2 | 0.057 | 11.8 | 0.293 | 9.1 | 0.071 |
| F: Sociodemographic characteristics | 81-90 | 10 | 1.5 | 0.019 | 1.0 | 0.018 | 4.6 | 0.045 |
| G: Opinions | 91A-93F | 17 | 7.2 | 0.040 | 9.3 | 0.392 | 7.6 | 0.055 |
| TOTAL | 1-93F | 369 | 8.4 | 0.048 | 5.3 | 0.209 | 4.4 | 0.050 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

When the mean nonresponse for critical items was examined (see Table 7.8), the Web questionnaire still had the lowest mean nonresponse rates ( 1.6 percent compared to 2.1 percent for telephone and 2.6 percent for mail). The nonresponse rate for critical items was slightly lower for CATI than it is for mail surveys. This is most likely due to the presence of the interviewer, which encouraged respondents to answer questions they might otherwise skip in a selfadministered format.

Table 7.8-Mean item nonresponse rates for critical and non-critical items, by mode (weighted data)

| Critical items | Mail |  |  |  | Phone |  |  | Web |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Min | Mean | Max | Min | Mean | Max | Min | Mean | Max |  |
|  | 0.3 | 2.6 | 5.1 | 0.0 | 2.1 | 25.9 | 0.1 | 1.6 | 7.0 |  |
| Standard error | 0.009 | 0.026 | 0.037 | 0.000 | 0.026 | 0.130 | 0.007 | 0.025 | 0.055 |  |
| Non-critical items | Min | Mean | Max | Min | Mean | Max | Min | Mean | Max |  |
| Nonresponse rate (percent) | 0.3 | 8.7 | 47.5 | 0.0 | 5.5 | 68.4 | 0.1 | 4.6 | 30.4 |  |
| Standard error | 0.009 | 0.050 | 0.200 | 0.000 | 0.221 | 2.445 | 0.008 | 0.051 | 0.273 |  |

NOTE: The standard errors above are the minimum, mean, and maximum of the standard errors, not the standard errors for the nonresponse percentages.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

## CHAPTER 8. An Assessment Of Discrepancies In Faculty Counts

This chapter provides an evaluation of the discrepancies found among different sources of faculty counts in NSOPF:99. It reviews the procedures used to detect discrepancies and provides an analysis of their magnitude.

### 8.1 Discrepancies in Faculty Counts

As in previous NSOPF studies, institution coordinators were asked to provide counts of full- and part-time faculty and instructional staff at their institutions as of November $1,1998,{ }^{22}$ the same reference period used for the IPEDS Fall Staff Survey. Coordinators were asked to provide these counts in two documents, an institution questionnaire and a list of all faculty and instructional staff. Unlike NSOPF:93, ${ }^{23}$ when institution coordinators were asked to provide the list and the questionnaire data at two different points in time, NSOPF:99 asked coordinators to return both documents at the same time. In addition, coordinators were given explicit warnings about potential undercounts of faculty and were asked to ensure that the counts provided in the list and questionnaire were consistent. This strategy was employed to reduce errors in reporting, under the assumption that coordinators would be more likely to provide consistent counts of faculty if they were given clear instructions, adequate warnings, and were asked to perform both reporting tasks simultaneously.

In addition, intensive follow-up was conducted with 234 (28.6 percent of participating) institutions whose reports exhibited a variance of 5 percent or more between the list and questionnaire counts overall, or between the two part-time counts.

In conducting an assessment of faculty counts, the primary consideration was the extent to which the counts reported by the institution in the list and questionnaire matched or were discrepant. Since both counts were requested simultaneously, there was no reason to expect differences. However, when differences did emerge, other sources of data such as IPEDS enumerations and faculty counts from previous NSOPF studies were useful in providing checks on the quality of the current NSOPF data and clues about the nature of the error. For example, during list collection, IPEDS and historical NSOPF data were helpful in identifying systematic errors such as the (inadvertent) systematic exclusion of all part-time faculty. The most current IPEDS data (from the 1997 Fall Staff Survey) was available for comparison. Earlier NSOPF data was also available and could be used to make comparative assessments and to explore trends over time.

Discrepancies in faculty counts are more likely to appear between IPEDS data and either faculty list or questionnaire counts than between the list and questionnaire counts collected by NSOPF:99. Indeed, a certain level of discrepancy between NSOPF:99 data and IPEDS is to be expected since IPEDS does not provide a direct comparison for the same point in time. The most recent IPEDS data that were available at the time of the analysis were from the IPEDS 1997 Fall Staff Survey completed one year earlier than the NSOPF:99 reference date. Differences in the

[^15]criteria and definitions used by IPEDS and NSOPF are also a source of discrepancy. IPEDS, unlike NSOPF, excludes instructional staff that do not have faculty status. (See also the Glossary of IPEDS terms contained in the institution questionnaire in Appendix A). These two points of difference-reporting period and definitions-account for a large proportion, but certainly not all, of the discrepancies between IPEDS and the list and questionnaire counts in NSOPF:99.

### 8.2 Procedures for Determining Discrepancies in Faculty Counts

As part of NSOPF:99, Gallup designed and implemented a set of procedures to identify discrepancies between list, questionnaire, and IPEDS sources of faculty counts. Discrepancies were determined using the following procedures:

- As each list of faculty was evaluated and processed for sampling, the total count of faculty was obtained. Counts by employment status (full-time/part-time), gender and race/ethnicity were entered into a specially-designed discrepancy detection module of the Status Monitoring System (SMS) for each participating institution. The total count of faculty was determined by summing full-time, part-time and those for whom employment status was unknown. When such data was not provided, total counts were determined by adding male, female, and those for whom gender was unknown. Similarly, once a completed institution questionnaire was received and receipted, full-time and part-time faculty counts from the first two items of the questionnaire were entered into the SMS discrepancy module, and were summed to determine the total count of faculty and other instructional staff.
- Additional sources of data were pre-loaded into the SMS, including IPEDS Fall Staff Survey data from 1997, 1995, 1992, and 1991; and NSOPF list and questionnaire data for institutions participating in the 1993 full-scale study and 1992 field test, respectively (though historical data was rarely utilized). Although the IPEDS definition of faculty is less inclusive than the NSOPF:99 definition, IPEDS remains the most comprehensive and accurate count of faculty available, and hence provides a good benchmark for external comparisons. Historical data from earlier IPEDS and NSOPF surveys were loaded to check if the current data provided by the institution contradicted trends from previous years.
- Using the SMS, a discrepancy report was generated for each institution (see Appendix J for a sample discrepancy report); summary reports for all participating institutions were also prepared. Reports could be produced by choosing any two sources (i.e., list versus questionnaire, list versus IPEDS, or questionnaire versus IPEDS), choosing a survey period for each source (1999 full scale, 1993 full scale, or 1992 field test), and choosing one of three types of faculty counts (total, full-time, or part-time). Discrepancy reports were generated showing the total number of faculty (or the number of full-time or parttime faculty) from each source and the numerical and percent difference between each combination of sources.


### 8.3 Analysis of Discrepancies Among Faculty Counts

The following section analyzes discrepancies among three sources of faculty counts at participating postsecondary institutions for NSOPF:99. The analyses include:

- The unweighted NSOPF list count of faculty provided by the institution (LIST);
- The unweighted count of faculty based on the institution's response to the institution questionnaire (QUEX);
- The count of faculty according to the institution's IPEDS data (IPEDS), keeping in mind that the IPEDS faculty count does not include instructional staff without faculty status.

As indicated earlier, the IPEDS definition of faculty includes only those who have academic-rank titles whose primary duties are instructional. These exceptions do not apply to NSOPF; all those with faculty status or any instructional duties were to be included in institutional counts and enumerated on the list of faculty. No adjustments have been made to make NSOPF list data comparable to IPEDS data for these comparisons; indeed, such adjustments could only be approximate, at best, since most lists of faculty do not clearly indicate whether an individual's primary duty is instructional, or whether they have faculty status. The obvious expectation is that most faculty counts produced for NSOPF should be larger than those produced for IPEDS.

In this section, these counts are referred to as LIST, QUEX, and IPEDS, respectively. The magnitudes and directions of each of the three pairwise differences are evaluated: (LISTIPEDS), (QUEX-LIST), and (QUEX-IPEDS). Note that (LIST-IPEDS) and (QUEX-IPEDS) comparisons are difficult to interpret because these comparisons pertain to different years of data. As noted earlier, it is also important to note that the definition of faculty used by NSOPF is broader than the IPEDS definition, and the faculty counts from the list or questionnaire should generally be larger than IPEDS. Thus, while all three comparisons provide some insight into the problem, the (QUEX-LIST) comparison should be viewed as the most valid comparison.

Table 8.1 provides a breakdown of total faculty counts, by source and year (i.e., NSOPF:88, NSOPF:93 and NSOPF:99). The discrepancy analyses for NSOPF:99 focus almost exclusively on institutions for which both a list and questionnaire counts were returned ( $\mathrm{N}=772$ ), in which a list was returned and IPEDS data were available ( $\mathrm{N}=765$ ), or in which questionnaire counts and IPEDS data were available ( $\mathrm{N}=792$ ).

When viewing the "matched" observations for NSOPF:99 in Table 8.1, the largest difference, as expected, appears when IPEDS and QUEX counts are compared; the questionnaire count is higher than IPEDS by 32,882 faculty.

The next largest difference is between the LIST and IPEDS counts, a difference of 18,998 . As expected, the list counts are larger than the IPEDS counts. The smallest difference is for the QUEX-LIST comparison, where the difference is reduced to 12,406 faculty. This number provides us with the best available estimate of the extent to which lists undercount faculty and instructional staff. This represents a 2.1 percent discrepancy, a difference roughly 34 percent smaller than the 3.4 percent discrepancy reported in 1993. Both the average size and overall number of discrepancies have been significantly reduced since 1993; hence, a far smaller number of institutions (some with very large discrepancies) were responsible for the difference than in 1993.

Surprisingly, the LIST counts for NSOPF:99 are far closer to the IPEDS counts than they were in 1993 (a 3.3 percent difference between LIST and IPEDS in 1999, compared to 14.4 percent difference in 1993). Strategies for preventing and resolving discrepancies likely had some impact
by reducing both the size and number of list over-counts. However, the fact that the gap between LIST/IPEDS has shrunk so dramatically makes it likely that other factors were also involved.

The fastest growing segment of the faculty population (part-time and contractual instructional staff) is also the most likely to be systematically undercounted on the lists of faculty. The stratum most likely to provide an undercount (based on having list and questionnaire counts lower than IPEDS), 2-year public and private not-for-profit institutions, has among the highest concentrations of part-time and contractual staff. It is possible that institutions included more of these staff (with academic titles such as "lecturer" and "instructor") within their IPEDS definitions, while still frequently excluding them from the list of faculty (and sometimes recapitulating this error in their questionnaire counts as well). Because interpretations of terms like "academic title" and "faculty status" may vary widely from institution to institution, there is likely to be some inconsistency in how these types of staff were reported to IPEDS.

Table 8.1- NSOPF counts of faculty on lists provided by institutions, by source and year

| LIST-IPEDS comparison | Matched observations of faculty counts |  |  |
| :--- | ---: | ---: | ---: |
|  | NSOPF:88 | NSOPF:93 |  |$\left|\begin{array}{rl}\text { NSOPF:99 }\end{array}\right|$

SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); Integrated Postsecondary Education System (IPEDS) Institutional Characteristics of Postsecondary Institutions (IC), 1996-1997.

### 8.4 Discrepancy Analysis of 1999 NSOPF Full-Scale Data

Figure 8.1, comparing (LIST-IPEDS), shows seven institutions with identical LIST and IPEDS counts. Approximately 34 percent of institutions had differences of 10 percent or less, 37 percent had discrepancies of 11 to 30 percent, 13 percent had discrepancies of 31 to 50 percent, and 15 percent had differences of more than 50 percent. Counts were, as expected, likely to be higher on the lists ( 59 percent) than on IPEDS ( 39 percent). Because the IPEDS definition of faculty is less inclusive than NSOPF, only those discrepancies in which the list or questionnaire counts are lower than IPEDS clearly suggest a potential problem, since they may reflect undercounts of faculty.

Figure 8.1-Frequency distribution of discrepancy ranges, comparing NSOPF:99 full scale lists and 1997 IPEDS data (LIST-IPEDS)

| Percent range | Frequency Percent |  |  |
| :---: | :---: | :---: | :---: |
| <-50 | ********* | 46 | 6.37 |
| -50 to -31 | ********* | 46 | 6.37 |
| -30 to -11 | ******************* | 96 | 13.30 |
| -10 to -1 | ******************* | 94 | 13.02 |
| 0 | * | 7 | 0.97 |
| 1 to 10 | ****************************** | 149 | 20.64 |
| 11 to 30 | ********************************** | 168 | 23.27 |
| 31 to 50 | ********** | 51 | 7.06 |
| >+50 | ************* | 65 | 9.00 |
|  | $20 \quad 40 \quad 60 \quad 80 \quad 100 \quad 120 \quad 140 \quad 160$ |  |  |

NOTE: Percentages reflect $100^{*}$ (list count-IPEDS count)/(IPEDS count). Those with negative discrepancies are institutions where the IPEDS count was higher.

SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); 1997 Integrated Postsecondary Education System Institutional Characteristics of Postsecondary Institutions (IPEDS-IC:1997).

Figure 8.2 shows a comparison of (LIST-QUEX). Because both pieces of data were gathered at the same time for NSOPF:99, the assumption was that discrepancies would be much smaller than in 1993, when the list and questionnaire were collected separately. Indeed, nearly 43 percent of the institutions returning both a questionnaire and a list provided identical data. An additional 30 percent had discrepancies of 10 percent or less. Thus, roughly 73 percent of institutions provided data with a discrepancy of 10 percent or less. This stands in marked contrast to NSOPF:93, where only 42 percent had discrepancies of 10 percent or less. When an institution provided discrepant data, they tended to provide more faculty on the questionnaire (31 percent) than on the list ( 26 percent).

There is evidence that counts provided on the institution questionnaire are, overall, more complete and accurate than those derived from the list of faculty. In 1993, institutions were recontacted after data collection had been completed to resolve discrepancies between the list and institution questionnaire. Most often, institutions chose the institution questionnaire counts as the most accurate enumeration of faculty. Nearly 24 percent of the NSOPF: 93 institutions contacted systematically excluded some or all part-time faculty from the list of faculty, but included them in the questionnaire counts. (Only 6 percent of institutions contacted excluded some or all faculty on the lists from the institution questionnaire counts). Post-stratification adjustments based on these institutional re-contacts brought national population estimates in the faculty file more in line with the estimates produced by the institution questionnaire file. Based on these findings, the contractor for NSOPF:93 suggested that post-stratifying faculty questionnaire data to estimates produced for the institution questionnaire file could reduce measurement error and ensure consistency between the faculty and institution questionnaire data files. The larger estimates produced by the institution questionnaire file for NSOPF: 99 tend to support the conclusion that, overall, institution questionnaire counts continue to be more inclusive of eligible faculty and, therefore, more accurate than counts derived from faculty lists.

Figure 8.2-Frequency distribution of discrepancy ranges, comparing NSOPF:99 full scale lists and NSOPF:99 full scale questionnaires (LIST-QUEX)


NOTE: Percentages reflect $100^{*}$ (list count-questionnaire count)/(questionnaire count). Those with negative discrepancies are institutions where the questionnaire count was higher.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Figure 8.3 compares NSOPF:99 questionnaire data with 1997 IPEDS data (QUEX-IPEDS). Only 2 percent of institutions had identical data between these two sources. Among the other institutions, 39 percent had discrepancies of 10 percent or less, 33 percent between 11 and 30 percent, 13 percent between 31 and 50 percent, and 13 percent had discrepancies over 50 percent. Counts tended to be larger on questionnaires ( 60 percent) than on IPEDS ( 38 percent). This could be due to a real increase in faculty over time, better reporting, the broader definition of faculty used in NSOPF, or a combination of the three factors.

Figure 8.3-Frequency distribution of discrepancy ranges, comparing NSOPF:99 full-scale questionnaires and 1997 IPEDS data (QUEX-IPEDS)


NOTE: Percentages reflect $100^{*}$ (questionnaire count-IPEDS count)/(IPEDS count). Those with negative discrepancies are institutions where the IPEDS count was higher.

SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); 1997 Integrated Postsecondary Education System Institutional Characteristics of Postsecondary Institutions (IPEDS-IC:1997).

In summary, larger discrepancies are more prevalent in the (LIST-IPEDS) and (QUEX-IPEDS) comparisons than in the (QUEX-LIST) comparison. This finding is generally consistent with patterns found in NSOPF:93 and NSOPF:88.

Table 8.2 shows the results of paired $t$-tests of the significance of differences between LIST and IPEDS, between QUEX and LIST, and between QUEX and IPEDS. Both the mean differences (i.e., mean difference between LIST and IPEDS) and the mean percentage differences (i.e. the mean of 100*(LIST-IPEDS)/IPEDS) were tested. T-tests among observations with percent differences less than 50 in absolute value were also performed.

The data suggest a clearly significant mean difference only for the QUEX/IPEDS comparison. However, when the outlier observations (greater than 50 percent difference) are excluded, a
significant difference in the mean between QUEX and LIST appears. Once the largest QUEXLIST discrepancies are removed, the mean discrepancy decreases significantly from 16.07 to -18.51 (significant at the .05 level). This suggests the very largest discrepancies are largely those in which the QUEX count is substantially higher than the list. Once they are removed from the analysis, the countervailing impact of counts that are higher than the questionnaire can be more clearly seen. Also, the standard error shows that the estimate with the largest discrepancies taken out is more precise than the estimate of the total sample. At the same time, a difference was not observed in the mean percent difference for QUEX/LIST with outliers removed. However, mean percent differences between QUEX and IPEDS, and LIST and IPEDS, are significant even when outliers are excluded.

Table 8.2-1999 NSOPF estimates of number of faculty—paired t-tests

| Comparison | Number | Mean <br> difference <br> (standard <br> error*) | Paired T <br> P value | Mean percent <br> difference <br> (standard <br> error*) | Paired T <br> P value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| LIST-IPEDS | 765 | $24.83(13.8)$ | .07 | $9.77(2.1)$ | .00 |
| QUEX-LIST | 772 | $16.07(11.2)$ | .15 | $14.98(2.7)$ | .00 |
| QUEX-IPEDS | 792 | $41.52(12.5)$ | .00 | $12.92(2.1)$ | .00 |
| **LIST-IPEDS | 638 | $9.80(9.8)$ | .32 | $2.73(0.8)$ | .00 |
| **QUEX-LIST | 701 | $-18.51(6.0)$ | .00 | $-0.09(0.5)$ | .85 |
| $* *$ QUEX- <br> IPEDS | 690 | $6.71(8.5)$ | .43 | $2.68(0.7)$ | .00 |

*Standard errors assume simple random sampling.
**Observations with percent differences greater than 50 in absolute value were excluded.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); Integrated Postsecondary Education System (IPEDS) Institutional Characteristics of Postsecondary Institutions (IC), 1996-1997.

Table 8.3 presents paired t-tests in faculty estimates for small and large institutions, for public and private institutions, and for 2-year, 4 -year and other institutions (the "other" category includes health sciences, professional and religious institutions). Table 8.4 presents the results of paired $t$-tests for institutions in different sampling strata. If there is no discrepancy between the institution's questionnaire and list (i.e., the null hypothesis), the institution's discrepancy is equal to zero. These $t$-tests indicate whether the mean difference between faculty counts provided on the institution questionnaire and the number of faculty enumerated on the faculty list are significantly different from zero.

Table 8.3-QUEX-LIST discrepancies, by institution characteristics: size, type and control mean differences (matched pairs ttests), fall 1999

| Size | Number | Mean <br> difference | SE* | Probability |
| :--- | :---: | :---: | :---: | :---: |
| Small | 387 | 56.0 | 12.22 | 0.0001 |
| Large | 387 | -21.6 | 18.57 | 0.2451 |
| Control |  |  |  |  |
| Public | 552 | 16.1 | 13.64 | 0.2378 |
| Private | 222 | 19.9 | 19.36 | 0.3051 |
| Type | 266 | 33.7 | 13.45 | 0.0128 |
| 2-year | 444 | -3.0 | 14.19 | 0.8318 |
| 4 -year | 64 | 88.8 | 73.92 | 0.2340 |
| Other |  |  |  |  |

*Standard errors assume simple random sampling.
NOTE: Observations with percent differences greater than 50 in absolute value were excluded. Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Institution size. Institutions providing both the institution questionnaire and a list were divided into "small" and "large" institutions at the median list count of 436 faculty. The results showed that, on average, smaller institutions reported 56 more faculty on the institution questionnaire than on the list. Larger institutions, on the other hand reported about 22 fewer faculty on the questionnaire than on the list. These results closely mirror the results in 1993, when small institutions reported about 56 more faculty on the questionnaire, and larger institutions reported roughly 23 more faculty on the list. As in 1993, however, only the average discrepancy for small institutions meets the probability test for significance ( $p=.05$ ). Clearly a contributing factor is that small institutions, like 2-year institutions, are somewhat more likely to employ part-time or short-term faculty, and to lack the software and personnel to accurately track them. For the smallest institutions, it should be noted that comparatively small numerical differences can create large percentage differences.

Control. The public/private variable was not a significant predictor of the magnitude of differences between the list and questionnaire counts. The size of the discrepancy for public institutions has shrunk by more than two-thirds since 1993, when the average discrepancy was 38.2; the size of discrepancies for private institutions has shifted from -11.5 in 1993 to 19.9 in 1999. The reasons for this shift are unclear.

Type. As in 1993, 2-year institutions reported higher numbers of faculty on the questionnaire than on the list. In 1993, 2-year schools reported an average of 41 more faculty on the questionnaire; for NSOPF:99, the mean difference was roughly 34. In both instances, the discrepancy can likely be attributed to the greater numbers of part-time and transient faculty employed by such institutions (and the attendant difficulties in tracking them.). Two-year institutions often do not have full-time institutional research offices, and they often lack the sophisticated software to accurately track more transient part-time, and short-term instructional staff. This discrepancy meets the test for significance at the .05 level. As in 1993, no differences were detected in the discrepancies for 4 -year institutions. The "other" category, which includes
other health science, professional and religious institutions exhibits a large numerical discrepancy of 103 more faculty on the questionnaire than on the list. However, because of the small size of this grouping, this discrepancy does not meet the criteria for significance.

Table 8.4 shows discrepancies by the eight sampling stratum described in section 3.2.3. Both the private masters and associates strata suggest significant discrepancies. The largest numerical discrepancy is in the medical stratum, where there were an average of 164 more faculty on the institution questionnaire than the list. Because of the relatively small number of institutions in this stratum, this result does not reach the level of significance at the .05 level. However, it can be said that large discrepancies from medical institutions, when they occur, are generally caused by the special nature of medical institutions and faculty. Medical institutions frequently have large numbers of honorary faculty, voluntary faculty and part-time and occasional lecturers, as well as faculty paid solely by sources outside the institution (e.g., research grants, hospitals, the military) and physicians with "faculty status" who supervise residents but do not otherwise teach. Hence, they have a much harder time tracking faculty and defining "who is faculty" than other institutions. These difficulties have the potential to lead to substantial undercounts or overcounts, depending on how the individual institution keeps its records.

Table 8.4-Discrepancies by sampling stratum, mean differences (matched pairs t-tests), fall 1998

| Sampling stratum | Number | Mean <br> difference | Standard <br> error* | P value |
| :--- | ---: | ---: | ---: | ---: |
| Large public masters | 27 | 10.9 | 37.56 | 0.7749 |
| Small public masters | 88 | 3.7 | 17.38 | 0.8337 |
| Private not-for-profit masters | 53 | 33.9 | 14.24 | 0.0208 |
| Public baccalaureate | 36 | -11.2 | 29.29 | 0.7053 |
| Private not-for-profit baccalaureate | 86 | 5.0 | 4.71 | 0.2912 |
| Medical | 34 | 164.4 | 136.2 | 0.2360 |
| Associates | 256 | 37.2 | 13.82 | 0.0075 |
| Research and doctoral | 194 | -21.9 | 30.74 | 0.4774 |
| All | 774 | 17.2 | 11.20 | 0.1248 |

*Standard errors assume simple random sampling.
NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

Table 8.5 compares the percentage distribution of all institutions providing both a list and a questionnaire with the subset of these institutions with the 100 largest discrepancies. Again, as in 1993 we see that the largest discrepancies are clustered in the associates stratum, and in the smaller institutions. Almost one-half of the largest discrepancies are in the associates stratum, while more than two-thirds of the largest discrepancies fall in the small institutions. These results echo the results from the 1993 study, which similarly found the largest discrepancies in these strata. As noted earlier, these types of institutions are considerably more likely to utilize a high percentage of part-time faculty, and also less likely to have the resources available to keep track of them.

Table 8.5-A comparison of institutions providing both a list and a questionnaire and the $\mathbf{1 0 0}$ of those institutions with the largest discrepancies

| Sampling stratum | All institutions providing <br> list and questionnaire, <br> percent | 100 of those institutions with <br> largest discrepancies, <br> percent |
| :--- | :---: | :---: |
| Large public masters | 3.5 | 1.0 |
| Small public masters | 11.3 | 7.0 |
| Private not-for-profit masters | 6.9 | 6.0 |
| Public baccalaureate | 4.7 | 3.0 |
| Private not-for-profit baccalaureate | 11.1 | 10.0 |
| Medical | 4.4 | 5.0 |
| Associates | 33.0 | 52.0 |
| Research and doctoral | 25.1 | 16.0 |
| Size |  |  |
| Small (less than 436 faculty) | 50.0 | 70.0 |
| Large (436 faculty or more) | 50.0 | 30.0 |
| List/Quex Comparison |  | 21.0 |
| List $>$ Quex | 28.8 | 0.0 |
| Quex=List | 33.7 | 79.0 |
| Quex $>$ List | 37.6 |  |

NOTE: Sample excluded for-profit institutions.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99).

### 8.5 The Impact of Identical List and Questionnaire Data on Data Quality

Roughly 43 percent of the institutions, overall, provided data in which the list and questionnaire data were identical. This is in stark contrast to 1993, when only 2.4 percent of institutions provided identical data for both datasets. As noted at the beginning of the chapter, this improvement can be largely attributed to the fact that, unlike 1993, the list request and institution questionnaire were mailed simultaneously (and to the same individual). An intensive effort to reconcile list/questionnaire discrepancies also played a role in this improvement (96 or 11.7 percent of the 819 participating institutions supplied matching or substantially improved data as a result of follow-up to resolve discrepancies).

However, identical institution questionnaire and list data does not necessarily indicate that the data for these institutions is entirely free from error. Systematic errors (particularly the exclusion of part-time or short-term faculty and instructional staff, or the inclusion of ineligible staff) may sometimes affect both counts. Since the counts come from the same source, there is also the possibility that some institutions might be tempted to simply reiterate the list count on the questionnaire-even if the list is not complete, according to NSOPF definitions. So we tested the assumption that identical list and questionnaire counts provide better data. In Tables 8.6, 8.7 and 8.8 , we compare the counts from institutions providing identical LIST/QUEX data and those with LIST/QUEX discrepancies with the latest faculty counts from IPEDS. Because the definition of faculty used by NSOPF is broader than that used by IPEDS, the NSOPF counts should almost always be the same or larger than the IPEDS counts. A count that is lower than IPEDS may reflect either institutional downsizing since 1997 (when IPEDS was completed) or the exclusion
of some eligible faculty from the counts or both. On a stratum-wide basis, counts lower than IPEDS would lead us to suspect systematic undercounting by a significant number of institutions.

There are no differences observed between the faculty counts from institutions supplying identical data and institutions supplying discrepant data in the eight sampling strata (Table 8.7). This is partly attributable to the small number of institutions in individual strata. However, there are, nonetheless, strong indications that LIST/QUEX faculty counts that match are generally more complete and reliable than the discrepant faculty counts. In 7 of the 8 strata used for sampling, the faculty counts for non-discrepant institutions are higher than IPEDS, though some individual institutions in each strata have counts lower than IPEDS. (Outliers have not been removed from this analysis, and have the potential to significantly affect the mean, particularly in smaller strata, such as private masters). Table 8.7 shows how non-discrepant institutions compare to discrepant institutions. For institutions with LIST/QUEX discrepancies, five of the strata are larger than IPEDS.

The one stratum in which institutions with identical LIST/QUEX data are lower, overall, than IPEDS is the associates stratum. We have already identified this stratum as being most likely to provide list counts that are lower than questionnaire counts. Barring any evidence that would support significant downsizing in this strata since 1997, we must conclude that even when providing identical LIST/QUEX data, 2-year associates institutions were more likely to undercount faculty than other institutions. As previously discussed, it is likely that a significant number of institutions in this strata excluded some transient part-time and short-term faculty from their list, and repeated this exclusion in the institution questionnaire counts. However, even in this stratum, institutions were slightly more likely to report faculty counts higher than IPEDS when their list and questionnaire match (Table 8.8).

Table 8.8 shows the percentages by strata of faculty counts greater than IPEDS for both groups of institutions (those supplying identical and discrepant data). In 7 out of 8 strata, the percentage of institutions with list counts greater than IPEDS is higher among non-discrepant institutions than among discrepant institutions. The percentage of institutions with questionnaire counts exceeding IPEDS is also higher for identical LIST/QUEX data than for discrepant institutions in 7 out of 8 strata.

Strategies to reduce discrepancies between the list and questionnaire do result in improvements in consistency of data reporting; this is true for questionnaire counts as well as list counts.

Table 8.6-Mean discrepancies between institutions with identical LIST/QUEX data and IPEDS

| Sampling stratum | Number | Mean | Standard <br> deviation | Minimum | Maximum |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Large public masters | 8 | 116.6 | 115.5 | -59 | 297 |
| Small public masters | 30 | 63.7 | 96.4 | -39 | 411 |
| Private not-for-profit <br> masters | 11 | 2.3 | 100.2 | -212 | 120 |
| Public baccalaureate | 9 | 21.6 | 47.2 | -29 | 131 |
| Private not-for-profit <br> baccalaureate | 25 | 20.0 | 72.3 | -130 | 290 |
| Medical | 13 | 60.5 | 116.9 | -135 | 370 |
| Associates | 68 | -53.8 | 211.4 | -787 | 329 |
| Research and doctoral | 80 | 143.4 | 481.3 | -1496 | 2101 |

NOTE: Sample excluded for-profit institutions.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); Integrated Postsecondary Education System (IPEDS) Institutional Characteristics of Postsecondary Institutions (IC), 1996-1997.

Table 8.7-Discrepancies with IPEDS for schools providing identical and discrepant list and questionnaire data

|  | LIST/QUEX counts are <br> identical |  | LIST/QUEX counts are <br> discrepant |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sampling stratum | Number | Mean diference: <br> Counts/IPEDS | Number | Mean difference: <br> QUEX/IPEDS | Mean difference: <br> LIST/IPEDS |
| Large public masters | 8 | 116.6 | 19 | 100.8 | 85.4 |
| Small public masters | 30 | 63.7 | 54 | 55.8 | 65.5 |
| Private not-for-profit <br> masters | 11 | 2.3 | 39 | 5.2 | -37.9 |
| Public baccalaureate | 9 | 21.6 | 21 | -64 | -46.0 |
| Private not-for-profit <br> baccalaureate | 25 | 20.0 | 48 | 9.5 | -1.0 |
| Medical | 13 | 60.5 | 15 | 189.6 | -16.1 |
| Associates | 68 | -53.8 | 174 | 0.2 | -48.1 |
| Research and doctoral | 80 | 143.4 | 108 | 81.7 | 117.1 |

NOTE: Sample excluded for-profit institutions.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); Integrated Postsecondary Education System (IPEDS) Institutional Characteristics of Postsecondary Institutions (IC), 1996-1997.

Table 8.8-Percentage of institutions with identical and discrepant LIST/QUEX data with counts higher than IPEDS

| Sampling | Number | LIST/QUEX data is identical | LIST/QUEX data is discrepant |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Percent with faculty <br> counts $>$ IPEDS | Percent with <br> list>IPEDS | Percent with <br> quex>IPEDS |
| Large public masters | 27 | 88 | 58 | 74 |
| Small public masters | 87 | 84 | 66 | 64 |
| Private not-for-profit <br> masters | 53 | 83 | 61 | 78 |
| Public baccalaureate | 32 | 60 | 41 | 46 |
| Private not-for-profit <br> baccalaureate | 82 | 79 | 57 | 61 |
| Medical | 34 | 86 | 85 | 95 |
| Associates | 250 | 75 | 43 | 48 |
| Research and doctoral | 194 |  | 74 | 65 |

NOTE: Sample excluded for-profit institutions.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); Integrated Postsecondary Education System (IPEDS) Institutional Characteristics of Postsecondary Institutions (IC), 1996-1997.

### 8.6 Comparison of 1999 Data to Previous Cycles

Table 8.9 shows the percentage differences between the three sources of data (QUEX, LIST and IPEDS) for all cycles of $\operatorname{NSOPF}(1988,1993,1999)$. The data suggests that the collection of list and questionnaire data in 1999 has greatly improved over previous cycles. In NSOPF:99, fully 73 percent of institutions provided questionnaire and list data that exhibited discrepancies of less than 10 percent, an improvement of 31 percentage points since 1993. These results suggest that asking for questionnaire and list data concurrently, providing warnings about undercounts, and making concerted efforts to provide consistent definitions of faculty and instructional staff on the questionnaire and list request has made a difference.

Table 8.9-Percentage differences between sources of data across all cycles of NSOPF


SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); 1999 National Study of Postsecondary Faculty Field Test Report (NCES, Working Paper No. 2000-01).

Table 8.10-Mean differences between sources of data across all cycles of NSOPF

|  | Year | Number | Mean difference (standard error ${ }^{1}$ ) | $\begin{gathered} \text { Mean percent } \\ \text { difference } \\ \text { (standard error') } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| (LIST- <br> IPEDS) <br> difference | 1988 | 410 | 3.0 (17.3) | $14.1^{2} \quad(3.8)$ |
|  | 1993 | 655 | $88.4^{2}$ (22.6) | $24.8^{2} \quad(3.1)$ |
|  | 1999 | 765 | 24.8 (13.8) | $9.8{ }^{2} \quad(2.1)$ |
| (QUEX- <br> LIST) difference | 1988 | 410 | 8.5 (16.1) | $11.4^{2} \quad(3.2)$ |
|  | 1993 | 750 | 23.5 (16.7) | 142.4 (106.8) |
|  | 1999 | 772 | 16.1 (11.2) | $14.9{ }^{2} \quad(2.7)$ |
| (QUEXIPEDS) difference | 1988 | 410 | 11.6 (14.7) | $15.8^{2} \quad(3.6)$ |
|  | 1993 | 688 | $96.3^{2}$ (21.5) | $36.4^{2} \quad$ (5.2) |
|  | 1999 | 806 | $53.5^{2} \quad(12.8)$ | $18.5^{2} \quad(2.7)$ |
| $\begin{aligned} & \text { (LIST- } \\ & \text { IPEDS) } \\ & \text { difference }^{3} \end{aligned}$ | 1988 | 328 | -12.3 (10.9) | 1.2 (1.1) |
|  | 1993 | 517 | $34.2^{2} \quad(9.4)$ | $7.4^{2} \quad(1.0)$ |
|  | 1999 | 638 | 9.8 (9.8) | $2.7^{2} \quad(0.8)$ |
| $\begin{array}{\|l} \hline \text { QUEX- } \\ \text { LIST) } \\ \text { difference }^{3} \end{array}$ | 1988 | 366 | -12.1 (8.4) | -1.1 (0.8) |
|  | 1993 | 598 | -22.0 (7.9) | -0.1 (0.8) |
|  | 1999 | 701 | $-18.5^{2} \quad(6.0)$ | -0.1 (0.9) |
| $\begin{aligned} & \text { (QUEX- } \\ & \text { IPEDS) } \\ & \text { difference }^{3} \end{aligned}$ | 1988 | 349 | $1.5 \quad$ (9.1) | 1.4 (1.1) |
|  | 1993 | 539 | $35.2^{2}$ (8.2) | $8.6^{2} \quad(0.9)$ |
|  | 1999 | 690 | 6.7 (8.5) | $2.7^{2} \quad(0.7)$ |

'Standard errors assume simple random sampling.
${ }^{2}$ Statistically significant at alpha $=.05$, based on paired t-test.
${ }^{3}$ Observations with percent differences greater than 50 in absolute value were excluded.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99); 1999 National Study of Postsecondary Faculty Field Test Report (NCES, Working Paper No. 2000-01).

Tables 8.11 and 8.12 compare weighted estimates and percentages of full- and part-time faculty for NSOPF:99, based on faculty questionnaire data, with the final faculty questionnaire estimates reported for NSOPF: 93 . Estimates for 1993 were post-stratified using "best estimates" provided by the institutions. The "best estimates" for 1993, as noted earlier, were the result of an effort to reconcile institution questionnaire and list data and are based on the most accurate faculty counts available from institutions. (The institutions contacted selected the "best estimate" available from the list and questionnaire counts they provided or, in some instances, provided a third, more accurate faculty count). These estimates were weighted by the first stage institution weight and then used to post-stratify the faculty estimates shown below. (For details on how NSOPF:99 data were weighted, consult Chapter 3).

The comparison of NSOPF:99 faculty questionnaire data with NSOPF:93 "best estimates" shows, overall, continuing growth in both full- and part-time faculty. Faculty growth varies widely by institution type, however, and some institution types report fewer faculty than in 1993, while others remain virtually unchanged. In some instances, changes in individual institution types may simply reflect changes in the institutional composition of individual institution types since 1993, as well as shifts in the numbers of faculty employed at institutions within each category. (Moreover, some institutions included in the 1993 sample may have changed classification). Please note that while the public liberal arts category appears at first glance to have undergone explosive growth since 1993, it is far more likely that the estimate produced for 1993 (which was based on only three institutions, as opposed to eighteen institutions for NSOPF:99) was too low. The comparable figure from IPEDS in 1997 shows 14,822 faultymuch closer to the NSOPF:99 estimate of 19,204 than the NSOPF:93 estimate. (It is also very close to the 1999 weighted institution questionnaire count of 19,000 faculty).

Table 8.11 demonstrates that despite shifts in the faculty counts among individual institution types, the percentages of full and part-time faculty in each category (Table 8.12) are closely comparable to what was reported as a "best estimate" in 1993.

Table 8.11-NSOPF:99 faculty questionnaire estimates compared to NSOPF:93 "best estimates," by institution type

|  | All |  | Full-time |  | Part-time |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Institution type | NSOPF:93 | NSOPF:99 | NSOPF:93 | NSOPF:99 | NSOPF:93 | NSOPF:99 |
| Public, research | 158,578 | 200,813 | 128,432 | 160,094 | 30,145 | 40,719 |
| Private, research | 63,654 | 63,689 | 41,9131 | 44,929 | 21,740 | 18,760 |
| Public, other Ph.D. | 59,873 | 64,068 | 43,800 | 46,131 | 16,072 | 17,937 |
| Private, other Ph.D. | 33,494 | 32,831 | 19,099 | 15,558 | 14,395 | 17,272 |
| Public, comprehensive | 151,839 | 137,348 | 101,238 | 87,204 | 50,601 | 50,143 |
| $\begin{array}{l}\text { Private, } \\ \text { comprehensive }\end{array}$ | 79,227 | 76,781 | 40,746 | 39,754 | 38,481 | 37,027 |
| Public, liberal arts | 3,239 | 19,204 | 1,974 | 11,965 | 1,265 | 7,239 |
| Private, liberal arts | 63,785 | 84,039 | 41,997 | 50,193 | 21,788 | 33,846 |
| Public, 2-year | 303,273 | 301,412 | 112,538 | 108,877 | 190,735 | 192,535 |
| Private, 2-year | 11,646 | 11,736 | 4,667 | 4,713 | 6,979 | 7,023 |
| Public, medical | 25,110 | 30,996 | 17,327 | 18,744 | 7,783 | 12,222 |
| Private, medical | 15,539 | 10,553 | 10,524 | 8,382 | 5,015 | 2,170 |
| Private, religious | 7,129 | 12,902 | 4,398 | 7,634 | 2,731 | 5,268 |
| Public, other | 9,196 | 4,746 | 6,885 | 2,485 | 2,341 | 2,261 |
| Private, other | 19,813 | 22,578 | 8,992 | 9,779 | 10,821 | 12,799 |
| Unknown | 28,571 | -- | 13,729 |  | -- | 14,842 |$]$

NOTE: Sample excluded for-profit institutions.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1993, 1999 National Study of Postsecondary Faculty (NSOPF:93, NSOPF:99).

Table 8.12-Percent of total faculty by institution type: NSOPF:99 faculty questionnaire estimates (weighted) compared to 1993 "best estimates"

|  | All |  | Full-time |  | Part-time |  |
| :--- | :---: | ---: | ---: | ---: | ---: | :---: |
| Institution type | NSOPF:93 | NSOPF:99 | NSOPF:93 | NSOPF:99 | NSOPF:93 | NSOPF:99 |
| Public, research | 15.3 | 18.7 | 12.4 | 14.9 | 2.9 | 3.8 |
| Private, research | 6.2 | 5.9 | 4.0 | 4.2 | 2.1 | 1.8 |
| Public, other Ph.D. | 5.7 | 6.0 | 4.2 | 4.3 | 1.6 | 1.7 |
| Private, other Ph.D. | 3.2 | 3.0 | 1.8 | 1.5 | 1.4 | 1.6 |
| Public, comprehensive | 14.7 | 12.8 | 9.8 | 8.1 | 4.9 | 4.7 |
| Private, comprehensive | 7.7 | 7.2 | 3.9 | 3.7 | 3.7 | 3.5 |
| Public, liberal arts | .3 | 1.8 | 0.2 | 1.1 | 0.1 | 0.7 |
| Private, liberal arts | 6.2 | 7.8 | 4.1 | 4.7 | 2.1 | 3.2 |
| Public, 2-year | 29.3 | 28.1 | 10.9 | 10.1 | 18.5 | 17.9 |
| Private, 2-year | 1.1 | 1.1 | 0.5 | 0.4 | 0.7 | 0.7 |
| Public, medical | 2.4 | 2.9 | 1.7 | 1.8 | 0.8 | 1.1 |
| Private, medical | 1.5 | 1.0 | 1.0 | 0.8 | 0.5 | 0.2 |
| Private, religious | 0.7 | 1.2 | 0.4 | 0.7 | 0.3 | 0.5 |
| Public, other | 0.9 | 0.4 | 0.7 | 0.2 | 0.2 | 0.2 |
| Private, other | 1.9 | 2.1 | 0.9 | 0.9 | 1.1 | 1.2 |
| Unknown | 2.8 | -- | 1.3 | -- | 1.4 | -- |

NOTE: Sample excluded for-profit institutions.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1993, 1999 National Study of Postsecondary Faculty (NSOPF:93, NSOPF:99).

### 8.7 Changes over Time in the Direction and Magnitude of Discrepancies

Table 8.13 compares mean discrepancies and mean percent discrepancies across the three waves of data for $\operatorname{NSOPF}(1988,1993,1999)$. Statistical tests of significance were performed using ANOVA to compare the three years of data, and using two sample $t$-tests to compare 1999 and 1993 data, with a Satterthwaite correction for inequality of variances between years. These tests assume independent samples of institutions between the years and are not corrected for finite populations of inference. Hence, Table 8.13 may somewhat understate the power of the data.

Table 8.13 suggests that, in general, the mean discrepancies between the three sources of data (list, questionnaire, and IPEDS) have declined since 1993. It is clear that quality control procedures instituted for NSOPF: 99 have greatly reduced both the size and number of discrepancies between the list and questionnaire, both list undercounts and list over-counts. The most dramatic decreases are between IPEDS and list data, and IPEDS and questionnaire data. This is, indeed, the only one of the percentage decreases that is significant at the .05 level. However, as previously discussed, there may be other factors at work in the narrowing of the gap between NSOPF and IPEDS counts. There may be a greater tendency among institutions to report certain part-time or contractual staff (with academic titles like "instructor" or "lecturer") in their IPEDS counts, while still leaving them off the NSOPF list of faculty, and, in some instances, recapitulating this exclusion in their institution questionnaire counts. The difference between the IPEDS and NSOPF definitions (and the inconsistency of institutions in interpreting terms like "faculty status" and "academic title") make analysis of this comparison difficult. Shifts in faculty population since 1997 would also contribute to narrowing this gap.

Table 8.13-Comparison of 1988, 1992, 1993, and 1998 discrepancies-ANOVA and two sample t-tests

|  | Year | N | Mean | Standard error ${ }^{1}$ | $\begin{gathered} \text { ANOVA P } \\ \text { value }^{2} \end{gathered}$ | T test $P$ value ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean difference |  |  |  |  |  |  |
| LIST-IPEDS(L-I) | 1988 | 410 | 3.0 | 17.3 | . 02 | . 03 |
|  | 1993 | 655 | 88.4 | 22.6 |  |  |
|  | 1999 | 765 | 24.8 | 13.9 |  |  |
| $\begin{aligned} & \text { QUEX-LIST } \\ & \text { (Q-L) } \end{aligned}$ | 1988 | 410 | 8.5 | 16.1 | . 92 | . 71 |
|  | 1993 | 750 | 23.5 | 16.7 |  |  |
|  | 1999 | 772 | 16.1 | 11.2 |  |  |
| $\begin{aligned} & \text { QUEX-IPEDS } \\ & \text { (Q-I) } \end{aligned}$ | 1988 | 410 | 11.6 | 14.7 | . 02 | . 03 |
|  | 1993 | 688 | 96.3 | 21.5 |  |  |
|  | 1999 | 792 | 41.5 | 12.5 |  |  |
| Mean percentage difference |  |  |  |  |  |  |
| $\begin{aligned} & \text { LIST-IPEDS } \\ & 100^{*}(\mathrm{~L}-\mathrm{I}) / \mathrm{I} \end{aligned}$ | 1988 | 410 | 14.1 | 3.8 | . 00 | . 00 |
|  | 1993 | 655 | 24.8 | 3.1 |  |  |
|  | 1999 | 765 | 9.8 | 2.1 |  |  |
| $\begin{aligned} & \text { QUEX-LIST } \\ & 100^{*}(\mathrm{Q}-\mathrm{L}) / \mathrm{L} \end{aligned}$ | 1988 | 410 | 11.4 | 3.2 | . 61 | . 23 |
|  | 1993 | 750 | 142.4 | 106.8 |  |  |
|  | 1999 | 772 | 14.9 | 2.7 |  |  |
| $\begin{aligned} & \text { QUEX-IPEDS } \\ & 100^{*}(\mathrm{Q}-\mathrm{I}) / \mathrm{I} \end{aligned}$ | 1988 | 410 | 15.8 | 3.6 | . 00 | . 00 |
|  | 1993 | 688 | 36.4 | 5.2 |  |  |
|  | 1999 | 792 | 12.9 | 2.1 |  |  |

${ }^{1}$ Standard errors assume simple random sampling.
${ }^{2}$ Based on ANOVA analysis of 1988, 1993, 1999 data.
${ }^{3}$ Incorporates Satterthwaite correction for inequality of variances.
SOURCES: U.S. Department of Education, National Center for Education Statistics, 1988, 1993, 1999 National Study of Postsecondary Faculty (NSOPF:88, NSOPF:93, NSOPF:99); 1999 National Study of Postsecondary Faculty Field Test Report (NCES, Working Paper No. 200001 ).

### 8.8 Summary

As the above discussion indicates, the NSOPF survey system has experienced discrepancies in faculty counts among the three sources (IPEDS, institution questionnaire, and the list of faculty) across all cycles of the study. Even though the identical information is requested on the questionnaire as on the list (i.e., a count of all full-time and part-time faculty and instructional staff as of November 1, 1998), institutions continue to have difficulties providing identical responses to the two sources of NSOPF data requests. As in 1993, large discrepancies tend to be concentrated among smaller institutions, and 2-year institutions. Undercounting of part-time faculty and instructional staff without faculty status on the list remains the primary reason for the majority of these discrepancies.

However, procedures implemented in NSOPF:99 resulted in dramatic improvements in the consistency of the list and questionnaire counts when compared to previous cycles of NSOPF. The percent of institutions providing list and questionnaire data that had less than a 10 percent discrepancy has increased from 42 percent in NSOPF:93 to 73 percent in NSOPF:99. A total of 43 percent provided identical data on the list and questionnaire in NSOPF:99 (compared to only 2.4 percent in 1993). Moreover, schools providing identical LIST/QUEX data can be shown to have provided more accurate and complete data on both the lists and questionnaire. These findings suggest that the changed procedures that were introduced in the 1998 field test and NSOPF:99 (see Chapter 4) have resulted in more accurate counts of faculty and instructional staff.

Institutions may also be in a better position to respond to these requests for data. Their accumulated experience in handling NSOPF and IPEDS (and other survey) requests, their adoption of better reporting systems, more flexible computing systems and staff, and a general willingness to provide the information are probably also a factor in their ability to provide more consistent faculty counts although data to support these assertions are not available.

Follow-up efforts to reconcile discrepancies in faculty counts were also intensified for 1999. In NSOPF:99, a total of 234 institutions with a discrepancy of five percent or more (in either the overall or part-time counts) were contacted. Forty-one percent of these institutions were able to provide new or corrected data that resolved their discrepancy. This is a considerable improvement over similar efforts in 1993, which were based solely on comparisons between list and IPEDS data. (See Chapter 4). Nonetheless, 59 percent of institutions contacted could not resolve their discrepancies to within the desired five percent range of error. This is due largely to the difficulty institutions have in maintaining accurate records of part-time and contractual faculty, as well as the wide range of definitions used by institutions to classify faculty and other instructional staff. Hence, while the measures taken to prevent and correct discrepancies between list and questionnaire counts were largely successful, they have not eliminated the problem entirely.

## Appendix A: 1999 NSOPF Institution Questionnaire

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

## National Center for Education Statistics

## 1999 National Study of Postsecondary Faculty

## Institution Questionnaire



All information that would permit identification of individuals will be kept confidential.

| Sponsored by: | National Center for Education Statistics U.S. Department of Education 555 New Jersey Avenue, N.W. Washington, D.C. 20208 | Mailing Address: | The Gallup Organization ATTN: Mary Beth Olson PO Box 5700 Lincoln, Nebraska 68505-9926 |
| :---: | :---: | :---: | :---: |
| Supported by: | National Science Foundation <br> National Endowment for the Humanities | Survey Contact: | Brian Kuhr <br> E-mail: NSOPF99@gallup.com <br> Toll-Free Number: 1-800-633-0209 |
| Contractor: | The Gallup Organization Government \& Education Division One Church Street, Suite 900 Rockville, Maryland 20850 |  |  |

## how to access the institution questionnaire on The world wide web

The Institution Questionnaire is available through the World Wide Web (WWW) at: http://www.gallup.com/usde. We strongly encourage you to complete the Web version of the questionnaire. The WWW version can be accessed through most browsers. For example, to access this address in Netscape, go to the FILE menu and select Open Location. Type in the WWW address exactly as it appears above in lower case, and hit the Enter key. To access the WWW address using Microsoft Internet Explorer, go to the FILE menu and select Open. Again, type in the WWW address exactly as it appears above in lower case, and hit the Enter key.

At this point, both Netscape and Microsoft systems will prompt you for a Personal Identification Number (PIN). Your individualized PIN appears on the label on the back of the questionnaire and at the bottom of the cover letter in the Gallup folder. (The PIN is used by Gallup to keep track of who completes the survey and to keep unauthorized persons from entering the website.) This number will never be used to link your responses to your name. Your individual responses will be kept completely confidential.

## Who to Contact for Assistance

If you have any questions about the study, including the WWW site, please contact Brian Kuhr of the Gallup Organization toll-free at 1-800-633-0209, or via e-mail at NSOPF99@gallup.com.

[^16]The Gallup folder includes: 1) An institution questionnaire, 2) an affidavit of confidentiality, and 3) a request for a list of faculy and instructional staff employed in your institution. For information about the affidavit and faculty lists, see Instructions for the Instruction Coordinator provided in the Gallup folder.

This questionnaire seeks information about full-time and part-time faculty and instructional staff employed in your institution.

## Full-time and part-time faculty and instructional staff INCLUDE:

$\Uparrow$ All part-time, full-time, temporary, permanent, adjunct, visiting, acting, postdoctoral appointees, tenured, tenuretrack, non-tenure-track, undergraduate, graduate, professional school (e.g., medical, law, dentistry, etc.) faculty and instructional staff who were on the payroll of your institution as of November 1, 1998. Include faculty on paid sabbatical leave.
$\Uparrow$ Any administrators, researchers, librarians, coaches, etc., who have faculty status at your institution-whether or not they have instructional responsibilities-and were on the payroll of your institution as of November 1, 1998. Any administrators, researchers, librarians, coaches, etc., who do not have faculty status at your institution but have instructional responsibilities and were on the payroll of your institution as of November 1, 1998.
$\Uparrow$ All employees with instructional responsibilities -teaching one or more courses, or advising or supervising students' academic activities (e.g., serving on undergraduate or graduate thesis or dissertation committees, supervising an independent study or one-on-one instruction, etc.) -during the 1998 Fall Term who were on the payroll of your institution as of November 1, 1998 and who may or may not have faculty status.

Do NOT include: Graduate or undergraduate teaching or research assistants, faculty and instructional personnel on leave without pay or teaching outside the U.S., military personnel who teach only ROTC courses, instructional personnel supplied by independent contractors, and voluntary medical staff.

We realize that postsecondary education institutions vary widely in their organizational structures and staffing patterns and institutions may use different definitions of faculty and non-faculty positions, temporary and permanent status, and full-time and part-time status. Please interpret the instructions and terms according to your institution's usage. Should you have any questions about classification of personnel, or whether they should or should not be included on the lists, we urge you to contact Brian Kuhr at The Gallup Organization at 1-800-633-0209.

Refer to the Glossary on pages 11-12 for a more detailed definition of faculty and instructional staff and other terms used in the questionnaire.

Respondents. Several people at your institution may complete different parts of the questionnaire. Please ask each respondent to fill in the requested information in Section D on page 10.

Returning the questionnaire, affidavit and faculty lists. Please be sure to return all three items requested. You may return each item as it is completed-you do not have to return all three documents at the same time. A pre-paid, pre-addressed envelope is provided for your convenience and additional mailing instructions are on page 13.

Questions. If you have any questions about who to include and exclude in your responses to the questions, or if you have other questions about the study, please contact Brian Kuhr of The Gallup Organization toll-free at 1-800-633-0209 or via email at NSOPF99@gallup.com.

Scannable Form. This questionnaire is a scannable form.
Please follow the steps below carefully when completing this questionnaire.
It will make it easier to interpret your results.

- Use a blue or black ink pen only.
- Do not use ink that soaks through the paper.
- Make solid marks that fit in the response boxes.
- To answer the survey questions, please mark the appropriate answer in each box.

EXAMPLE


## 1999 National Study of Postsecondary Faculty Institution Questionnaire

BE SURE TO READ BEFORE COMPLETING QUESTIONNAIRE: If your institution has multiple branches, answer only for the branch named on the label on the back of the questionnaire. If your institution/branch has schools (e.g., medical, law, etc.) or classes in more than one physical location, please be sure to include all faculty and instructional staff for these locations as well.

Please be sure to include in your counts all faculty and instructional staff in all program areas (e.g., humanities, fine arts, social sciences, natural sciences, etc.). Remember also to include faculty and instructional staff from the health sciences. The health sciences include: dentistry, health services administration, medicine, nursing, pharmacy, public health, veterinary medicine, allied health technologies and services, and other health sciences.

The number of individuals reported as full-time and part-time faculty and instructional staff should be as large or larger than the number your institution reported in your IPEDS Fall Staff Survey because NSOPF:99 uses a broader definition (Refer to the Glossary on pages 11-12).

## START HERE

1. As of November 1,1998 , how many of each of the following types of staff were employed by your institution? Please report the total number of persons (i.e. headcount), rather than full-time equivalents (FTEs). (Write a number in each box; if none, write in " 0 ".)

a. Full-time faculty and instructional staff (Any full-time faculty plus any other full-time employees with instructional responsibilities)
b. Part-time faculty and instructional staff (Any part-time faculty plus any other parttime employees with instructional responsibilities)


#### Abstract

SPECIAL NOTE: The number of faculty and instructional staff reported in the Institution Questionnaire should be consistent with the number of personnel included on the List of Faculty and Instructional Staff that your institution is requested to prepare for NSOPF:99. If for some reason these counts are inconsistent, please explain the reason(s) for the inconsistency in the Comments section on page 13. (See the Instructions for Preparing Lists of Faculty provided in your Gallup folder.) If you have any questions, or need assistance, please contact Brian Kuhr at The Gallup Organization at 1-800-633-0209.


## Section A

## Full-time Faculty and Instructional Staff

Instructions: If you indicated your institution had any full-time faculty or instructional staff, begin with this section. If your
institution did not have any full-time faculty or instructional staff, skip to Section B, Part-time Faculty and Instructional Staff, on page 6.
2. During the past five years has the total number of full-time faculty and instructional staff at your institution increased, decreased, or remained about the same? By what percentage (approximate)? (Mark [x] one box; if numbers increased or decreased, write in percentage.)

3. During the past five years, has your institution done any of the following to decrease the number of full-time faculty and instructional staff at your institution? (Mark [x] one box for each item.) Yes
a. Replaced full-time faculty and instructional staff with part-time faculty and instructional staff $\qquad$
b. Increased faculty course load rather than replace full-time faculty and instructional staff who left $\qquad$
c. Increased class sizes $\qquad$
d. Reduced the number of courses or program offerings $\qquad$
e. Substituted on-campus courses taught by full-time faculty and instructional staff with remote site (e.g., video, audio, internet) courses $\qquad$

f. Other actions (Please specify.) $\square$
4. Does your institution have a tenure system for any full-time faculty and instructional staff? (Mark [x] one box.)
$\square$ Yes, has a tenure system
$\square$ Currently no tenure system, but still have tenured staff
$\square$ No tenure system
5. Please provide the following information about changes in the number of full-time faculty and instructional staff between the 1997 and 1998 Fall Terms. If your institution does not recognize tenure, please report all full-time faculty and instructional staff in column (D). (Write a number in each box; if none, write in " 0 ".)

| A. | B. | C. | D. |
| :---: | :---: | :---: | :---: |
| Tenured | Non-tenured, | Non-tenured, | Total |

a. Total number as of November 1, 1997 Fall Term $\qquad$
$\square$ on tenure track not on tenure track
$\square$

b. Number who changed from part-time to full-time status between Nov. 1, 1997 and Nov. 1, 1998 $\qquad$
$\square$
$\square$
$\square$
$\square$
c. Number hired between Nov. 1, 1997 and Nov. 1, 1998 ..... $\square$

$\square$
d. Number retired between Nov. 1, 1997 and Nov. 1, 1998 $\square$

e. Number who left for other reasons between

Nov. 1, 1997 and Nov. 1, 1998 $\square$
$\square$

$\square$
f. Total number as of Nov. 1, 1998 $\qquad$
$\square$
$\square$
$\square$
$\square$
(Reminder-The total of column D should total to the same number reported in Question 1A. If it does not, please explain.)
$\square$

Note: If your institution does not have a tenure system for any full-time faculty and instructional staff, please skip to Question 10.
6. During the 1997-98 academic year (i.e., Fall 1997 through Spring 1998), how many full-time faculty and instructional staff at your institution were considered for tenure, and how many were granted tenure? (Write a number in each box; if none, write in " 0 ".)


Number of full-time faculty and instructional staff considered for tenure


Number of full-time faculty and instructional staff granted tenure
7. For those on a tenure track but not tenured:
(Write a number, in years, in each box.)
What is the maximum number of years full-
$\square$ time faculty and instructional staff can be on a tenure track and not receive tenure? (If no maximum, write in " $N A$ ".)
$\square$ If the maximum number of years has changed during past 5 years, write in previous maximum. (If no change, write in "NA".)
8. During the past five years, has your institution done any of the following? (Mark [x] one box for each item.)
a. Changed policy for granting tenure to full-time faculty and instructional staff

b. Made the standards more stringent for granting tenure to full-time faculty and instructional staff $\qquad$
$\square$

c. Reduced the number of tenured fulltime faculty and instructional staff through downsizing $\qquad$

d. Replaced some tenured or tenure-track full-time faculty and instructional staff with full-time faculty and instructional staff on fixed term contracts $\qquad$

e. Discontinued tenure system at the institution $\qquad$

f. Offered early or phased retirement to any tenured full-time faculty or instructional staff $\qquad$

(IF YES) Write in the number of full-time faculty and instructional staff who took early retirement during the past five years. $\qquad$

9. Has your institution taken any other action(s) that reduced the number of tenured full-time faculty and instructional staff at your institution during the past five years? (Mark [x] one box.)
$\square$ NoYes (Please specify below.)

10. How many full-time positions was your institution seeking to fill for the 1998 Fall Term? (Write a number in the box; if none, write in " 0 ".)


Number of full-time positions institution was seeking to fill for the 1998 Fall Term
11. Indicate if each of the retirement plans listed below is available to any full-time faculty or instructional staff at your institution. If available, please indicate whether the plan is fully subsidized, partially subsidized, or not subsidized by your institution. (Mark [x] the appropriate box for each plan.)

b. Other 403 plan

c. State plan


Yes ..................


No
d. 401 K or 401 B plan
Yes $\qquad$



No
e. Other retirement plan


No
12. Indicate which of the following employee benefits is available at your institution to any full-time faculty or instructional staff. If available, indicate whether the benefit for the employee is fully subsidized, partially subsidized, or not subsidized by your institution. (Mark [x] the appropriate box for each benefit.)

| Fully | Partially | Not |
| :---: | :---: | :---: |
| Subsifzed | Subsidzed | Subsidized |
| $\boldsymbol{\nabla}$ | $\boldsymbol{\nabla}$ | $\boldsymbol{\nabla}$ |

a. Medical insurance or medical care


No
b. Dental insurance or dental care

c. Disability insurance program


Yes.



No
d. Life insurance


Yes $\qquad$


No
e. Child care


Yes


No
f. Medical insurance for retirees

g. "Cafeteria-style" benefits plan (a plan under which staff can trade off some benefits for others, following guidelines established by the institution)

13. Next, indicate which of the following employee benefits or policies is available at your institution to any full-time faculty or instructional staff.
(Mark [x] the appropriate box for each benefit.)

|  | Yes | $\stackrel{\text { No }}{ }$ |
| :---: | :---: | :---: |
| a. Wellness program or health promotion |  |  |
| b. Tuition remission/grants at this or other institutions for spouse |  |  |
| c. Tuition remission/grants at this or other institutions for children |  |  |
| d. Housing/mortgage; rent ...................... |  |  |
| e. Transportation/parking ...................... |  |  |
| f. Paid maternity leave ........................... |  |  |
| g. Paid paternity leave ........................... |  |  |
| h. Paid sabbatical leave ........................ |  |  |
| i. Employee assistance program ........... |  |  |

14. What is the average percentage of salary that is contributed by your institution to the total benefits package for full-time faculty and instructional staff? (Write a percent in the box; if none, write in " 0 ".)

15. Are any of your full-time faculty and instructional staff legally represented by a union (or other association) for purposes of collective bargaining with your institution? If yes, what percent (approximate) are represented? (Mark [x] one box; if Yes, write in percent.)


No
16. Are any of the following used as part of institution or department/school policy in assessing the teaching performance of full-time instructional faculty/staff at this institution? (Mark [x] the appropriate boxes for each item; if you do not use or do not know about an assessment, check "Not Used" or "Don't Know.")

|  |  | Department/ <br> School <br> Policy |
| :--- | :--- | :--- |
| anstitution |  |  |
| Policy |  |  |


|  |
| :--- |
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## Section B <br> Part-time Faculty and Instructional Staff

Instructions: If you indicated that your institution has parttime faculty or instructional staff (at Question 1b), please continue with SECTION B, Question 17 below. Otherwise, please skip to SECTION C on page 9.

Reminder: Part-time refers to an individual's employment status at the institution rather than to their assigned instructional responsibilities.
17. Are any retirement plans available to any parttime faculty or instructional staff at your institution? (Mark [x] one box.)


Yes to all part-time faculty and instructional staff


Yes to most part-time faculty and instructional staff


Yes to some part-time faculty and instructional staff


No to all part-time faculty and instructional staff (SKIP TO QUESTION 20)
18. Indicate which of the retirement plans listed below is available to any part-time faculty or instructional staff at your institution. If available, please indicate whether the plan is fully subsidized, partially subsidized, or not subsidized by your institution. (Mark [x] the appropriate box for each plan; if you do not know if a plan is available, check "Don't Know.")
a. TIAACREF plan

Yes

No

Don't Know

b. Other 403 plan

Yes. $\qquad$

No

Don't Know
c. State plan

$\qquad$
$\square$

No

Don't Know
d. 401 K or 401 B plan

No

Don't Know
e. Other retirement plan


No


Don't Know
19. If a retirement plan is available for any parttime faculty or instructional staff, does your institution have any criteria that must be met in order for part-time faculty or instructional staff to be eligible for any retirement plan? (Mark [x] one box.)


No, no criteria, or not available


Yes (Please describe below.)
$\qquad$
continue to next page.
20. Indicate which of the following employee benefits is available at your institution to any part-time faculty or instructional staff. If available, indicate whether the benefit for the employee is fully subsidized, partially subsidized, or not subsidized by your institution. (Mark [x] the appropriate box for each benefit; if you do not know if a benefit is available, check "Don't Know.")
 NA (Not applicable. No benefits available.)
a. Medical insurance
or medical care

No
$\square$ Don't Know
b. Dental insurance or dental care


No


Don't Know
c. Disability insurance program


Yes. $\qquad$


No


Don't Know
d. Life insurance


Yes.


NoDon't Know
e. Child care


Yes


No
$\square$ Don't Know
f. Medical insurance for retirees


| Fully | Parially | Not |
| :---: | :---: | :---: |
| Subsidized | Suldsidized | Subsidized |
| $\nabla$ | $\boldsymbol{\nabla}$ | $\boldsymbol{\nabla}$ |

g. "Cafeteria-style" benefits plan (a plan under which staff can trade off some benefits for others, following guidelines established by the institution)


Yes $\qquad$


No
$\square$ Don't Know
21. Next, indicate which of the following employee benefits or policies is available at your institution to any part-time faculty or instructional staff. (Mark [x] the appropriate box for each benefit; if you do not know if a benefft is available, check "Don't Know.")
$\square$ NA (Not applicable. No benefits available.)

b. Tuition remission/grants at this or other institutions for spouse.

c. Tuition remission/grants at this or other institutions for children.

d. Housing/mortgage; rent $\qquad$

e. Transportation/parking $\qquad$

f. Paid maternity leave $\qquad$

g. Paid paternity leave $\qquad$

h. Paid sabbatical leave $\qquad$

i. Employee assistance program

22. Does your institution have any criteria that must be met in order for part-time faculty and instructional staff to be eligible for any benefits? (Mark [x] one box.)


No


Yes (Please describe below.)
$\square$
23. What is the average percentage of salary that is contributed by your institution to the total benefits package for part-time faculty and instructional staff? (Write a number in the box; if none, write in " 0 ".)

24. Are any of your part-time faculty and instructional staff legally represented by a union (or other association) for purposes of collective bargaining with this institution? If yes, what percent (approximate) are represented? (Mark $[x]$ one box; if Yes, write in percent.)


Yes $\square$
 No
25. Are any of the following used as part of institution or department/school policy in assessing the teaching performance of part-time instructional faculty/staff at this institution? (Mark [x] the appropriate boxes for each item; if you do not use or do not know, mark "Not Used" or "Don't Know.")
a. Student evaluations


Not
Used
$\nabla$
Don't

b. Student test scores

c. Student career placement

d. Other measures of student performance.

e. Departmentdivision chair evaluations.

f. Dean evaluations

g. Peer evaluations $\qquad$

h. Self-evaluations

i. Other (Please describe below.)

$\square$

Section C

## All Faculty and Instructional Staff

26. What percentage of undergraduate student credit hours were assigned to the following staff? Student credit hours are defined as the number of course credits or contact hours multiplied by the number of students enrolled. (Write a percentage in each box; if none, write in " 0 ". Categories should sum to $100 \%$.)


Not applicable; no undergraduates (SKIP TO SECTION D on page 10)


Percent of undergraduate instruction assigned to full-time faculty or instructional staff


Percent of undergraduate instruction assigned to part-time faculty or instructional staff


Percent of undergraduate instruction assigned to teaching assistants


Percent of undergraduate instruction assigned to others (Please specify below.)

$$
\text { = } 100 \%
$$



## Section D <br> Respondent Information

Instructions: Please fill in your name and title at this institution, as well as the names and titles of any other individuals who answered one or more questions in this questionnaire, and the question numbers each individual worked on. Include telephone numbers in case we have questions about any entries.

All information that would permit identification of individuals, including names and telephone numbers, will be removed from survey files.
a. Name of primary contact if there are any questions:


Title:


Telephone: $\square$
$\square$ $-\square$
Please write in the question numbers answered:


All
$\square$
b. Other respondent:
$\square$
Title:

$\square$
Please write in the question numbers answered:

c. Other respondent:


Title:


Telephone: $\square$
$\square$ $-\square$
Please write in the question numbers answered:
$\square$
d. Other respondent:
$\square$
Title:


Telephone: $\square$ - $\square$ $-\square$

Please write in the question numbers answered:
$\square$
e. Other respondent:


Title:


Telephone: $\square$
$\square$ $-\square$
Please write in the question numbers answered:
$\square$
f. Other respondent:


Title:


Telephone: $\square$ $-\square$ $-\square$

Please write in the question numbers answered:
$\square$

## Glossary

1998 Fall Term—The term that was in progress as of November 1, 1998.

Note: While the NSOPF:99 definition of faculty is similar to the IPEDS definition [see IPEDS Fall Staff Survey Definitions on the next page], it is not identical. The NSOPF:99 definition of faculty is broader than the IPEDS definition of faculty. For example, NSOPF:99 includes as faculty an individual who is an administrator, dean, librarian; etc., and has faculty status even if that individual is not engaged in instructional activities during the 1998 Fall Term. NSOPF:99 is interested in all faculty. The IPEDS definitions that appear on the following page are provided to remind you to include all faculty as defined in IPEDS as well as all other individuals at your institution/branch who have faculty status.

NSOPF:99 Definition of Faculty and Instructional Staff
Faculty—All employees classified by the institution as faculty who were on the payroll of your institution as of November 1, 1998.

Include as Faculty:

- Any individuals who would be reported as "Faculty (Instruction/Research/Public Service)" on the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS): Fall Staff Survey.
- Any individuals with faculty status who would be reported as "Executive, Administrative, and Managerial" on the IPEDS Fall Staff Survey, whether or not the person is engaged in any instructional activities.
- Any individuals with faculty status who would be reported as "Other Professionals (Support/Service)" on the IPEDS Fall Staff Survey, whether or not the person is engaged in any instructional activities.


## Exclude as Faculty:

- Any individuals who would be reported as "Instruction/Research Assistants" on the IPEDS Fall Staff Survey.

Instructional Staff-All employees with instructional responsibilities-teaching one or more courses, or advising or supervising students' academic activities (e.g., serving on undergraduate or graduate thesis or dissertation committees, supervising an independent study or one-on-one instructions, etc.)-during the 1998 Fall Term who were on the payroll of your institution as of November 1, 1998 and who may or may not have faculty status.

## Include as Instructional Staff:

- Any individuals with instructional responsibilities during the 1998 Fall Term who would be reported as "Executive, Administrative, and Managerial" on the IPEDS Fall Staff Survey (i.e., A finance officer teaching a class in the business school.)
- Any individuals with instructional responsibilities during the 1998 Fall Term who would be reported as "Other Professionals (Support/Service)" on the IPEDS Fall Staff Survey.


## Exclude as Instructional Staff:

- Any individuals who would be reported as "Instruction/Research Assistants" on the IPEDS Fall Staff Survey.

Full-time-Persons on payroll of the institution and classified by the institution as full-time, regardless of the amount of instructional responsibilities.

Part-time-Persons on the payroll of the institution and classified by the institution as part-time, regardless of the amount of instructional responsibilities.

Tenure-Status of a personnel position, or a person occupying a position or occupation, with respect to permanence of position.

Tenure Track—Positions that lead to consideration for tenure.


#### Abstract

NOTE: This restriction does not apply in the case of the NSOPF:99 definition of faculty. Please include anyone with faculty status or any instructional responsibilities as of November 1, 1998.


## For Reference Only <br> IPEDS Fall Staff Survey Definitions

- Faculty (Instruction/Research/Public Service)—Persons whose specific assignments customarily are made for the purpose of conducting instruction, research, or public service as a principal 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. This category includes deans, directors, or the equivalent, as well as associate deans, assistant deans, and executive officers of academic departments (chairpersons, heads, or the equivalent) if their principal activity is instructional. Student teachers or research assistants are not included in this category.
- Executive, Administrative, and Managerial-Persons whose assignments require primary (and major) responsibility for management of the institution, or a customarily recognized department or subdivision thereof. Assignments require the performance of work directly related to management policies or general business operations of the institution, department, or subdivision. It is assumed that assignments in this category customarily and regularly require the incumbent to exercise discretion and independent judgment, and to direct the work of others. Included in this category are all officers subordinate to any of these as president, vice president, dean, director, or the equivalent, as well as officers subordinate to any of these administrators with such titles as associate dean, assistant dean, executive officer of academic departments (department heads, or the equivalent) if their principal activity is administrative.
- Other Professionals (Suppori/Service)-Persons employed for the primary purpose of performing academic support, student service, and institutional support activities, whose assignments would require either college graduation or experience of such kind and amount as to provide a comparable background, include employees such as librarians, accountants, systems analysts, and coaches in this category.
- Instruction/Research Assistants-Students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research. These positions are typically held by graduate students having titles such as teaching assistant, teaching associate, teaching fellow, or research assistant.

Please indicate approximately how many minutes it took you and anyone else involved to complete this questionnaire.

## Comments:

$\square$

## Thank you very much for your participation.

Return this questionnaire in the enclosed pre-paid envelope or mail directly to:
The Gallup Organization
ATTN: Mary Beth OIson
PO Box 5700
Lincoln, Nebraska 68505-9926

## Endorsed by:

- American Association for Higher Education
- American Association of Community Colleges
- American Association of State Colleges and Universities
- American Association of University Professors
- American Council on Education
- American Federation of Teachers
- Association for Institutional Research
- Association of American Colleges and Universities
- Association of Catholic Colleges and Universities
- College and University Personnel Association
- The College Board
- The College Fund/UNCF
- Council of Graduate Schools
- The Council of Independent Colleges
- National Association for Equal Opportunity in Higher Education
- National Association of Independent Colleges and Universities
- National Association of State Universities and Land-Grant Colleges
- National Education Association


Sponsored by: National Center for Education Statistics
Supported by: National Science Foundation National Endowment for the Humanities

Contractor: The Gallup Organization
Government \& Education Division
Mailing Address: The Gallup Organization
ATTN: Mary Beth Olson
P.O. Box 5700

Lincoln, Nebraska 68505-9926

Survey Contact: Brian Kuhr
E-mail: NSOPF99@gallup.com
Toll-Free Number: 1-800-633-0209

## Appendix B: 1999 NSOPF Faculty Questionnaire

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

## National Center for Education Statistics

## 1999 National Study of <br> Postsecondary Faculty

## Faculty Questionnaire



All information that would permit
identification of individuals will be kept confidential.

| Sponsored by: | National Center for Education Statistics | Mailing Address: | The Gallup Organization <br> Survey Processing Center |
| :--- | :--- | :--- | :--- |
| Supported by: | National Science Foundation |  |  |
|  | National Endowment for the Humanities |  | P.O. Box 5700 <br> Lincoln, Nebraska $68505-9926$ |
| Contractor: | The Galliup Organization <br> Government \& Education Division | Survey Contact: | Brian Kuhr |
|  |  |  | E-mail: NSOPF99@gallup.com <br> Toll-Free Number: 1-800-633-0209 |

## Instructions

General Instructions. Many of our questions ask about your activities during the 1998 Fall Term. By this, we mean whatever academic term that was in progress on November 1, 1998.

All questions that ask about your position at "this institution" refer to your position during the 1998 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 faculty and instructional staff, in 2- and 4-year (and above) higher education institutions of all types and sizes. If you are a research assistant or a teaching assistant, please note this on the cover of the questionnaire and return it without completing the questionnaire.

Electronic questionnaire. This questionnaire is available on the World Wide Web (WWW). We strongly urge you to use the electronic version because it is user friendly and takes less time to complete than the paper version. To access the WWW version of the questionnaire, go to http://www.faculty.gallup.com. Your individual Personal Identification Number (PIN) is on the label on the back of the questionnaire.

Returning the questionnaire. Mailing instructions for returning the completed questionnaire appear on the last page of the questionnaire.

Questions. If you have any questions about the study, please contact Brian Kuhr of The Gallup Organization tollfree at 1-800-633-0209 or via e-mail at NSOPF99@gallup.com.

Survey Instructions. This is a scannable questionnaire. Please follow the steps below carefully when completing this questionnaire. It will make it easier to read your results.

- Use a blue or black ink pen only.
- Do not use ink that soaks through the paper.
- Make solid marks that fit in the response boxes.
- To answer the survey questions, please mark the appropriate answer in each box.



## ASSURANCE OF CONFIDENTIALITY

All information that permits the identification of individuals will be kept strictly confidential. Individual responses, and all responses that permit the identification of individuals, will be protected by the National Education Statistics Act, Public Law 103-382 RO U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a].

## Section A:

Nature of Employment

1. During the 1998 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)?
(Mark [x] one box.)


YesNo (SKIP TO QUESTION 3)
2. During the $\mathbf{1 9 9 8}$ Fall Term, were ... (Mark [x] one box.)
all of your instructional duties related to credit courses, or advising or supervising academic activities for which students received credit
some of your instructional duties related to credit courses or advising or supervising academic activities for which students received credit

OR
all of your instructional duties related to noncreditcourses or advising or supervising noncredit academic activities
3. What was your principal activity at this institution during the 1998 Fall Term? If you had equal responsibilities, please select one. (Mark [x] one box.)


Teaching


Research


Clinical service


Administration (Write in tittle or position.)On sabbatical from this institution
Other activity (e.g., technical activity such as programmer or technician; other institutional activities such as library services, community/ public service; subsidized performer, artist-inresidence, etc.)
4. During the 1998 Fall Term, did you have faculty status at this institution? (Mark [ $x$ ] one box.)Yes
$\square N$
No
5. During the 1998 Fall Term, did this institution consider you to be employed part-time or fulltime? (Mark [x] one box.)
$\square$ Part-timeFull-time (SKIP TO QUESTION 7)
6. Did you hold a part-time position at this institution during the 1998 Fall Term because... (Mark [x] "Yes" or "No" for each item)

7. In what year did you begin the job you held at this institution during the 1998 Fall Term? Consider promotions in rank as part of the same job. (Write in year.)

8. Which of the following best describes your academic rank, title, or position at this institution during the 1998 Fall Term? (Mark [x] one box. If no ranks are designated at your institution, mark the "NA," Not Applicable box.)NA. Not applicable: no ranks designated at this institution (SKIP TO QUESTION 10, PAGE 2)ProfessorAssociate ProfessorAssistant ProfessorInstructorLecturerOther title (Please specify below.)
9. In what year did you first achieve this rank/title? (Write in year.)

10. What was your tenure status at this institution during the 1998 Fall Term? (Mark [ $x$ ] one box.)


Tenured $\longrightarrow$ In what year did you achieve tenure at this institution? (Write in year.)


On tenure track but not tenuredNot on tenure track/although institution has a tenure system

$\square$No tenure system at this institution
11. During the 1998 Fall Term, what was the duration of your contract or appointment at this institution? (Mark [ $x$ ] one box.)
 Unspecified duration, or tenured


One academic termOne academic year or one calendar yearTwo or more academic/calendar years
$\square$ Other
12. During the 1998 Fall Term, did you hold any of the following kinds of appointments at this institution? (Mark [x] "Yes" or "No" for each item.)

g. Postdoctoral

h. Other (Please specify below.)

13. Were you chairperson of a department or division at this institution during the 1998 Fall Term? (Mark [ $x$ ] one box.)
 Yes
 No
14. What is your principal field or discipline of teaching? If equal areas, select one. (Write in the name of your principal field or discipline and enter the code number of the discipline, on pages 3-4, that best matches your field of teaching. If you have no field of teaching, mark [x] the "NA" box.)


NA. Not Applicable (SKIP TO QUESTION 15)
Name of principal field/discipline of teaching
$\square$


Code for Field or Discipline
15. What is your principal area of research? If equal areas, select one. (Write in the name of your principal area of research and enter the code number of the discipline, on pages 3-4, that best matches your field of research. If you have no research area, mark [x] the "NA" box.)NA. Not Applicable (SKIP TO QUESTION 16, PAGE 5)

Name of principal field/discipline of research


Code for Field or 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 Architecture 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 Higher Education
229 Special Education
230 Student Counseling \& Personnel Services
231 Other Education

TEACHER EDUCATION

## FOREIGN LANGUAGES

311

312 French
314 Italian
315 Latin
316 Japanese
317 Other Asian
318 Russian or Other Slavic
319 Spanish
320 Other Foreign Languages

## HEALTH SCIENCES

Allied Health Technologies \& Services
Dentistry
Health Services Administration
Medicine, including Psychiatry
Nursing
Pharmacy
Public Health
Veterinary Medicine
Other Health Sciences
350 HOME ECONOMICS
360 INDUSTRIAL ARTS

370
LAW
Pre-Elementary
Elementary
Secondary
Adult \& Continuing
Other General Teacher Education Programs
Teacher Education in Specific Subjects

## ENGINEERING

Engineering, General
Civil Engineering
Electrical, Electronics, \& Communication Engineering
Mechanical Engineering
Chemical Engineering
Other Engineering
Engineering-Related Technologies

ENGLISH \& LITERATURE
English, General
Composition \& Creative Writing
American Literature
English Literature
Linguistics
Speech, Debate, \& Forensics
English as a Second Language
English, Other

Chinese (Mandarin, Cantonese, or Other Chinese)

German

LIBRARY \& ARCHIVAL SCIENCES
(CONTINUED)

| 390 | MATHEMATICSISTATISTICS | Vocational Training |  |
| :---: | :---: | :---: | :---: |
|  |  |  | CONSTRUCTION TRADES |
|  |  | 601 | Carpentry |
|  | NATURAL SCIENCES: BIOLOGICAL SCIENCES | 602 | Electrician |
| 391 | Biochemistry | 603 | Plumbing |
| 392 | Biology | 610 | Other Construction Trades |
| 393 | Botany |  |  |
| 394 | Genetics |  | CONSUMER, PERSONAL, \& MISCELLANEOUS SERVICES |
| 395 | Immunology | 621 | Personal Services (e.g., Barbering, Cosmetology) |
| 396 | Microbiology | 630 | Other Consumer Services |
| 397 | Physiology |  |  |
| 398 | Zoology |  | MECHANICS \& REPAIRERS |
| 400 | Biological Sciences, Other | 641 | Electrical \& Electronics Equipment Repair |
|  |  | 642 |  |
|  | NATURAL SCIENGES: PHYSICAL SCIENCES |  | Repairers |
| 411 | Astronomy | 643 | Vehicle \& Mobile Equipment Mechanics \& Repairers |
| 412 | Chemistry | 644 | Other Mechanics \& Repairers |
| 413 | Physics |  |  |
| 414 | Earth, Atmosphere, and Oceanographic (Geological Sciences) | 661 | PRECISION PRODUCTION Drafting |
| 420 | Physical Sciences, Other | 662 | Graphic \& Print Communications |
|  |  | 663 | Leatherworking \& Upholstering |
| 430 | PARKS \& RECREATION | 664 | Precision Metal Work |
|  |  | 665 | Woodworking |
|  | PHILOSOPHY, RELIGION \& THEOLOGY | 670 | Other Precision Production Work |
| 440 | Philosophy |  |  |
| 44 | Religion |  | TRANSPORTATION \& MATERIAL MOVING |
| 442 | Theology | 681 | Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management) |
| 470 | PHYSICAL EDUCATION | 682 | Land Vehicle \& Equipment Operation |
|  |  | 683 | Water Transportation (e.g., Boat \& Fishing Operations, Deep Water Diving, Marina Operations, Sailors \& Deckhands) |
| 50 | Protection) | 690 | Other Transportation \& Material Moving |
| 510 | PSYCHOLOGY | 900 | OTHER |
| 520 | PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work) |  |  |
| 530 | SCIENCE TECHNOLOGIES |  |  |
|  | SOCIAL SCIENCES \& HISTORY |  |  |
| 54 | Social Sciences, General |  |  |
| 54 | Anthropology |  |  |
| 54 | Archeology |  |  |
| 54 | Area \& Ethnic Studies |  |  |
| 54 | Demography |  |  |
| 54 | Economics |  |  |
| 54 | Geography |  |  |
| 54 | History |  |  |
| 54 | International Relations |  |  |
| 55 | Political Science \& Government |  |  |
| 55 | Sociology |  |  |
| 56 | Other Social Sciences |  |  |

## Section B:

## Academic/Professional Background

16. Please list below information about the degrees you have received. Do not list honorary degrees. If you have more than one degree at the same level, please list the most recent degree first. (Complete all columns for each degree. If you have none of the degrees or awards listed below, mark [ $x$ ] the " $N A^{n}$ " box.)

## CODES FOR TYPE OF DEGREE

1) First professional degree (M.D., D.O., D.D.S. or D.M.D., LL.B., J.D., D.C. or D.C.M., D.Par., Pod.D. or D.P., D.V.M., O.D., M.Div. or H.H.L. or B.D.)
2) Doctoral degree (Ph.D., Ed.D., etc.)
3) Masters of Fine Arts, Masters of Social Work (M.F.A., M.S.W.)
4) Other Master's degree (M.A., M.S., M.B.A., M.Ed., etc.)
5) Bachelor's degree (B.A., A.B., B.S., etc.)
6) Associate's degree or equivalent (A.A., A.S., etc.)
7) Certificate or diploma for completion of undergraduate program (other than Associate's or Bachelor's)


NA. Not Applicable; do not hold a degree or award listed above (SKIP TO QUESTION 17)


1. Highest

a.

2. Next Highest

a. $\qquad$
b.

3. Next Highest

a. $\qquad$
b.

4. Next Highest

a. $\qquad$
b. $\qquad$
5. Are you currently working toward a degree? (Mark [ $x$ ] one box.)


YesNo (SKIP TO QUESTION 19, PAGE 6)
18. Please indicate below ( $A$ ) the type of degree you are currently working toward, ( $B$ ) the year you anticipate receiving it, (C) name of the field, (D) the field code that applies (from pages 3-4), and (E) the name and location of the institution from which you anticipate receiving this degree. (Complete all columns.)

| A. | B. | C. | D. | E. |
| :---: | :---: | :---: | :---: | :---: |
| Degree Code | Year | Name of Field | Field Code | a. Name of Institution, and |
| (see box above) Anticipated |  | (from pages 3-4) | b. City and State/Country of Institution |  |

Degree Working Toward

a. $\square$
b. $\qquad$
19. Do you consider your position at this institution to be your primary employment? (Mark [ $x$ ] one box.)YesNo
20. During the 1998 Fall Term, did you do outside consulting in addition to your employment at this institution? (Mark [x] one box.)Yes
$\square$ No
21. During the 1998 Fall Term, did you have professional employment other than consulting in addition to your employment at this institution? (Mark [x] one box.)YesNo (SKIP TO QUESTION 23)
22. How many different professional jobs/positions, other than your employment at this institution or consulting jobs, did you have during the 1998 Fall Term? (Write in number.)
$\square$ Number of other jobs
23. In total, how many professional positions in higher education institutions have you held? Consider promotions in rank at the same institution as part of the same position. If your occupational classification changed within the same institution, please consider this a separate position. (Include your position at this institution and all other full-time and part-time positions. Do not include teaching or research assistant positions.)
$\square$ Number of positions
24. The next questions ask about your first professional position in a higher education institution, and your most recent professional position at a higher education institutution (other than the one you currently hold at this institution. (If your current position is your first position, complete column 1. If you have no other additional professional positions, mark $[x]$ the " $N A$ " box at the top of the second column.)

- Do not list promotions in rank at one place of employment as different positions.
- Do not include work as a graduate student.

\begin{tabular}{|c|c|c|}
\hline \& First Professional Position in a Higher Education Institution \& Most Recent Professional Position at a Higher Ed. Institution (other than the one you currently hold at this institution)
\(\square\) NA: No other positions \\
\hline \begin{tabular}{l}
1. YEARS JOB HELD \\
FROM: \\
TO: (If a current position, mark [x] "Present".)
\end{tabular} \&  \& (Write in year.) \\
\hline \begin{tabular}{l}
2. TYPE OF INSTITUTION \\
4 -year doctoral granting college or university, graduate or professional school \\
4-year non-doctoral granting college or university \\
2 -year degree granting college \\
Other postsecondary institution
\end{tabular} \& (Mark [x] one box.)
\(\square\) \& (Mark [x] one box.)
\(\square\) \\
\hline \begin{tabular}{l}
3. EMPLOYMENT STATUS \\
Full-time \\
Part-time
\end{tabular} \& (Mark [x] one box.) \& (Mark [x] one box.)
\(\square\)
\(\square\) \\
\hline \begin{tabular}{l}
4. PRIMARYRESPONSIBILITY \\
Administration, Management Instruction/Research/Public Service Other Professional (Support/Service/Clinical)
\end{tabular} \& (Mark [x] one box.)
\(\square\)
\(\square\)
\(\square\) \& (Mark [x] one box.)
\(\square\) \\
\hline \begin{tabular}{l}
5. ACADEMIC RANK/TITLE (What were your academic ranks when you began and left this academic position? If current job, do not indicate rank at exit.) \\
Professor \\
Associate Professor \\
Assistant Professor \\
Instructor \\
Lecturer \\
Other \\
NA. Not applicable, no rank
\end{tabular} \&  \&  \\
\hline \begin{tabular}{l}
6. TENURE STATUS (What was your tenure status when you began and left this academic position? If current job, do not indicate tenure at exit.) \\
Tenured \\
On tenure track but not tenured \\
Not on tenure track although institution has a tenure system \\
No tenure system at this institution
\end{tabular} \& \begin{tabular}{l}
(Mark [ \(x\) ] one box in each column.) \\
At Hire \\
At Exit

$\square$
\end{tabular} \&  <br>

\hline
\end{tabular}

25. How many years have you been teaching in higher education institutions?
(Write in number. If none, write in " 0 ". If less than 1 year, write in " 1 ".)


Number of years
26. How many professional positions, outside of higher education institutions, have you held? Do not include consulting jobs (Write in number. If none, mark the box indicating "None".)


None (SKIP TO QUESTION 29, PAGE 9)


Number of professional positions outside higher education institutions
27. How many of these positions were... (Write in number of full-time and part-time professional positions outside of higher education institutions. If none, write in " 0 ".)


Full-time $\square$ Part-time
28. The next questions ask about professional positions outside of higher education institutions you have held. List information on your first and your most recent professional positions outside of higher education institutions. Do not include positions you began in 1999.

|  | First Professional Position Outside of a Higher Education Institution | Most Recent Professional Position Outside of a Higher Ed. Institution NA: No other Professional positions |
| :---: | :---: | :---: |
| 1. YEARS JOB HELD <br> FROM: <br> TO: (If a current position, mark [x] "Present".) |  |  |
| 2. TYPE OF EMPLOYER <br> Elementary or secondary school <br> Hospital or other health care organization or clinical setting <br> Foundation or other non-profit organization other than health care organization <br> For-profit business or industry in the private sector <br> Government (federal, state, or local) or military <br> Other | (Mark [x] one box.) $\square$ | (Mark [x] one box.) |
| 3. EMPLOYMENTSTATUS <br> Full-time <br> Part-time | (Mark [x] one box.) $\square$ $\square$ | (Mark [x] one box.) $\square$ $\square$ |
| 4. PRIMARYRESPONSIBILITY <br> Administration, Management <br> Instruction, Research, or Public Service <br> Other Professional (Support/Service/Clinical) <br> Technical <br> Other | (Mark [x] one box.) $\square$ $\square$ $\square$ $\square$ $\square$ | (Mark [x] one box.) $\square$ $\square$ $\square$ $\square$ |

29. How many of each of the following have you presented/published/etc. during your entire career and during the last two years? For publications, please include only works that have been accepted for publication. Count multiple presentations/publications of the same work only once. Include electronic publications that are not published elsewhere in the appropriate categories. (Mark the "NA" box if you have not published or presented.)
$\square$ NA. Not applicable. No presentations/publications/etc. (SKIP TO QUESTION 30, PAGE 10)

| Type of Presentation/Publication/etc. (Write a number in each box. If none, write in " 0 ".) | Total during career | Total during past two years |  |
| :---: | :---: | :---: | :---: |
|  |  | Sole responsibility | Joint responsibility |
| 1. Articles published in refereed professional or trade journals; creative works published in juried media |  |  | $\square$ |
| 2. Articles published in nonrefereed professional or trade journals; creative works published in nonjuried media or in-house newsletters |  |  |  |
| 3. Published reviews of books, articles, or creative works; chapters in edited volumes |  | $\square$ | $\square$ |
| 4. Textbooks, other books; monographs; research or technical reports disseminated internally or to clients |  |  |  |
| 5. Presentations at conferences, workshops, etc.; exhibitions or performances in the fine or applied arts |  |  |  |
| 6. Other, such as patents or computer software products | $\square$ |  | $\square$ |

## Section C:

## Institutional Responsibilities and Workload

30. On average, how many hours per week did you spend at each of the following kinds of activities during the 1998 Fall Term? (Write in average number of hours. If not sure, give your best estimates. If none, write in " 0 ".)

## Average number of hours per week

a. All paid activities at this institution (e.g. teaching, clinical service, class preparation, research, administration)

b. All unpaid activities at this institution
(Please specify type of activities below.) $\square$

$\square$
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

31. In column A, please allocate your total work time in the 1998 Fall Term (as reported in Question 30a-d) into several categories. We realize the categories are not mutually exclusive (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 percentage 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 prefer to spend in each of the listed categories. Time spent with colleagues should be allocated to a specific activity.

| (Write in a percentage on each line. If not sure, give your best estimate; if none, write in " 0 ".) | A \% of Work Time Spent | B. \% of Work Time Preferred |
| :---: | :---: | :---: |
| a. Teaching Undergraduate Students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; working with student organizations or intramural athletics) |  |  |
| b. Teaching Graduate or First Professional Students (including teaching; grading papers; preparing courses; developing new curricula; advising or supervising students; supervising student teachers and interns; supervising clinical students; working with student organizations or intramural athletics) |  |  |
| c. 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) |    |  |
| d. Professional Growth (including taking courses; pursuing an advanced degree; other professional development activities; such as practice or activities to remain current in your field) |  |  |
| e. Administration (including departmental or institution-wide meetings or committee work) |  |  |
| f. Service (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service; service to professiona societies/associations) |  |  |
| g. Outside Consulting, Freelance Work, Other Outside Work/Other Non-Teaching Professional Activities (other activities or work not listed in a-f) | $\square$ | $\square$ |
| Please be sure that the percentages you provide add up to 100\%. | 100\% | 100\% |

32. During the 1998 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams or orals committees, or examination or certification committees did you serve on at this institution; how many did you chair, and what was the average number of hours spent in these activities per week? (Write in a number on each line. If none, write in " 0 ". Mark the "NA" box if you did not serve on any committees.)
$\qquad$ NA. Not applicable. Did not serve on any undergraduate or graduate committees (SKIP TO QUESTION 33)

|  | Number served on | Of that number, how many did you chair? | Average number of hours per week |
| :---: | :---: | :---: | :---: |
| Type of Committee | (Write in number in each box. If none, write in " 0 ".) |  |  |
| 1. Undergraduate thesis honors committees; comprehensive exams or orals committees; examination/certification committees |  |  |  |
| 2. Graduate thesis or dissertation committees; comprehensive exams or orals committees (other than as part of thesis/ dissertation committees); examination/certification committees |  |  |  |

33. During the 1998 Fall Term, what was the total number of classes or sections you taught at this institution? (Mark the "NA" box if you did not teach any classes.)

- Do not include individualized instruction, such as independent study, individual performance classes, or working with individual students in a clinical or research setting.
- Count multiple sections of the same course as a separate class (e.g., if you taught Sociology 101 to two different groups of students during the term, count this as two separate classes).
- Count lab or discussion sections of a class as the same class (e.g., if you taught Biology 202 to a group of students during the term and the class consisted of a lecture two times a week, a lab one day a week, and a discussion section one day a week, count this work as one class).


NA. Not applicable; no classes taught (SKIP TO QUESTION 48, PAGE 14)


Number of classes/sections (i.e., credit and non-credit)
34. How many different courses (preparations) do these classes/sections represent? (Write in number. If none, write in "0".)


Number of courses these classes/sections represent
35. How many of the classes/sections that you taught during the 1998 Fall Term were remedial? (Write in number. If none, write in "0".)
$\square$ Number of classes/sections that were remedial, i.e., credit and non-credit. (IF NONE, SKIP TO QUESTION 37)
36. How many of these remedial classes/sections were not creditable toward a degree (non-credit classes)? (Write in number. If none, write in "0".)


Number of remedial classes/sections that were not creditable toward a degree (non-credit)
37. How many of the classes/sections that you taught during the 1998 Fall Term were continuing education classes? (Write in number. If none, write in "0")
$\square$ Number of classes/sections that were continuing education (IF NONE, SKIP TO QUESTION 39)
38. How many of these continuing education classes/sections were not creditable toward a degree (noncredit classes)? (Write in number. If none, write in "0".)
$\square$ Number of continuing education classes/sections that were not creditable toward a degree (non-credit)
39. What is the total number of students enrolled in all your non-credit classes/sections combined? (Write in number. If none, write in " 0 ".)
$\square$ Total number of students enrolled in non-credit classes/sections
40. How many of the classes/sections that you taught during the 1998 Fall Term were for credit? (Write in number. If none, write in " 0 ".)
$\square$ Number of classes/sections for credit (IF NONE, SKIP TO QUESTION 43, PAGE 14)
41. For each credit class or section that you taught at this institution during the $\mathbf{1 9 9 8}$ Fall Term, please answer the following questions. For each class, enter the code for the academic discipline of the class. (Refer to pages 3-4 for the codes. Please enter the code rather than the course name.)

- 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.


42. In how many of the undergraduate courses that you taught for credit during the 1998 Fall Term did you use... (Mark [ $x$ ] one box for each item.)NA. Did not teach any undergraduate classes for credit (SKIP TO QUESTION 43)
a. Student evaluations of each other's work?
b. Multiple-choice midterm and/or final exam?

None Some

. Essay midterm and/or final exams? $\qquad$

d. Short-answer midterm and/or final exams?

e. Term/research papers? $\qquad$

f. Multiple drafts of written work?

g. Grading on a curve?

h. Competency-based grading?

43. During the 1998 Fall Term, did you have websites for any of the classes you taught? (Mark [x] one box.)


Yes


No (SKIP TO QUESTION 45)
44. What did you use the websites for? (Mark [ $x]$ "Yes" or "No" for each item.)

45. During the 1998 Fall Term, did you use electronic mail (e-mail) to communicate with students in your classes? (Mark [x] one box.)
 Yes No (SKIP TO QUESTION 48) 48)
46. Approximately what percent of the students in your classes communicated with you via email during the 1998 Fall Term? (Write in percent. If none, write in " 0 ".)


Percent of students in your classes who . $0 \%$ communicated with you via e-mail
47. Approximately how many hours per week did you spend responding to student e-mail during the 1998 Fall Term? (Write in number of hours. If none, write in " 0 ".)


Hours per week spent responding to student e-mail
48. During the 1998 Fall Term, did you have access to the internet... (Mark [ $x$ ] one box.)

49. For each type of student listed below, please indicate how many students received individual instruction from you during the 1998 Fall Term (e.g., independent study; supervising student teachers or interns; 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. If none, write in " 0 ".)

| Type of students receiving formal <br> individualized instruction |
| :--- |
| a. Undergraduate students $\ldots \ldots .$Number of <br> students |
| Total contact <br> hours per <br> week |
| b. Graduate students . . . . . . . . . . . |

50. On average, how many contact hours per week did you spend with students you were assigned to advise? (Write in a number. If none, write in "0".)


Number of contact hours spent with students per week (Do not include hours spent working with students on their thesis, dissertation, or independent study.)
51. During the 1998 Fall Term, how many regularly scheduled office hours did you have per week? (Write in a number. If none, write in " 0 ".)


Number of regularly scheduled office hours per week
52. During the 1998 Fall Term, were you engaged in any professional research, proposal writing, creative writing, or creative works (either funded or non-funded) at this institution?
(Mark [x] one box.)


YesNo (SKIP TO QUESTION 60, PAGE 16)
53. How would you describe your primary professional research, writing, or creative work during the 1998 Fall Term? (Mark [x] one box.)Basic researchApplied or policy-oriented research or analysis


Literary, performance, or exhibitions
Program/Curriculum design and development


Other (Please specify below.)
$\square$
54. During the 1998 Fall Term were you engaged in any funded research or funded creative work? Include any grants, contracts, or institutional awards. Do not include consulting services. (Mark $[x]$ one box.)


Yes
No (SKIP TO QUESTION 60, PAGE 16)
55. During the 1998 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts? (Mark [x] one box.)Yes $\longrightarrow$ How many? $\square$ No (SKIP TO QUESTION 57)
56. During the 1998 Fall Term, how many individuals at this institution other than yourself were supported, either in part or in full, by all the grants and contracts for which you were PI or Co-PI? (Write in a number. If none, write in "0".)


Number of individuals supported by grants or contracts
57. From which of the following sources did you receive funding during the 1998 Fall Term? (Mark [x] all that apply.)This institution
Foundation or other nonprofit organization
For profit business or industry in the private sectorState or local government
Federal Government


Other (Please specify)
58. What were the total number of grants/contracts from all sources in the 1998 Fall Term? (Write in a number)
 Total number of grants/contracts

59a. What were the total funds received from all sources for the 1998-99 academic year? Do not include funding that was awarded in 1999.
(Write in a number; if not sure, mark [ $x]$ the " $D K$, Don't Know"box.)

.00DK, Don't Know

59b. How were these funds used? (Mark [ $x$ ] all that apply.)ResearchProgram/curriculum development


Other
60. How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1998 Fall Term? (Mark $[x]$ one box for each item.)
a. Basic research equipment/instruments
b. Laboratory/research space and supplies
c. Availability of teaching assistants
d. Availability of research assistants
e. Personal computers and local networks
f. Centralized (main frame) computer facilities
g. Internet connections
h. Technical support for computer-related activities
i. Audio-visual equipment
j. Classroom space
k. Office space
I. Studio/performance space
m.Secretarial support
n. Library holdings


Not Available/ Not Applicable/ Don't Know


Continue to next page $\longrightarrow$
61. During the past two years, did you use institutional funds for any of the purposes specified below? (Mark [x] one item for each category.)
a. Tuition remission at this or other institution

No,
although
unds were
available
$\nabla$
$\square$
No,
no funds
were available,
or not eligible
$\square$

No, don't know if funds were available

b. Professional association memberships and/or registration fees
c. Professional travel $\qquad$
d. Training to improve research or teaching skills

e. Release time from teaching

f. Sabbatical leave $\qquad$




62. During the 1998 Fall Term, how many of the following types of administrative committees did you serve on at this institution? How many of these committees did you chair? Include committees at the department or division level, the school or college level, and institution- and system-wide committees. (Write a number in each box. If you did not serve on or chair a committee, write "0" for each item. If you did not serve on or chair any administrative committees mark [ $x$ ] the NA box.)NA. Not applicable; did not serve on or chair any administrative committees. (SKIP TO QUESTION 64)
a. Curriculum Committees $\qquad$ Served On

Chaired

b. Personnel Committees (e.g., search or
recruitment committees). . . . . . . . . .

c. Governance Committees (e.g., faculty senate, student retention, budget, or admissions)

d. Other

63. On average, approximately how many hours per week did you spend on administrative committee work? (Write in number. If none, write in "0".)
$\square$ Hours per week spent on committee work
64. Are you a member of a union (or other bargaining association) that is the legally recognized representative of the faculty at this institution? (Mark [x] one box.)Union/bargaining association is not availableUnion/bargaining association is available, but I am not eligibleI am eligible, but not a memberI am eligible, and a member

## Section D:

Job Satisfaction Issues
65. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution? (Mark [x] one box for each item. Mark [x] "NA" if you had no instructional duties.)

$\square$
NA. Not applicable; no instructional duties (SKIP TO QUESTION 66)

|  | Very Dissatisfied | Somewhat Dissatisfied | Somewhat Satisfied | Very Satisfied | Not Applicable |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The authority I have to make decisions about content and methods in the courses I teach. |  |  |  |  |  |
| b. The authority I have to make decisions about what courses I teach |  |  |  |  |  |
| c. The authority I have to make decisions about other (non-instructional) aspects of my job. |  |  |  |  |  |
| d. Time available for working with students as an advisor, mentor, etc. |  |  |  |  |  |
| e. Time available for class preparation |  |  |  |  |  |
| f. Quality of undergraduate students whom I have taught here |  |  |  |  |  |
| g. Quality of graduate students whom I have taught here |  |  |  |  |  |

66. How satisfied or dissatisfied are you with the following aspects of your job at this institution? (Mark [ $x$ ] one box for each item.)

| Very Dissatisfied $\nabla$ | Somewhat Dissatisfied | Somewhat Satisfied $\square$ | Very Satisfied | Not Applicable |
| :---: | :---: | :---: | :---: | :---: |
| a. My work load |  |  |  |  |
| b. My job security . |  |  |  |  |
| c. Opportunity for advancement in rank at this institution |  |  |  |  |
| d. Time available for keeping current in my field. |  |  |  |  |
| e. The effectiveness of faculty leadership at this institution (e.g. academic senate, faculty councils, etc.) |  |  |  |  |
| f. Freedom to do outside consulting |  |  |  |  |
| g. My salary |  |  |  |  |
| h. My benefits, generally |  |  |  |  |
| i. Spouse or partner employment opportunities in this geographic area |  |  |  | $\square$ |
| j. My job here, overall . . . . . . . . . . . . . |  |  |  |  |

67. During the next three years, how likely is it that you will leave this job to: (Mark [x] one box for each item.)
a. Accept a part-time job at a different postsecondary institution? .....
b. Accept a full-time job at a different postsecondary institution? .......
c. Accept a part-time job not at a postsecondary institution? ...........
d. Accept a full-time job not at a postsecondary institution? ...........
e. Retire from the labor force? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
68. At what age do you think you are most likely to stop working at a postsecondary institution? (Write in age or mark "DK. Don't Know".)
$\square$ Years of age
$\square$ DK. Don't Know
69. If you were to leave your current position at this institution to accept another position inside or outside of academia, how important would each of the following be in your decision? (Mark [x] one box for each item.)

|  | Not Important | Somewhat Important $\square$ | Very Important | Not <br> Applicable |
| :---: | :---: | :---: | :---: | :---: |
|  | Salary level |  |  |  |
|  | Tenure-track/tenured position |  |  |  |
|  | Job security |  |  |  |
|  | Opportunities for advancement |  |  |  |
|  | Benefits |  |  |  |
|  | No pressure to publish. |  |  |  |
|  | Good research facilities and equipment |  |  |  |
|  | Good instructional facilities and equipment . . . . . . . . . . . |  |  |  |
|  | Good job or job opportunities for my spouse or partner. . |  |  |  |
|  | Good geographic location |  |  |  |
|  | Good environment/schools for my children. . |  |  | , |
|  | Greater opportunity to teach |  |  |  |
|  | Greater opportunity to do research . . . . . . . . . . . . . . . . . . . . . . |  |  |  |

70. Of the factors listed in Question 69, write in the letter of the item ( $\mathrm{a}-\mathrm{m}$ ) that would be most important in your decision to leave. (Write in a letter, a-m, from Question 69.)
$\square$
71. If you could elect to draw on your retirement and still continue working at this institution on a part-time basis, would you do so? (Mark [x] one box.)Yes

$\square$ DK. Don't Know
72. Have you retired from another position? (Mark [x] one box.)
$\square$ Yes

73. If an early retirement option were offered to you at this institution, would you take it? (Mark [ $x$ ] one box.)

$\square$ DK. Don't Know
74. At which age do you think you are most likely to retire from all paid employment? (Write in age or mark "DK. Don't Know".)


Years of ageDK. Don't Know

## Section E: <br> Compensation

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They wil be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group.
75. What is your basic salary from this institution for the 1998-99 academic year? (Write in dollar amount. If not sure, give your best estimates; if no basic salary, mark [ $x$ ] the "NA. Not Applicable" box.)
a. Basic salary for academic year.


NA. Not Applicable
b. Basic salary is based on: (Mark [x] one box in "Type" and write in "Number" below.) TYPE
$\square$ length of appointment in months (e.g. 9 months) NUMBER

$\square$
 months
 number of credit hours taught
 credit hoursnumber of classes taught

classesother (Please specify.) $\square$
 (Specify.) $\square$
76. For the 1998 calendar year, please estimate your gross compensation before taxes from each of the sources listed below. (Write in dollar amount. If not sure, give your best estimates; if no compensation from a source, mark [x] the "NA. Not Applicable" box.)

## Compensation from this institution:

a. Basic salary for calendar year
 .00

b. Other income from this institution not included in basic salary (e.g., for summer session, overload courses, administration, research, coaching sports, etc.)
 .00

c. Non-monetary compensation, such as food, housing, car provided by this institution (do not include employee benefits such as medical, dental, or life insurance).

.00


## Compensation from other sources:

d. Employment at another academic institution

.00

e. Any other employment
 $0 \square$
f. Legal or medical services or psychological counseling
 .00

g. Outside consulting, consulting business or freelance work

.00

h. Self-owned business (other than consulting)

.00 $\square$
i. Professional performances or exhibitions $\qquad$

.00

j. Speaking fees, honoraria
 .00


k. Royalties or commissions
I. Non-monetary compensation, such as food, housing, car (do not include other employee benefits such as medical, dental, or life insurance)

.00


Other sources of earned income (Please specify below):
m.

.00

n.

$\square$ .00

77. What was the gross income of your spouse or significant other for the 1998 calendar year? (Write in number. If no income, write in " 0 ". If no spouse or significant other, mark the "NA" box. If don't know, mark the "DK" box.)
\$
 .00 Gross income of spouse/significant other for 1998NA. No spouse or significant other
$\square$
DK. Don't know
78. For the 1998 calendar year, how many persons lived in your household including yourself? (Write in number.)
$\square$ Total number in household
79. For the 1998 calendar year, what was your total household income before taxes? (Write in number.)
$\square$ . 00 Total household income before taxes
80. For the 1998 calendar year, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her financial support from you.) (Write in number. If none, write in " 0 ".)


Number of dependents

## Section F: <br> Sociodemographic Characteristics

81. Are you ...


Male


Female
82. In what month and year were you born? (Write in month and year.)


Month


Year
83. What is your ethnicity? (Mark [x] one box.)
$\square$ Hispanic or LatinoNot Hispanic or Latino
84. What is your race? (Mark [x] one or more.)American Indian or Alaska NativeAsianBlack or African AmericanNative Hawaiian or Other Pacific IslanderWhite
85. Are you a person with a disability? (Mark [x] one box.)


YesNo (SKIP TO QUESTION 87)
86. What type of disability do you have? (Mark [x] all that apply.)Hearing impairment (i.e., deaf or hard of hearing)Blind or visual impairment that cannot be corrected by wearing glasses, or legally blindSpeech or language impairmentMobility/orthopedic impairmentOther (e.g., specific learning disability, attention deficit, mental illness, or emotional disturbance)
87. What was your marital status in the 1998 Fall Term? (Mark [ $x$ ] one box.)Single, never married


MarriedLiving with someone in a marriage-like relationshipSeparated, divorced, widowed
88. During the 1998 Fall Term, was your spouse or significant other employed in a professional position at a higher education institution? (Mark [x] one box.)Yes, at this institutionYes, at another higher education institutionNoNot Applicable
89. In what country were you born? (Mark [x] one box.)
$\square$ USAOther (Please specify below.)
90. What is your citizenship status? (Mark [x] one box.)United States citizen, nativeUnited States citizen, naturalized
$\square$ Permanent resident of the United States (immigrant visa)


COUNTRY OF PRESENT CITIZENSHIP

$\square$
Temporary resident of United States (non-immigrant visa)


COUNTRY OF PRESENT CITIZENSHIP
91. What is the highest level of formal education completed by your mother and your father? What is the highest level of formal education completed by your spouse or significant other? (Mark [x] one box for each person.)


## Section G: <br> Opinions

92. Please indicate the extent to which you agree or disagree with each of the following statements. (Mark [ $x$ ] one box for each item.)

| [x] | Strongly Disagree | Disagree | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| a. Teaching effectiveness should be the primary criterion for promotion of faculty/instructional staff at this institution . . |  |  |  |  |
| b. Research/publications should be the primary criterion for promotion of faculty/instructional staff at this institution. |  |  |  |  |
| c. At this institution, research is rewarded more than teaching |  |  |  |  |
| d. Post-tenure review of faculty will improve the quality of higher education |  |  |  |  |
| e. This institution should have a tenure system |  |  |  |  |
| f. Female faculty members are treated fairly at this institution. |  |  |  |  |
| g. Faculty who are members of racial or ethnic minorities are treated fairly at this institution |  |  |  |  |
| h. If I had it to do over again, I would still choose an academic career |  |  |  |  |

93. Please indicate the extent to which you agree or disagree with each of the following statements. Over recent years at this institution... (Mark $[x]$ one box for each item.)

|  | Strongly Disagree | Disagree | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| a. It has become more difficult for faculty to obtain external funding |  |  |  |  |
| b. Faculty work load has increased |  |  |  |  |
| c. The quality of undergraduate education has declined |  |  |  |  |
| d. The atmosphere is less conducive to free expression of ideas |  |  |  |  |
| e. The quality of research has declined |  |  |  |  |
| f. Too many full-time faculty have been replaced by part-time faculty |  |  |  |  |

Please indicate approximately how long it took you to complete this questionnaire.
$\square$ Minutes

## Comments:



## Thank you very much for your participation.

Return your completed questionnaire in the enclosed pre-paid envelope or mail directly to:
The Gallup Organization
Survey Processing Center
P.O. Box 5700

Lincoln, Nebraska 68505-9926

## Endorsed by:

- American Association for Higher Education
- American Association of Community Colleges
- American Association of State Colleges and Universities
- American Association of University Professors
- American Council on Education
- American Federation of Teachers
- Association for Institutional Research
- Association of American Colleges and Universities
- Association of Catholic Colleges and Universities
- College and University Personnel Association
- The College Board
- The College Fund/UNCF
- Council of Graduate Schools
- The Council of Independent Colleges
- National Association for Equal Opportunity in Higher Education
- National Association of Independent Colleges and Universities
- National Association of State Universities and LandGrant Colleges
- National Education Association

Sponsored by: National Center for Education Statistics
Supported by: National Science Foundation National Endowment for the Humanities

Contractor: The Gallup Organization Government \& Education Division

Mailing Address: The Gallup Organization Survey Processing Center
P.O. Box 5700

Lincoln, Nebraska 68505-9926
Survey Contact: Brian Kuhr
E-mail: NSOPF99@gallup.com
Toll-Free Number: 1-800-633-0209

## Appendix $\mathbb{C}$ : Discipline Crosswalk, NSOPF 1988-1993-1999

|  | Discipline Crosswalk, NSOPF 1988-1999 <br> Codes for Major Fields of Discipline |  |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{1 9 8 8}$ Codes | $\mathbf{1 9 9 3}$ Codes | $\mathbf{1 9 9 9}$ Codes |  |


| Discipline Crosswalk, NSOPF 1988-1999 Codes for Major Fields of Discipline |  |  |  |
| :---: | :---: | :---: | :---: |
| 1988 Codes | 1993 | 1999 Codes |  |
| 201 | 200 |  | COMPUTER SCIENCE <br> Computer \& Information Sciences <br> Computer Programming <br> Data Processing <br> Systems Analysis <br> Other Computer Science |
|  | 201 | 201 |  |
| 202 | 202 | 202 |  |
| 203 | 203 | 203 |  |
| 204 | 204 | 204 |  |
| 210 | 210 | 210 |  |
|  | 220 |  | EDUCATION |
| 038 | 221 | 221 | Education, General |
| 039 | 222 | 222 | Basic Skills |
| 040 | 223 | 223 | Bilingual/Cross-cultural Education |
| 041 | 223 | 223 | Curriculum Instruction |
| 042 | 225 | 225 | Education Administration |
| 043 | 226 | 226 | Education Evaluation and Research |
| 044 | 227 | 227 | Educational Psychology |
|  |  | 228 | Higher Education |
| 045 | 228 | 229 | Special Education |
| 046 | 229 | 230 | Student Counseling \& Personnel Services |
| 047 | 230 | 231 | Other Education |
|  | 240 |  | TEACHER EDUCATION |
| 048 | 241 | 241 | Pre-Elementary |
| 049 | 242 | 242 | Elementary |
| 050 | 243 | 243 | Secondary |
| 051 | 244 | 244 | Adult \& Continuing |
| 052 | 245 | 245 | Other General Teacher Education Programs |
| 053 | 250 | 250 | Teacher Education in Specific Subjects |
|  | 260 |  | ENGINEERING |
| 054 | 261 | 261 | Engineering, General |
| 055 | 262 | 262 | Civil Engineering |
| 056 | 263 | 263 | Electrical, Electronics, \& Communications |
| 057 | 264 | 264 | Engineering |
|  |  | 265 | Mechanical Engineering |
| 058 | 265 270 | 270 | Chemical Engineering |
| 059 | 280 | 280 | Other Engineering |
|  |  |  | Engineering-Related Technologies |
|  | 290 |  | ENGLISH AND LITERATURE |
| 060 | 291 | 291 | English, General |
| 061 | 292 | 292 | Composition \& Creative Writing |
| 062 | 293 | 293 | American Literature |
| 063 | 294 | 294 | English Literature |
| 064 | 295 | 295 | Linguistics |
| 065 | 296 | 296 | Speech, Debate \& Forensics |
| 066 | 297 | 297 | English as a Second Language |
| 067 | 300 | 300 | English, Other |


| Discipline Crosswalk, NSOPF 1988-1999 Codes for Major Fields of Discipline (cont'd) |  |  |  |
| :---: | :---: | :---: | :---: |
| 1988 Codes | 1993 Codes | 1999 |  |
|  | 310 |  | FOREIGN LANGUAGES |
| 068 | 311 | 311 | Chinese (Mandarin, Cantonese or other Chinese) |
| 069 | 312 | 312 | French |
| 070 | 313 | 313 | German |
| 071 | 314 | 314 | Italian |
| 072 | 315 | 315 | Latin |
| 073 | 316 | 316 | Japanese |
| 074 | 317 | 317 | Other Asian |
| 075 | 318 | 318 | Russian or Other Slavic |
| 076 | 319 | 319 | Spanish |
| 077 | 320 | 320 | Other Foreign Languages |
|  | 330 |  | HEALTH SCIENCES |
| 078 | 331 | 331 | Allied Health Technologies \& Services |
| 079 | 332 | 332 | Dentistry |
| 080 | 333 | 333 | Health Services Administration |
| 081 | 334 | 334 | Medicine, including Psychiatry |
| 082 | 335 | 335 | Nursing |
| 083 | 336 | 336 | Pharmacy |
| 084 | 337 | 337 | Public Health |
| 085 | 338 | 338 | Veterinary Medicine |
| 086 | 340 | 340 | Other Health Sciences |
| 087 | 350 | 350 | HOME ECONOMICS |
| 088 | 360 | 360 | INDUSTRIAL ARTS |
| 089 | 370 | 370 | LAW |
| 090 | 380 | 380 | LIBRARY \& ARCHIVAL SCIENCES |
|  |  |  | MATHEMATICS/STATISTICS |
| 101 | 430 | 390 | Mathematics |
| 101 | 440 | 390 | Statistics |
| 091 | 390 |  | NATURAL SCIENCES: BIOLOGICAL |
| 100 | 391 | 391 | SCIENCES |
| 093 | 392 | 392 | Biochemistry |
| 094 | 393 | 393 | Biology |
| 100 | 394 | 394 | Botany |
| 100 | 395 | 395 | Genetics |
| 100 | 396 | 396 | Immunology |
| 098 | 397 | 397 | Microbiology |
| 099 | 398 | 398 | Physiology |
| 100 | 400 | 400 | Zoology <br> Biological Sciences, Other |


|  | Discipline Crosswalk, NSOPF 1988-1999 <br> Codes for Major Fields of Discipline (cont'd) |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| $\mathbf{1 9 8 8}$ Codes | $\mathbf{1 9 9 3}$ Codes | 1999 Codes |  |  |


| Discipline Crosswalk, NSOPF 1988-1999 Codes for Major Fields of Discipline (cont'd) |  |  |  |
| :---: | :---: | :---: | :---: |
| 1988 Codes | 1993 Codes 1999 |  |  |
|  | 640 |  | MECHANICS AND REPARRERS <br> Electrical \& Electronics Equipment Repair |
| 128 | 641 | 641 |  |
| 129 | 642 | 642 | Heating, Air Conditioning, \& Refrigeration Mechanics and |
| 130 | 643 | 643 | Repairers |
| 131 | 644 | 644 | Vehicle and Mobile Equipment Mechanics and Repairers |
|  |  |  | Other Mechanics and Repairers |
|  | 660 | 660 | PRECISION PRODUCTION |
| 132 | 661 | 661 | Drafting |
| 133 | 662 | 662 | Graphic \& Print communications |
| 134 | 663 | 663 | Leatherworking \& Upholstering |
| 135 | 664 | 664 | Precision Metal Work |
| 136 | 665 | 665 | Woodworking |
| 137 | 670 | 670 | Other Precision Production Work |
| 138 | 680 | 680 | TRANSPORTATION AND MATERIAL <br> MOVING <br> Air Transportation (e.g., Piloting, Traffic Control, Flight |
|  | 681 | 681 |  |
|  |  |  |  |
| 139 | 682 | 682 |  |
| 140 | 683 | 683 | Maintenance, Aviation Management) <br> Land Vehicle \& Equipment Operation <br> Water Transportation (e.g., Boat \& Fishing |
|  |  |  |  |
|  |  |  |  |
| 141 | 690 | 690 | Operations, Deep Water Diving, Marina |
|  |  |  |  |
|  |  |  | Deckhands) |
|  |  |  | Other Transportation \& Material moving |
| 888 | 900 | 900 | OTHER |

Appendix D: Letters And Forms For Institution Recruitment<br>Letter To Chief Administrative Officer<br>Confirmation Form<br>Letter To Institution Coordinator<br>How To Prepare Lists Of Faculty And Instructional Staff<br>How To Submit Electronic Lists Of Faculty And Instructional Staff<br>Commonly Asked Questions About NSOPF:99<br>Glossary<br>Affidavit Of Nondisclosure And Confidentiality<br>NSOPF:99 Informational Brochure

Letter to Chief Administrative Officer

NSOPF: 99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education

American Federation of Teachers

Association for Institutional Research

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

The College Board
The College Fund/UNCF
College and University Personnel Association

Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State
Universities and
Land-Grant Colleges
National Education
Association
[DATE]
«Chfnm», «Chftitle»
«Instnm»
«Addr»
«City», «STABBR» «Zip»
Dear Colleague:
The National Center for Education Statistics (NCES) is conducting the third cycle of the National Study of Postsecondary Faculty (NSOPF:99) in the 1998-99 school year. Your institution was scientifically selected for inclusion in the NSOPF:99 study. I am writing to ask for your participation in this study and to provide you with some background information on this important research.

NSOPF:99 is the most comprehensive study of higher education faculty ever undertaken. Postsecondary institutions and faculty today are facing changing academic, fiscal, and political environments. To make realistic plans for the future of higher education, planners and policy makers at all levels-institutional, governmental, and legislative-need reliable and current national data on available resources, as well as on the constraints and demands on the higher education system and faculty. NSOPF:99 will provide national profiles of faculty and instructional staff in American institutions of higher learning, national benchmarks for faculty productivity and workload, and information on institutional policies and practices affecting faculty. An informational brochure about the study is enclosed.

To confirm your institution's participation in the study, you are requested to:

- Designate an individual to act as your Institution Coordinator. This person will serve as the liaison between your institution, NCES, and the contractor for the study. We will ask this individual to provide a list of faculty and instructional staff at your institution and to coordinate the completion of the Institution Questionnaire, which asks questions about your institution's policies and practices regarding full-time and part-time faculty, adjunct faculty, and instructional staff.
- Complete the enclosed Confirmation Form, with the name, campus address, telephone, fax number, and e-mail address of the person who you have chosen as the Institution Coordinator and return the form to The Gallup Organization within the next five days.

NCES has contracted with The Gallup Organization to collect the data for the study. In appreciation of your institution's participation in the study, The Gallup Organization will prepare a customized Peer Report specifically for your institution based on the data gathered by the NSOPF:99 Institution Questionnaire. The report will show how your institution compares to other institutions in your Carnegie Classification (e.g., Research Universities I, Baccalaureate Colleges II, etc.). To order a Peer Report and receive a copy of the NSOPF:99 final report, complete the enclosed Publications Request Form and return it to The Gallup Organization. In addition, a variety of NSOPF datafiles and a wide range of other analytic reports based on past NSOPF data are available. Please use the request form to order any of the reports or datafiles listed. You can also access NSOPF publications, data, and other education reports electronically through NCES's World Wide Web site at http://nces.ed.gov.

I want to assure you that all information collected in this study that permits the identification of individuals will be kept strictly confidential, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

Public reporting burden for this information request in its entirety is estimated to average 3.5 hours per response, including 30 -minutes for you to review the enclosed material, identify the Institution Coordinator, and complete the Confirmation Form for your institution; 120-minutes for the Institution Coordinator to prepare the list of faculty and instructional staff; and 60 -minutes for the Institution Coordinator to complete the Institution Questionnaire. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Education, Information Management and Compliance Division, Washington, DC 20202-4651 and to the Office of Management and Budget, Paperwork Reduction Project 1850-0665, Washington, DC 20503.

If you have questions or comments concerning the study, please contact the NSOPF:99 Project Director,
Dr. Sameer Abraham or Brian Kuhr, the Project Coordinator, at The Gallup Organization, at 1-800-633-0209, or via e-mail at NSOPF99@gallup.com; or the NCES Project Officer, Linda Zimbler, at 202-219-1834.

Your participation in this important and useful study is critical to its success. We appreciate and thank you for your participation.

Sincerely,


Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics

Enclosures

1999 National Study of Postsecondary Faculty

## CONFIRMATION FORM

Institution Address Label

Write in any address corrections on or alongside the label.
Name of Chief Administrative Officer
(If different from above.)
Last
First

Name of Institution $\qquad$
E-mail Address $\qquad$

## Institution Coordinator Information

Institution official who will prepare the list of faculty and instructional staff for the 1999 National Study of Postsecondary Faculty, complete the Institution Questionnaire, and act as liaison to the study.

Name $\qquad$
Last
First

Institution Title $\qquad$
Mailing Address $\qquad$

City
State
Zip Code
Campus telephone $\qquad$
E-mail Address
Fax


Please return the white and yellow copies of this form to The Gallup Organization within 5 days. You may fax the form, or return it in the pre-paid envelope provided.

E-mail to: NSOPF99@gallup.com
Fax form to: Brian Kuhr at 312-357-0836
Mail form to: Mary Beth Olson at The Gallup Organization, P.O. Box 5700, Lincoln, NE 68505-9926

Letter to Institution Coordinator

NSOPF:99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education

American Federation of Teachers

Association for Institutional Research

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

## College and University

 Personnel AssociationThe College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State Universities and Land-Grant Colleges

National Education Association

October 23, 1998
Name
Title
Institution
Address
City, State Zip

## Dear Colleague:

The National Center for Education Statistics (NCES) is conducting the third cycle of the National Study of Postsecondary Faculty (NSOPF:99) in the 1998-99 school year. Your institution has been selected for inclusion in NSOPF:99 and you have been designated to serve as the institution's coordinator for the study. Your institution's participation in this important study is critical to its success.

NSOPF:99 is the most comprehensive study of higher education faculty ever undertaken. Postsecondary institutions and faculty today are facing changing academic, fiscal, and political environments. To make realistic plans for the future of higher education, planners and policy makers at all levels-institutional, governmental, and legislative-need reliable and current national data on available resources, as well as on the constraints and demands on the higher education system and faculty. NSOPF:99 will provide national profiles of faculty and instructional staff in American institutions of higher learning, national benchmarks for faculty productivity and workload, and information on institutional policies and practices affecting faculty. An informational brochure about the study is enclosed

The enclosed Gallup folder includes the NSOPF:99 Instructions for the Institution Coordinator, which describes all of the necessary instructions and contains all forms needed for participation in the study. A copy of these forms can be found on the NSOPF:99 World Wide Web site at http://nces.ed.gov/NSOPF99.

As your institution's coordinator for NSOPF:99, you are requested to:

- Prepare a list of full- and part-time faculty and instructional staff employed at your institution as of November 1, 1998, and review the form, How to Prepare Lists of Faculty and Instructional Staff and other relevant forms in the NSOPF:99 Instructions for the Institution Coordinator.
- Complete the NSOPF:99 Institution Questionnaire, which asks questions about your institution's policies and practices regarding full-time and part-time faculty, adjunct faculty and instructional staff.

The list of faculty and instructional staff you prepare will serve as a sampling frame from which we will randomly select individual faculty members and instructional staff for the study. You can submit the Faculty and Instructional Staff lists on floppy disk, computer
tape, CD-ROM, hard copy, or via e-mail or FTP. The list and the completed forms can be mailed to Gallup in the enclosed prepaid self-addressed envelope; faxed to Gallup's Chicago office at 312-357-0836; or e-mailed to NSOPF99@gallup.com.

The Institution Questionnaire also contained in the Gallup folder focuses on your institution's policies and practices that affect faculty and instructional staff. You can access an electronic version of this questionnaire on the World Wide Web at http://www.gallup.com/usde. Please follow the instructions in the front cover of the paper questionnaire to access the electronic questionnaire. Your PIN (Personal Identification Number) to access the site is printed below.

In appreciation of your institution's participation, you can order a customized Peer Report specifically for your institution based on the data gathered by the NSOPF:99 Institution Questionnaire. The report will show how your institution compares to its peer institutions as defined by its Carnegie Classification (e.g., Research Universities I, Baccalaureate Colleges II, etc.). To order a Peer Report and receive a copy of the NSOPF:99 final report, complete the enclosed Publications Request Form and return it to The Gallup Organization. In addition, a variety of NSOPF datafiles and a wide range of other reports based on past NSOPF data are available. Please use the request form to order any of the reports or datafiles listed.

All information that permits the identification of individuals will be kept confidential, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

Public reporting burden for the Institution Questionnaire is estimated to average 1 hour per response, including time for reviewing instructions, identifying existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Public reporting burden for the list of faculty and instructional staff and other forms is estimated to average 2 hours per response, including time for reviewing instructions, identifying existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding these burden estimates or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, Information Management and Compliance Division, Washington, D. C. 20202-4651; and to the Office of Management and Budget, Paperwork Reduction Project 1850-0665, Washington, D. C. 20503.

If you have questions or comments concerning the study, please contact the NSOPF:99 Project Director, Dr. Sameer Abraham or Brian Kuhr, the Project Coordinator, at The Gallup Organization, at 1-800-633-0209 or via e-mail at NSOPF99@gallup.com; or the NCES Project Officer, Linda Zimbler, at 202-219-1834. Your participation in this important and useful study is critical to its success. We appreciate and thank you for your participation.


Pascal D. Forgione Jr., Ph.D. Commissioner of Education Statistics

Enclosures

## 1999 National Study of Postsecondary Faculty

## HOW TO PREPARE LISTS OF FACULTY AND INSTRUCTIONAL STAFF

## To be read by the Institution Coordinator

The list of faculty and instructional staff that you provide will be used to randomly select a nationally representative sample of all faculty in higher education institutions in the country. To ensure a scientifically accurate sample, it is extremely important that you follow the instructions below in preparing your institution's list. Because postsecondary education institutions vary widely in their organizational structures and staffing patterns, we realize that some of the criteria presented below may not apply to your institution. Also, different institutions use different definitions of faculty and non-faculty positions, temporary and permanent status, and full-time and part-time status. Please interpret the instructions and terms according to your institution's usage. Should you have any questions about-classification of personnel, or whether they should or should not be included on the lists, we urge you to contact Brian Kuhr at The Gallup Organization at 1-800-633-0209. For definitions of terms, please refer to the attached Glossary.

1. Include all faculty and instructional staff who were on the payroll of your institution as of November 1, 1998.
2. INCLUDE the following categories of personnel on your faculty list:
$\checkmark$ all faculty including any administrators, researchers, librarians, coaches, etc. who have faculty status at your institution, regardless of whether they have any instructional responsibility
$\checkmark$ all instructional staff, regardless of whether they have faculty status
BE SURE TO INCLUDE:
$\checkmark$ faculty and instructional staff in professional schools (e.g. medical, law, dentistry, etc.)
$\checkmark$ faculty and instructional staff who are permanent, temporary, adjunct, visiting, acting or postdoctoral appointees
$\checkmark$ faculty and instructional staff who are employed part-time or full-time by the institution
$\checkmark$ faculty and instructional staff who are tenured; nontenured, tenure track; or non-tenured, not on tenure track
$\checkmark$ faculty and instructional staff who interact with undergraduate or graduate students
$\checkmark$ faculty and instructional staff on paid sabbatical leave

## DO NOT INCLUDE:

x graduate or undergraduate teaching or research assistants
x faculty and instructional staff with instructional duties outside the U.S. (but not on sabbatical leave)
$x$ faculty and instructional staff on leave without pay
$x$ military personnel who teach only ROTC courses
$x$ instructional personnel supplied by independent contractors
$x$ voluntary medical faculty
3. For each person on the list, please provide the following information. (A short explanation of how the data are used is provided below.)
a. Full name
b. Campus address and telephone number
c. Home address and telephone number
d. E-mail address
e. Department/program affiliation (e.g., English, Engineering, Education)
f. Academic field or teaching discipline (e.g., American Literature, Chemical Engineering, Botany)
g. Race/ethnicity:

White (not of Hispanic origin)
African American/Black (not of Hispanic origin)
Hispanic
Asian or Pacific Islander
American Indian or Alaskan Native
h. Gender
i. Full- or part-time employment status
j. Employee ID number
k. IPEDS (Integrated Postsecondary Education Data System) category - see Glossary
i.e., Executive, Administrative, and Managerial; Faculty (Instruction/Research/Public Service); or Other Professionals (Support/Service).

Sampling Information: a, e, f,g,h,i-These items will be used to scientifically select a small sample of faculty and instructional staff that will be included in the study. Each person selected will be asked to complete a questionnaire about his or her workload and responsibilities.

Contact Information: a,b,c,d-These data will enable Gallup to contact the selected faculty member and ensure that all sampled faculty have an equal opportunity to participate in the study.

Quality Control Information: $\mathrm{j}, \mathrm{k}$-These items provide Gallup research staff with an additional way of checking the accuracy and completeness of the list.
4. If this information is not available on a single master list, please submit all applicable lists.
5. Please submit the lists in electronic (i.e., diskette or computer tape) and hard copy formats. The instructions, How to Submit Electronic Lists of Faculty and Instructional Staff, provide guidelines for formatting the computer files.
6. Please submit your lists no later than December 15, 1998.

[^17]
## 1999 National Study of Postsecondary Faculty

# HOW TO SUBMIT ELECTRONIC LISTS OF FACULTY AND INSTRUCTIONAL STAFF: GUIDELINES AND DOCUMENTATION 

## To be completed and returned by the Institution Coordinator

Please follow the guidelines below when submitting computer generated lists of faculty and instructional staff. We realize that computer capabilities vary widely across institutions and that some of these guidelines cannot be met; be sure to describe any special circumstances or deviations from these guidelines. Refer to the instructions, How to Prepare Lists of Faculty and Instructional Staff, to determine who should be included on the lists.

1. Please indicate the format of your enclosed faculty lists.
$\square$ Floppy Disk
$\square$ Computer Tape
$\square$ CD-ROM $\square$ FTPE-mail Hard copy: How many different lists are being submitted? $\qquad$
NOTE: Floppy disks should be formatted for Windows 95 (MS-DOS 3.0 or later version).
Faculty lists on computer tape should be provided on 9 -track tape.
2. If you are submitting your faculty list on a floppy disk, please provide the following information:
$\square$ ASCII (PREFERRED)Excel Lotus
$\square$ WordPerfectWord $\square$ Other (PLEASE SPECIFY) $\qquad$
3. If you are submitting your faculty list via FTP or on computer tape, please contact Brian Kuhr at 1-800-633-0209 for instructions.
4. How many offices (e.g., payroll, personnel, etc.) provided information for the faculty lists? $\qquad$
5. Please list below the name, title, and telephone number of persons who provided information for the faculty list so we can contact them should we have any questions concerning the lists.

| Contact Person |  |  |  | Name of Office (e.g., <br> personnel, payroll, etc.) | Data Provided (e.g., <br> department, discipline, <br> etc.) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Last Name | First Name | Title | Telephone |  |  |
| 1. |  |  | $(\quad)$ |  |  |
| 2. |  |  | $(\quad)$ |  |  |
| 3. |  |  | $(\quad)$ |  |  |
| 4. |  |  | $(\quad)$ |  |  |
| 5. |  |  | $(\quad)$ |  |  |
| 6. |  |  | $(\quad)$ |  |  |

6. Is there any additional information (e.g., faculty designations, abbreviations, codes, etc.) which would assist us in reading the lists? Please explain and include any necessary documentation with the lists.

| Field | Codes | RECOMMENDED |  | ACTUAL |  | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Starting Col. No. | No. of Characters | Starting Col. No. | No. of characters |  |
| First name | = not known | 1 | 25 |  |  |  |
| Last name | = not known | 26 | 25 |  |  |  |
| Middle initial | $=$ not known | 51 | 1 |  |  |  |
| Campus address-1 | = not known | 52 | 35 |  |  |  |
| Campus address-2 | = not known | 87 | 35 |  |  |  |
| Campus address- City | $=$ not known | 122 | 20 |  |  |  |
| Campus address-State | $=$ not known | 142 | 2 |  |  |  |
| Campus address- Zip Code | = not known | 144 | 9 |  |  |  |
| Campus telephone number area code + phone + extension | $=$ not known | 153 | 14 |  |  |  |
| Home address-line 1 | $=$ not known | 167 | 35 |  |  |  |
| Home address-line 2 | = not known | 202 | 35 |  |  |  |
| Home address - City | = not known | 237 | 20 |  |  |  |
| Home address - State | $=$ not known | 257 | 2 |  |  |  |
| Home address- Zip Code | = not known | 259 | 9 |  |  |  |
| Home telephone number area code + phone | $=$ not known | 268 | 10 |  |  |  |
| E-mail address | = not known | 278 | 85 |  |  |  |
| Department/program affiliation | $=$ not known | 363 | 20 |  |  |  |
| Academic or teaching discipline | $=$ not known | 383 | 20 |  |  |  |
| Race/Ethnicity | $1=$ White (not Hispanic) <br> $2=$ Black (not Hispanic) <br> $3=$ Hispanic <br> $4=$ Asian or Pacific Islander <br> $5=$ American Indian/ <br> Alaskan Native <br> $6=$ Race/Ethnicity not known | 403 | 1 |  |  |  |
| Gender | $\begin{aligned} & 1=\text { male } \\ & 2=\text { female } \\ & 3=\text { gender not known } \end{aligned}$ | 404 | 1 |  |  |  |
| Employment status | $1=$ full-time <br> $2=$ part-time <br> $3=$ Employment status not known | 405 | 1 |  |  |  |
| Employee ID | $\ldots$ = not known | 406 | 9 |  |  |  |
| IPEDS | l $=$ Executive, Administrative, <br> Managerial <br> $2=$ Faculty (Instruction/ <br> Research/Public Service) <br> $3=$ Other Professionals <br> (Support/Service) <br> $4=$ not known | 415 | 1 |  |  |  |

## 1999 National Study of Postsecondary Faculty

## COMMONLY ASKED QUESTIONS ABOUT NSOPF:99

## How was my institution selected?

Your institution was scientifically selected from the universe of all accredited two-year and four-year (and above) degree granting higher education institutions of all types and sizes.

## Why am I the Institution Coordinator?

We contacted the Chief Administrator's Office at your institution to inform the CAO about the study and to select the best person to serve as a liaison. You have been identified as that person.

## What do I need to do?

You will need to complete three tasks:

1) Sign an affidavit of nondisclosure and confidentiality to preserve the anonymity of your faculty and instructional staff;
2) Complete a short questionnaire about your institution's policies regarding faculty and instructional staff;
3) Prepare a complete list of all full-time and part-time faculty and instructional staff employed by your institution as of November 1, 1998, and if in an electronic format, provide a layout of the list.

## How long will this take?

Public reporting burden for the Institution Questionnaire is estimated to average 1 hour per response, including time for reviewing instructions, identifying existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Public reporting burden for the list of faculty and instructional staff and other forms is estimated to average 2 hours per response, including time for reviewing instructions, identifying existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. We recognize that compiling a list of faculty may take longer for some institutions. If so, we will work with you to reduce the burden.

## Is my institution required to participate?

While your institution's participation is voluntary, it is critical if we are to obtain nationally representative samples of higher education institutions and their faculties. Data collection procedures and questionnaires have been developed to minimize burden whenever possible. No other institution can be used as a substitute for your institution.

Why do you need me to sign an affidavit?
All Gallup and NCES researchers participating in NSOPF:99 are required to complete the Affidavit of Nondisclosure. The affidavit ensures that the confidentiality of the information you provide will be protected by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins

Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a]. We also ask that all institution coordinators sign the affidavit to protect the confidentiality of the faculty selected to participate in the study. This allows Gallup to communicate with you about the faculty who are selected at your institution. Please return the signed and notarized form as soon as possible.

Why do you meed a list of faculty and instructional staff?
The list you provide us will be used to select a random sample of faculty and instructional staff from your institution who will be asked to complete the NSOPF:99 Faculty Questionnaire. Without a complete and accurate list of all faculty and instructional staff from your institution, it will not be possible to have an adequate representation of faculty and instructional staff in the nation.

## Why do you meed home addresses and telephone numbers on this list?

As you know, some faculty are very mobile and can often be difficult to reach at their campus offices. It is essential that all full-time and part-time faculty and instructional staff have an equal opportunity to participate in the study. The additional contact information you provide ensures that we can reach all sampled respondents and encourage their participation in this important research. Only those faculty and staff selected to complete the questionnaire will be contacted. The information you provide will only be used for the purposes of this study and will be protected by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a].

## Why do you need this no later than December 15, 1998 ?

It is critical that we distribute the questionnaires to faculty and instructional staff early in January 1999 so that we can complete data collection before the end of the academic year. We need the list that you provide and the accompanying documentation to select the faculty sample. Please return the questionnaire and list of faculty and instructional staff as early as possible but no later than December 15. Although we need both the questionnaire and the list, you may return the items separately. (e.g., if your list and supporting documentation are ready before your questionnaire is completed, please send them in-do not wait until December 15).

## Why do you prefer my list electronically?

Since we are on a tight timeline, it is much more efficient to process lists of faculty and instructional staff that are computer-readable. We prefer your list to be sent to us on disk or via e-mail, but we will also accept a paper copy of your list if the data are not available electronically.

## Who should I include on my list?

NSOPF:99 gathers data on faculty, as well as those staff who have instructional responsibilities but may not be considered faculty by the institution. Therefore, be sure to include all employees classified as faculty as well as all staff who may or may not have faculty status but who have instructional responsibilities. Include all fulltime, part-time and adjunct faculty, and full-time and part-time instructional staff who were on the payroll of this institution as of November 1, 1998. Be sure to include all faculty and instructional staff in the health sciences, sometimes an easily overlooked group of faculty and instructional staff. Do not, however, include any voluntary medical faculty. If your institution has multiple branches, provide information on the faculty and instructional staff at the branch listed on the cover letter of this packet.

## Who can I contact for more information?

If you have any questions about any aspect of the study, please contact Brian Kuhr of the Gallup Organization toll-free at 1-800-633-0209 or via e-mail at NSOPF99@gallup.com.

## 1999 National Study of Postsecondary Faculty

## GLOSSARY

1998 Fall Term-The term that was in progress as of November 1, 1998.
NOTE: While the NSOPF:99 definition of faculty is similar to the IPEDS definition [see IPEDS Fall Staff Survey Definitions on next page], it is not identical. The NSOPF:99 definition of faculty is broader than the IPEDS definition of faculty. For example, NSOPF:99 includes as faculty any individual who is an administrator, dean, librarian, etc. and has faculty status even if that individual is not engaged in instructional activities during the 1998 Fall Term. NSOPF: 99 is interested in all faculty. The IPEDS definitions that appear on the following page are provided to remind you to include all faculty as defined in IPEDS as well as all other individuals at your institution/branch who have faculty status.

## NSOPF:99 Definitions of Faculty and Instructional Staff

Faculty-All employees classified by the institution as faculty who were on the payroll of your institution as of November 1, 1998.

## Include as Faculty:

- Any individuals who would be reported as "Faculty (Instruction/Research/Public Service)" on the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS): Fall Staff Survey.
- Any individuals with faculty status who would be reported as "Executive, Administrative, and Managerial" on the IPEDS Fall Staff Survey, whether or not the person is engaged in any instructional activities.
- Any individuals with faculty status who would be reported as "Other Professionals (Support/Service)" on the IPEDS Fall Staff Survey, whether or not the person is engaged in any instructional activities.


## Exclude as Faculty:

- Any individuals who would be reported as "Instruction/Research Assistants" on the IPEDS Fall Staff Survey.

Instructional Staff-All employees with instructional responsibilities-teaching one or more courses or advising or supervising students' academic activities (e.g., serving on undergraduate or graduate thesis or dissertation committees, supervising an independent study or one-on-one instruction, etc.)-during the 1998 Fall Term who were on the payroll of your institution as of November 1, 1998 and who may or may not have faculty status.

## Include as Instructional Staff:

- Any individuals with any instructional responsibilities during the 1998 Fall Term who would be reported as "Executive, Administrative, and Managerial" on the IPEDS Fall Staff Survey (i.e., A finance officer teaching a class in the business school.)
- Any individuals with any instructional responsibilities during the 1998 Fall Term who would be reported as "Other Professionals (Support/Service)" on the IPEDS Fall Staff Survey.


## Exclude as Instructional Staff:

- Any individuals who would be reported as "Instruction/Research Assistants" on the IPEDS Fall Staff Survey.

Full-time-Persons on the payroll of the institution and classified by the institution as full-time regardless of the amount of instructional responsibility.

Part-time-Persons on the payroll of the institution and classified by the institution as part-time regardless of the amount of instructional responsibility.

Tenure-Status of a personnel position, or a person occupying a position or occupation, with respect to permanence of position.

Tenure Track-Positions that lead to consideration for tenure.

## For Reference Only

IPEDS Fall Staff Survey
Definitions

## NOTE:

This restriction does not apply in the case of the NSOPF: 99 definition of faculty. Please include anyone with faculty status or any instructional responsibilities as of November I, 1998.

- Faculty (Instruction/Research/Public Service)-Persons whose specific assignments customarily are made for the purpose of conducting instruction, research, or public service as a principal 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. This category includes deans, directors, or the equivalent, as well as associate deans, assistant deans, and executive officers of academic departments (chairpersons, heads, or the equivalent) if their principal activity is instructional. Student teachers or research assistants are not included in this category.
- Executive, Administrative, and Managerial-Persons whose assignments require primary (and major) responsibility for management of the institution, or a customarily recognized department or subdivision thereof. Assignments require the performance of work directly related to management policies or general business operations of the institution, department, or subdivision. It is assumed that assignments in this category customarily and regularly require the incumbent to exercise discretion and independent judgment, and to direct the work of others. Included in this category are all officers subordinate to any of these as president, vice president, dean, director, or the equivalent, as well as officers subordinate to any of these administrators with such titles as associate dean, assistant dean, executive officer of academic departments (department heads, or the equivalent) if their principal activity is administrative.
- Other Professionals (Support/Service)-Persons employed for the primary purpose of performing academic support, student service, and institutional support activities, whose assignments would require either college graduation or experience of such kind and amount as to provide a comparable background, include employees such as librarians, accountants, systems analysts, and coaches in this category.
- Instruction/Research Assistants-Students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research. These positions are typically held by graduate students having titles such as teaching assistant, teaching associate, teaching fellow, or research assistant.


## BEST COPY AVAILABLE

## 1999 National Study of Postsecondary Faculty

## AFFIDAVIT OF NONDISCLOSURE AND CONFIDENTIALITY

## To be completed and returned by the Institution Coordinator

The National Center for Education Statistics requests that anyone who may have access to the identities of individual sample members or access to data complete this form. All Gallup and NCES Research Staff participating in NSOPF:99 are required to complete an Affidavit of Nondisclosure and Confidentiality. Institution Coordinators are asked to complete this form to protect the confidentiality of the faculty selected to participate in the study. This will allow Gallup staff to communicate with you about the faculty who are selected to participate at your institution.
(Please type or print)
(Title of Institution Coordinator)
(Name of Institution)
(Date of Assignment to NCES Project)
1999 National Study of Postsecondary Faculty
(NCES study)
(Address)
I, $\qquad$ , do solemnly swear (or affirm) that when given access to the subject NCES data base or other information about individual sample members, I will not:
(i) use or reveal any individually assembled identifiable data furnished, acquired, retrieved or assembled by me or others, under the provisions of Sections 408 and 411 of the National Education Statistics Act of 1994(20 U.S.C. 9001 et seq.), for any purpose other than statistical purposes in the NCES survey, project, or contract;
(ii) make any disclosure or publication whereby a sample unit or survey respondent could be identified or the data furnished by or related to any particular person under this section can be identified;
(iii) permit anyone other than the individuals authorized by the Commissioner of the National Center for Education Statistics to examine the individual reports.
(Signature)
The penalty for unlawful disclosure is a fine of not more than $\$ 250,000$ (under 18 U.S.C. 3571 ) or imprisonment for not more than 5 years, or both. The word "swear" should be stricken out wherever it appears when a person elects to affirm the affidavit rather than swear to it.

State of
County of $\qquad$

Signed and sworn (or affirmed) before me on $\qquad$ by
(Date)
(Signature of Notary Public)
(Name of person making statement)
Commission Expires on:
$\qquad$

## Study Summary

Faculties are the pivotal resource around which postsecondary education revolves. They determine curriculum content, student performance standards, and the quality of s'udents' preparation for careers. Faculty members perform research and development work upon which this nation's technological and economic advancement depend. Through their public service activities, they also contribute to the public good. For these reasons, it is essential to understand who they are; what they do; and if, how, and why they are changing.

The third cycle of the National Study of Postsecondary Faculty (NSOPF:99) is being conducted by the National Center for Education Statistics (NCES), with support from the National Endowment for the Humanities and the National Science Foundation, to respond to the continuing need for data on higher education faculty and instructors-those who directly affect the quality of education in postsecondary institutions.

The major sources of comprehensive information on this key professional group are the 1988 National Survey of Postsecondary Faculty (NSOPF:88) and the 1993 National Study of Postsecondary Faculty (NSOPF:93). These previous data collections generated an immediate and a wide range of interest in the higher education community because they provided national profiles of faculty and instructional staff in American institutions of higher learning, national benchmarks for
faculty productivity and workload, and information on institutional policies and practices affecting faculty. This third cycle of the study will expand the information about faculty and instructional staff in two important ways: (1) it will allow for comparisons to be made over time, and (2) it will examine critical issues surrounding faculty that have developed since the first two studies.

The study is designed to address a variety of policy relevant issues for both faculty and institutions, including:

- How many full- and part-time faculty and instructional staff are there?
- What are the background characteristics of full- and part-time faculty and instructional staff?
- How have the workloads of faculty and instructional staff changed over time? Is more time being allocated to classroom instruction?
- What are the compensation and fringe benefit packages provided to faculty and instructional staff? How important are other sources of income or income-in-kind?
- What are the faculty's and instructional staff's attitudes and perceptions about their professional status, student preparation for college-level work, student achievement, etc.?
- What are the career and retirement plans of faculty and instructional staff?
- What retirement plans are available to faculty and instructional staff?
- Have institutions changed their policies on granting tenure to faculty members? Are changes anticipated in the future?
- What is the impact of retirement policies and tenure on the influx of new faculty and instructional staff or career development?


## How NSOPF:99 Will Be Conducted

The National Center for Education Statistics has contracted with the Gallup Organization's Govemment and Education Division to collect the data for this study.

NSOPF:99 includes both a field test and a full-scale study. The field test of 162 institutions and 512 faculty was conducted in the fall and spring of 1997/1998 to refine the data collection procedures and questionnaires. The full-scale study of a nationally representative sample of about 900 institutions and 29,000 faculty will be conducted in the fall of 1998 and the winter/spring of 1999.

## Data Analysis And Dissemination

Data collected from the National Study of Postsecondary Faculty are made available to the public in various ways:

- descriptive reports are published through NCES on selected topics; for example, the following reports were published based on NSOPF: 93 data: Faculty and Instructional Staff: Who Are They and What Do They Do? (NCES 94-346); Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992 (NCES 97-470);
Characteristics and Attitudes of
Instructional Faculty and Staff in the Humanities (NCES 97-973); Retirement and Other Departure Plans of Instructional Faculty and Staff in Higher Education Institutions (NCES 98-254); Institutional Policies and Practices Regarding Faculty in Higher Education (NCES 97-080).
- special tabulations are provided to the public;
- data files (without identifying information) are released to the public; andpresentations at conferences are made on study findings.

NSOPF publications and data can also be accessed electronically through NCES's World Wide Web site at:
http://nces.ed.gov

## Findings From NSOPF:93

The following are examples of the type of information obtained from NSOPF:93 on faculty characteristics and compensation:

- The mean age of full-time instructional faculty and staff at higher education institutions in 1992-93 was 48 years; the average age of part-time instructional faculty and staff was 46 years.
- Across all institutions of higher education, whites accounted for 87 percent of fulltime instructional faculty and staff and 88 percent of part-time instructional faculty and staff. Asian Americans comprised 5 percent of the full-time instructional faculty and staff, blacks 5 percent, Hispanics 3 percent, and American Indians less than 1 percent. Minorities accounted for similar proportions of parttime instructional faculty and staff.
- Men made up 67 percent of full-time instructional faculty and staff and 55 percent of part-time instructional faculty and staff. Among full-time instructional faculty and staff, public research universities had a significantly higher percentage of men ( 77 percent), whereas public two-year institutions had a significantly lower percentage ( 55 percent).
- Fifty-four percent of full-time instructional faculty and staff were tenured, and another 22 percent were on tenure track.
- Full-time instructional faculty and staff spent an average of 11 hours a week in the classroom in the fall of 1992.
- The average base salary for full-time instructional faculty and staff during the 1992 calendar year was $\$ 48,411$. The average total income-base salary, other institutional income, consulting, and other outside income-was $\$ 60,613$. For parttime instructional faculty and staff, the average base salary was $\$ 10,189$, and the average total income was $\$ 48,761$, including income from other (perhaps full-time) employment.


## Confidentiality

The 1999 National Study of Postsecondary Faculty (NSOPF:99) is being conducted for the National Center for Education Statistics (NCES) of the U.S. Department of Education in compliance with the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a]. Strict confidentiality of all information obtained from individuals surveyed in NSOPF is assured by current federal laws and regulations.

Any faculty data released to the general public (for example, statistical tables) are tailored so that it is not possible to identify specific individuals.

## Endorsements

The following organizations have endorsed NSOPF:99 recognizing the study's contribution to the body of knowledge about faculty in higher education:
American Association for Higher Education
American Association of Community
Colleges

American Association of State Colleges and Universities
American Association of University

## Professors

American Council on Education
American Federation of Teachers
Association for Institutional Research
Association of American Colleges and Universities
Association of Catholic Colleges and
Universities
College and University Personnel Association
The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges
National Association for Equal Opportunity in Higher Education
National Association of Independent Colleges and Universities
National Association of State Universities and Land-Grant Colleges
National Education Association

## For More Information

Please contact:

## Project Director

Dr. Sameer Abraham (1-800-633-0209)

## Project Coordinator

Brian Kuhr (1-800-335-0199)
E-mail: NSOPF99@gallup.com

## NCES Project Officer

Linda Zimbler (1-202-219-1834)

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NCES 98-286

# Appendix E: Letters To Faculty Questionnaire Respondents 

Initial Cover Letter To Faculty<br>Second Faculty Questionnaire Mailing<br>Third Faculty Questionnaire Mailing<br>Fourth Faculty Questionnaire Mailing<br>E-Mail Prompts To Faculty

Initial Cover Letter to Faculty

NSOPF:99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education

American Federation of Teachers
Association for Institutional Research

## Association of American

 Colleges and UniversitiesAssociation of Catholic Colleges and Universities
College and University Personnel Association

The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent
Colleges Colleges
National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State Universities and Land-Grant Colleges

National Education Association

## NSOPF PIN

 for web access: $\ll$ PIN \#
## [DATE]

<Faculty Name
«ADDR»
«CITY», «STABBR» «ZIP»
Dear Colleague:
I am writing to ask you to participate in the 1999 National Study of Postsecondary Faculty (NSOPF:99) by completing the enclosed questionnaire. Your institution has provided us with a complete list of its faculty from which your name was randomly selected. As part of a nationally representative sample, your participation, while voluntary, is vital to the study's success.

NSOPF:99 is the most comprehensive study of higher education faculty ever undertaken. Postsecondary institutions and faculty today are facing changing academic, fiscal, and political environments. To make realistic plans for the future of higher education, planners and policy makers at all levels-institutional, government, and legislative-need reliable and current national data on available resources, as well as on the constraints and demands on the higher education system and faculty. NSOPF:99 will provide national profiles of faculty and instructional staff in American institutions of higher learning, national benchmarks for faculty productivity and workload, and information on institutional policies and practices affecting faculty. An informational brochure about the study is enclosed.

The National Center for Education Statistics (NCES) of the U.S. Department of Education is conducting the study with additional support from the National Endowment for the Humanities and the National Science Foundation. NCES has contracted with The Gallup Organization to collect the data for the study.

You have the option of completing the Faculty Questionnaire electronically by accessing the World Wide Web (WWW) version. I strongly encourage you to use the electronic version because it is user-friendly and should take less time to complete than the paper version. Your PIN (Personal Identification Number) for the WWW site is printed in the box below. To access the electronic version enter http://www.faculty.gallup.com. At the login and password prompts, enter your PIN and then press enter. Instructions for completing the questionnaire will appear at that time. Or if you prefer, you may complete the enclosed paper version and return it to The Gallup Organization in the enclosed prepaid, self-addressed envelope.

NSOPF publications, data, and other education reports can be accessed electronically through NCES's World Wide Web site at http://nces.ed.gov.

Let me assure you that your responses and all information that would permit the identification of individuals will be kept strictly confidential, as mandated by the

National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

Public reporting burden for this information request in its entirety is estimated to average 45 minutes per response, including time to review the enclosed material and to complete the Faculty Questionnaire. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, Information Management and Compliance Division, Washington, D. C. 202024651; and to the Office of Management and Budget, Paperwork Reduction Project 1850-0665, Washington, D. C. 20503.

If you have questions or comments concerning the study, please contact the NSOPF:99 Project Director, Dr. Sameer Abraham, at The Gallup Organization, at 1-800-633-0209 or via e-mail at NSOPF99@gallup.com; or the NCES Project Officer, Linda Zimbler, at 202-219-1834.

Your participation in this important and useful study is critical to its success. We appreciate your participation and thank you for your cooperation.

Sincerely,


Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics

Enclosures

Second Questionnaire Mailing for Faculty

NSOPF:99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education
American Federation of Teachers

Association for institutional
Research
Association of American
Colleges and Universities
Association of Catholic
Colleges and Universities
College and University
Personnel Association
The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal
Opportunity in Higher Education
National Association of
Independent Colleges and Universities

National Association of State Universities and Land-Grant Colleges

National Education Association
$\ll$ DATE
<Faculty Name
«ADDR1»
«ADDR2"
«CITY», «STABBR» «ZIP»
Dear Colleague:
I am writing to ask you to respond to the 1999 National Study of Postsecondary Faculty (NSOPF:99), in which your institution is participating.

I want to thank you personally if you have already completed and returned your Faculty Questionnaire. If you did not receive the questionnaire, or have not yet returned it, please complete and return the enclosed copy within the next five days.

As someone who plays a crucial role in higher education, we are certain that you can appreciate our need to obtain a completed questionnaire from each sampled faculty member. You were scientifically selected; no one can substitute for you. Without the participation of faculty like yourself, the results of this study will not adequately represent all faculty in the nation.

If you prefer to complete the Faculty Questionnaire electronically, your PIN (Personal Identification Number) for the World Wide Web (WWW) site is printed in the box below. To access the electronic version enter http://www.faculty.gallup.com. At the login and password prompts, enter your PIN and then press enter. Instructions for completing the questionnaire will appear at that time.

Let me assure you that your responses and all information that would permit the identification of individuals will be kept strictly confidential, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.] and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

I appreciate your contribution to this very important research. Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209.

Sincerely,


Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics
Enclosures

Third Questionnaire Mailing for Faculty

NSOPF:99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education
American Federation of Teachers

Association for Institutional Research

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

College and University
Personnel Association
The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State
Universities and
Land-Grant Colleges
National Education Association
$\ll$ DATE
<Faculty Name
«ADDR1» «ADDR2"
«CITY», «STABBR» «ZIP»
Dear Colleague:
I am sending this third questionnaire packet to you because we have not heard from you, and the end date for the $\mathbf{1 9 9 9}$ National Study of Postsecondary Faculty (NSOPF:99) is almost upon us.

I want to thank you personally if you have already completed and returned your Faculty Questionnaire. If you did not receive the questionnaire, or have not yet returned it, please complete and return the enclosed copy within the next five days. Your participation is absolutely crucial if we are to adequately represent the diversity of the nation's instructional and non-instructional faculty. You were scientifically selected, and no one can substitute for you.

If you prefer to complete the Faculty Questionnaire electronically, your PIN (Personal Identification Number) for the World Wide Web (WWW) site is printed in the box below. To access the electronic version enter http://www.faculty.gallup.com. At the login and password prompts, enter your PIN and then press enter. Instructions for completing the questionnaire will appear at that time.

Again, let me assure you that your responses and all information that would permit the identification of individuals will be kept strictly confidential, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

Please take this opportunity to complete the questionnaire now. I appreciate your contribution to this very important research. Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209.

Sincerely,

Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics
Enclosures

## NSOPF PIN <br> for web access: $\ll$ PIN \#

$8: 9$

Fourth Questionnaire Mailing for Faculty

NSOPF:99
Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education
American Federation of Teachers

Association for Institutional Research

Association of American
Colleges and Universities
Association of Catholic
Colleges and Universities
College and University
Personnel Association
The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State Universities and
Land-Grant Colleges
National Education Association
$\ll$ DATE
<Faculty Name
«ADDR1»
«ADDR2»
«CITY», «STABBR» «ZIP»

## Dear Colleague:

URGENT: I am sending this final questionnaire packet to you because we have not received a completed questionnaire from you, and the end date for the 1999 National Study of Postsecondary Faculty (NSOPF:99) is almost upon us.

I want to thank you personally if you have already completed and returned your Faculty Questionnaire. If you did not receive the questionnaire, or have not yet completed it, please fill out and return the enclosed copy within the next five days. Your participation is absolutely crucial if we are to adequately represent the diversity of the nation's instructional and non-instructional faculty. You were scientifically selected, and no one can substitute for you.

If you prefer to complete the Faculty Questionnaire electronically, your PIN (Personal Identification Number) for the World Wide Web (WWW) site is printed in the box below. To access the electronic version enter http://www.faculty.gallup.com. At the login and password prompts, enter your PIN and then press enter. Instructions for completing the questionnaire will appear at that time.

Again, let me assure you that your responses and all information that would permit the identification of individuals will be kept strictly confidential, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a].

Please take this opportunity to complete the questionnaire now. I appreciate your contribution to this very important research. Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209.

Sincerely,

Sameer Y. Abraham, Ph.D.
NSOPF:99 Project Director
Enclosures

## NSOPF PIN

 for web access: $\ll$ PIN \#
## E-mail Prenotification to Faculty

## Dear Colleague:

Congratulations! You have been selected to participate in the 1999 Natiomal Stundy of Postsecondary Faculty (NSOPF:99). NSOPF:99 is the most comprehensive study of higher education faculty ever undertaken. The National Center for Education Statistics (NCES) of the U.S. Department of Education is conducting the study with additional support from the National Endowment for the Humanities and the National Science Foundation. NCES has contracted with the Gallup Organization to collect the data for this study.

Within the next few days, you will receive the NSOPF:99 Faculty Questionnaire in the mail. Please complete and return the questionnaire as quickly as possible. If you have internet access, I strongly encourage you to complete the web version of this questionnaire. It is user-friendly and should take less time to complete than the paper version. To access the electronic version immediately, go to http://www.faculty.gallup.com. At the bottom of the screen, enter your ID: xxx123 and press "login." Instructions for completing the questionnaire will appear at that time.

All information that would permit the identification of individual respondents will be kept strictly confidential in accordance with Federal laws governing collection of data by NCES. Should you have any questions, please do not hesitate to contact the Project Coordinator, Brian Kuhr at 1-800-633-0209. You may also contact Gallup via e-mail at: NSOPF99@gallup.com.

Thank you in advance for your help in this important study.

Sincerely,

Gary W. Phillips,

Acting Commissioner of Education Statistics

## E-mail \#I to Faculty

Dear Colleague:
Have you completed your questionnaire for the 1999 National Study of Postsecondary Faculty? If not, we need to hear from you. Your views and experiences are vital in planning the future of postsecondary education.

We are keenly of how busy faculty are...that is why we've developed a web version of the questionnaire that we hope is a faster, more user friendly way of taking part in this important survey. To encourage you to try this new technology, and to provide a small token of our thanks, we will mail you $\$$ if you complete the web questionnaire in the next seven days. We know this doesn't adequately compensate you for your time-- again, it is just a small way of saying thank you.

To access the web survey, go to http://www.faculty.gallup.com and type in your PIN number (ABC123). This is the first time NSOPF:99 has been made available over the web, and we welcome your feedback If you have any questions or comments, please call us toll-free at 1-800-633-0209
or e-mail us at NSOPF99@gallup.com.
Thank you again for your participation.
Sincerely,

Sameer Y. Abraham

Project Director, NSOPF:99

E-mail \#2 to Faculty
Dear Colleague:
Our records indicate that you have not completed your questionnaire for the 1999 National Study of Postsecondary Faculty. We urgently need to hear from you, as we are trying to close down our data collection and want to make sure you have the opportunity to participate. Your views and experiences are vital in planning the future of postsecondary education.

We are keenly of how busy you are at this time of year...that is why we've developed a web version of the questionnaire that we hope is a faster, more user friendly way of taking part in this important survey.

To access the web survey, go to $\mathrm{http}: / / \mathrm{www}$.faculty.gallup.com and type in your PIN number (ABC123). This is the first time NSOPF: 99 has been made available over the web, and we welcome your feedback If you have any questions or comments, please call us toll-free at 1-800-633-0209 or e-mail us at NSOPF99@gallup.com.

Thank you again for your participation.
Sincerely,

Sameer Y. Abraham<br>Project Director, NSOPF:99

## E-mail \#3 to Faculty

Dear Colleague:
Our records indicate that you have not completed your questionnaire for the 1999 National Study of Postsecondary Faculty. We urgently need to hear from you, as we are trying to close down our data collection and want to make sure you have the opportunity to participate. Your views and experiences -- whether you are part-time, full-time, taught one class or many classes during the 1998 Fall Term -- are vital in planning the future of postsecondary education.

We are keenly of how busy you are at this time of year...that is why we've developed a shortened version of the questionnaire that you can complete over the phone with an interviewer. Please call us toll-free at 1-800-633-0209 to set up an interview time.

We also offer a web version of the questionnaire that we hope is a fast, user friendly way of taking part in this important survey. To access the web survey, go to http://www.faculty.gallup.com and type in your PIN number ( ABCl 23 ).

If you have any questions or comments, please call us at 1-800-633-0209 or e-mail us at NSOPF99@gallup.com.

Thank you again for your participation.
Sincerely,
Sameer Y. Abraham
Project Director, NSOPF:99

## E-mail \#4 to Faculty

Dear Colleague:
As you are filling out your questionnaire for the National Study of Postsecondary Faculty, I wanted to inform you of a change in protocol for this study. We have just been granted the opportunity to offer you a $\mathbf{\$ 2 5}$ gift for completing your questionnaire by December 31. We are trying to wrap up our data collection on this study and it would be especially helpful if you would respond in the next two weeks. We will mail you the $\$ 25$ shortly after you complete the questionnaire.

I realize this is a very busy time of year for you, and $\$ 25$ in no way compensates you for your time. However, we wanted to find some way to thank you for your participation in this important study.

There are several ways to complete the NSOPF: 99 questionnaire. The quickest way is to visit our website at http://www.faculty.gallup.com and enter your PIN number (XXX123). Another option is to complete the questionnaire over the telephone. To set up an interview time, please call Gallup toll-free at 1-800-633-0209. Finally, you can choose to fill out the paper questionnaire. For your convenience, another copy is being mailed to you in the next few days.

Thank you again for your participation in this important study, and have a happy holiday season.
Sincerely,
Linda J. Zimbler
Project Officer, NSOPF:99
U.S. Department of Education

202/219-1834

# Appendix F: Coordinator Follow-Up With Faculty 

Instructions For Mailing \#3<br>Letter To Institution Coordinator If Affidavit Signed, Home Addresses Available<br>Letter To Institution Coordinator If Affidavit Signed, No Home Addresses Available<br>Sample Letter For Institution Coordinators To Send To Nonresponding Faculty

Instructions for Mailing \#3

## Affidavit signed by Coordinator



Directions for $3^{\text {rd }}$ mailout

Type of mailing

1. Coordinator mailing -- no home addresses, affidavit signed

CRITERIA: Nonresponding faculty with no home addresses, and Institutional Coordinator has returned Affidavit of Nondisclosure
LETTER TO: Institutional Coordinator
DOC NAME: 99faclet3-aff, no home
CONTENTS: $\quad$ Cover letter, a List of nonresponding faculty (merge document based on all nonrespondents for that institution), and pre-packaged envelopes for faculty
PACKETS:
LETTER TO: Faculty Member
DOC NAME: 99 faclet 3
CONTENTS: $\quad$ Cover letter, Questionnaire with label on back cover, BRE, Label for outer envelope with FIRST AND LAST NAME ONLY, Postage stamped
2. Coordinator mailing -- home addresses, affidavit signed

CRITERIA: Nonresponding faculty with home addresses, and Institutional Coordinator has returned Affidavit of Nondisclosure
LETTER TO: Institutional Coordinator
DOC NAME: $\quad 99$ faclet3-aff, home
CONTENTS: $\quad$ Cover letter, and a List of nonresponding faculty (merge document based on all nonrespondents for that institution)
PACKETS: NONE
3. Faculty Mailing, Home addresses available, affidavit either signed or not

CRITERIA: Nonresponding faculty with home addresses
LETTER TO: Faculty member at home address
DOC NAME: 99faclet3
CONTENTS: $\quad$ Cover letter, Questionnaire with label on back cover, BRE, Label for outer envelope with home address mailing info, Stamped
4. Faculty Mailing, no home address, no affidavit signed

CRITERIA: Nonresponding faculty with no home addresses
LETTER TO: Faculty member at campus address
DOC NAME: 99 faclet 3
CONTENTS: Cover letter, Questionnaire with label on back cover, BRE, Label for outer envelope with campus address mailing info, Stamped

Letter to Institution Coordinator for faculty follow-up if affidavit signed, home addresses available

## NSOPF:99

Endorsed by
American Association for Higher Education

American Association of Community Colleges

American Association of State
Colleges and Universities
American Association of University Professors

American Council on Education

American Federation of Teachers

Association for Institutional Research

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

College and University Personnel Association

The College Board
The College Fund/UNCF
Council of Graduate Schools

The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State Universities and Land-Grant Colleges

National Education Association
<<DATE>>

## Coordinator name

Institution name
Address line 1
Address line 2
City, State zip
Dear Coordinator Name:
Thank you for responding to our request for the 1999 Nationall Study of Postsecondary Faculty (NSOPF:99).

I am sending the enclosed list to you because we have not heard from all of the faculty from your institution who were selected to represent your institution, and the end date for the study is almost upon us. We have just mailed a third copy of the questionnaire to these faculty to encourage their participation in the study. Any assistance you can give us in prompting them to complete the questionnaire and return it to us as soon as possible would be greatly appreciated. I have attached a list of nonresponding faculty members with contact information. Please help preserve the anonymity of respondents by only contacting them individually, rather than through methods such as a group e-mail. I have attached a sample letter you might use when contacting faculty.

Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209. Thank you.

Sincerely,

Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics

## Enclosures

Letter to Institution Coordinator for faculty follow-up if affidavit signed, no home addresses available

NSOPF:99 Endorsed by

American Association for Higher Education

American Association of Community Colleges

American Association of State Colleges and Universities

American Association of University Professors

American Council on Education
American Federation of Teachers

Association for Institutional Research

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

College and University
Personnel Association
The College Board
The College Fund/UNCF
Council of Graduate Schools
The Council of Independent Colleges

National Association for Equal Opportunity in Higher Education

National Association of Independent Colleges and Universities

National Association of State
Universities and
Land-Grant Colleges
National Education Association
<<DATE>>
Coordinator name
Institution name
Address line 1
Address line 2
City, State zip
Dear Coordinator Name:
Thank you for responding to our request for the 1999 National Study of Postsecondary Faculty (NSOPF:99).

I am sending the enclosed questionnaire packets to you because we have not heard from all of the faculty who were selected to represent your institution, and the end date for the study is almost upon us. We respect the decision by some institutions not to disclose faculty members' home addresses, and are asking you to help us contact your faculty who have not yet responded.

Therefore, we would appreciate it if you would distribute these pre-packaged envelopes to the appropriate faculty members at their home addresses as soon as possible, so that they have ample time to complete the questionnaire. In addition, any assistance you can give us in prompting them to return the questionnaire as soon as possible would be greatly appreciated. I have attached a list of nonresponding faculty members with contact information. Please help preserve the anonymity of respondents by only contacting them individually, rather than through methods such as a group e-mail. I have attached a sample letter you might use when contacting faculty.

Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209. Thank you.

Sincerely,

Pascal D. Forgione, Jr., Ph.D.
Commissioner of Education Statistics

Enclosures

Sample letter for Institution Coordinators to send to nonresponding faculty

## Dear Colleague:

I am forwarding this questionnaire packet to you on behalf of the National Center for Education Statistics (NCES) of the U.S. Department of Education. You were randomly selected from the fall roster of faculty and instructional staff at this institution to participate in the 1999 National Study of Postsecondary Faculty. While I know you are very busy, I strongly encourage you to take the time to fill out this questionnaire at your earliest convenience. This is a very important study that will help shape national policy on postsecondary faculty, and without your participation, it will not be fully representative.

Your responses will be kept strictly confidential by The Gallup Organization, as mandated by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Federal Education Rights and Privacy Act of 1974 (FERPA) [5 U.S.C. 552a.]. No one from this institution will ever have access to your responses to this questionnaire or any information that might link you to your responses. The only information I have been given is that you have been randomly selected as part of a nationwide sample, and that your participation is urgently needed. I have signed an Affidavit of Nondisclosure and Confidentiality, ensuring that your identity as a respondent in the survey will be kept confidential.

If you have not already done so, please take this opportunity to complete the questionnaire now. I appreciate your contribution to this very important research. Should you have any questions, please call Brian Kuhr, the NSOPF:99 Coordinator, at 1-800-633-0209.

Sincerely,

## Appendix G: Items Retained On 1999 NSOPF Abbreviated Faculty Questionnaire

Items Retained on 1999 NSOPF Abbreviated Faculty Questionnaire

| NSOPF:99 <br> faculty question | Content area |
| :---: | :---: |
| 1 | Instructional duties |
| 2 | Credit or noncredit |
| 3 | Principal activity |
| 4 | Faculty status |
| 5 | Employed P/T or F/T |
| 7 | Year began current job |
| 8 | Academic rank, title or job |
| 10 | Tenure status |
| 14 | Principal field of teaching |
| 16 | Degrees earned |
| 17 | Working towards degree |
| 19 | Primary employment |
| 20 | Outside consulting |
| 21 | Additional professional employment |
| 22 | Number of other current jobs |
| 24 | First and most recent positions in higher education institutions |
| 25 | Number of years teaching in higher education |
| 29 | Publications |
| 30 | Hours per week spent on various activities |
| 31 | Percent of time spent on various activities |
| 32 | Undergraduate and graduate committee work |
| 33 | Total classes taught |
| 40 | Total credit classes taught |
| 41 | (Sections 1-3). Details about up to 5 credit classes taught |
| 45 | Used e-mail |
| 46 | Percent of students using e-mail |
| 47 | Hrs/wk spent replying to student e-mail |
| 48 | Internet access |
| 49 | Individual instruction |
| 52 | Any creative work/writing/research |
| 53 | Type of primary work/writing/research |
| 54 | Any funded research |
| 55 | $\mathrm{PI} / \mathrm{Co}-\mathrm{PI}$ on any grants or contracts |
| 56 | Number supported by all grants and contracts |
| 58 | Total number of grants/contracts |
| 59 | Total funds from all sources |
| 63 | Avg hrs/wk on committee work |
| 64 | Union status |
| 66 | Satisfaction w/job overall |
| 67 | Likelihood of accepting another position in next 3 years |
| 68 | Age likely to stop working at postsecondary institution |
| 69 | Importance of various factors if seeking another position in academia |
| 70 | If leave, most important factor |
| 74 | Age likely retire from all paid employment |
| 76 | Income |
| 78 | Number living in household |
| 79 | Total household income |
| 80 | Number of dependents |

Items Retained on 1999 NSOPF Abbreviated Faculty Questionnaire (cont'd)
NSOPF:99

## Content area

faculty
question

81
82
83
84
85
86
87
89
90.

92
92b
92h

Gender
Age
Ethnicity
Race
Disability
Type of disability
Marital status
Country of birth
Citizenship status
Opinion about teaching as promotion criteria
Opinion about research as promotion criteria
Opinion about choosing academic career again

# Appendix H: Critical Items And Nonresponse: 1999 NSOPF Institution Questionnaire 

Item Nonresponse Rates for the Institution Questionnaire

| 1. Item Nonresponse Rates, Critical Items |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| A1A | 2981 | 1 | 0.03 | 0.000 |
| A1B | 2981 | 15 | 0.49 | 0.001 |
| A5A1 | 2981 | 158 | 5.30 | 0.004 |
| A5A2 | 2981 | 159 | 5.34 | 0.004 |
| A5A4 | 2981 | 145 | 4.87 | 0.004 |
| A5B4 | 2981 | 222 | 7.46 | 0.005 |
| A5C4 | 2981 | 144 | 4.82 | 0.004 |
| A5D4 | 2981 | 142 | 4.75 | 0.004 |
| A5E4 | 2981 | 165 | 5.55 | 0.004 |
| A5F1 | 2981 | 185 | 6.21 | 0.004 |
| A5F2 | 2981 | 198 | 6.66 | 0.005 |
| A5F4 | 2981 | 1 | 0.03 | 0.000 |
| A14 | 2981 | 238 | 7.98 | 0.005 |
| B23 | 2917 | 479 | 16.44 | 0.007 |


| 2. liem Nonresponse Rates, Sorted by Variable |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| A1A | 2981 | 1 | 0.03 | 0.000 |
| A1B | 2981 | 15 | 0.49 | 0.001 |
| A2A | 2981 | 21 | 0.70 | 0.002 |
| A2B | 2981 | 54 | 1.80 | 0.002 |
| A2C | 2981 | 11 | 0.38 | 0.001 |
| A3A | 2981 | 48 | 1.60 | 0.002 |
| A3B | 2981 | 48 | 1.60 | 0.002 |
| A3C | 2981 | 48 | 1.60 | 0.002 |
| A3D | 2981 | 48 | 1.60 | 0.002 |
| A3E | 2981 | 48 | 1.60 | 0.002 |
| A4 | 2981 | 13 | 0.45 | 0.001 |
| A5A1 | 2981 | 158 | 5.30 | 0.004 |
| A5A2 | 2981 | 159 | 5.34 | 0.004 |
| A5A3 | 2981 | 158 | 5.30 | 0.004 |
| A5A4 | 2981 | 145 | 4.87 | 0.004 |
| A5B1 | 2981 | 188 | 6.32 | 0.004 |
| A5B2 | 2981 | 258 | 8.65 | 0.005 |
| A5B3 | 2981 | 344 | 011.54 | 0.006 |
| A5B4 | 2981 | 222 | 7.46 | 0.005 |
| A5C1 | 2981 | 183 | 6.14 | 0.004 |
| A5C2 | 2981 | 206 | 6.92 | 0.005 |
| A5C3 | 2981 | 201 | 6.76 | 0.005 |
| A5C4 | 2981 | 144 | 4.82 | 0.004 |
| A5D1 | 2981 | 185 | 6.20 | 0.004 |
| A5D2 | 2981 | 215 | 7.20 | 0.005 |
| A5D3 | 2981 | 199 | 6.67 | 0.005 |
| A5D4 | 2981 | 142 | 4.75 | 0.004 |
| A5E1 | 2981 | 219 | 7.35 | 0.005 |
| A5E2 | 2981 | 292 | 9.78 | 0.005 |
| A5E3 | 2981 | 339 | 11.38 | 0.006 |
| A5E4 | 2981 | 165 | 5.55 | 0.004 |
| A5F1 | 2981 | 185 | 6.21 | 0.004 |
| A5F2 | 2981 | 198 | 6.66 | 0.005 |
| A5F3 | 2981 | 197 | 6.63 | 0.005 |
| A5F4 | 2981 | 1 | 0.03 | 0.000 |
| A6A | 1956 | 130 | 6.64 | 0.006 |
| A6B | 1974 | 130 | 6.58 | 0.006 |
| A8FA | 1978 | 37 | 1.88 | 0.003 |
| A8A | 1972 | 111 | 5.62 | 0.005 |
| A8A | 1988 | 63 | 3.15 | 0.004 |
| A8B | 1988 | 63 | 3.15 | 0.004 |
| A8C | 1988 | 63 | 3.15 | 0.004 |
| A8D | 1988 | 63 | 3.15 | 0.004 |
|  | 1988 | 63 | 3.15 | 0.004 |
|  | 1993 | 59 | 2.96 | 0.004 |
|  | 238 | 25.71 | 0.014 |  |
|  |  |  |  |  |


| 2. Item Nonresponse Rates, Sorted by Variable |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Variable | Number Eligible | Number Missing | Percent Missing | Std Err |
| A10 | 2981 | 193 | 6.47 | 0.005 |
| A11A1 | 2981 | 17 | 0.57 | 0.001 |
| A11A2 | 2039 | 72 | 3.53 | 0.004 |
| A11B1 | 2981 | 17 | 0.57 | 0.001 |
| A11B2 | 1611 | 23 | 1.40 | 0.003 |
| A11C1 | 2981 | 17 | 0.57 | 0.001 |
| A11C2 | 1397 | 40 | 2.85 | 0.004 |
| A11D1 | 2981 | 17 | 0.57 | 0.001 |
| A11D2 | 603 | 22 | 3.69 | 0.008 |
| A11E1 | 2981 | 17 | 0.57 | 0.001 |
| A11E2 | 894 | 32 | 3.61 | 0.006 |
| A12A1 | 2981 | 18 | 0.60 | 0.001 |
| A12A2 | 2950 | 45 | 1.52 | 0.002 |
| A12B1 | 2981 | 18 | 0.60 | 0.001 |
| A12B2 | 2642 | 36 | 1.35 | 0.002 |
| A12C1 | 2981 | 18 | 0.60 | 0.001 |
| A12C2 | 2689 | 36 | 1.32 | 0.002 |
| A12D1 | 2981 | 18 | 0.60 | 0.001 |
| A12D2 | 2836 | 40 | 1.40 | 0.002 |
| A12E1 | 2981 | 18 | 0.60 | 0.001 |
| A12E2 | 714 | 83 | 11.58 | 0.012 |
| A12F1 | 2981 | 18 | 0.60 | 0.001 |
| A12F2 | 1659 | 84 | 5.04 | 0.005 |
| A12G1 | 2981 | 18 | 0.60 | 0.001 |
| A12G2 | 890 | 72 | 8.12 | 0.009 |
| A13A | 2981 | 20 | 0.68 | 0.002 |
| A13B | 2981 | 20 | 0.68 | 0.002 |
| A13C | 2981 | 20 | 0.68 | 0.002 |
| A13D | 2981 | 20 | 0.68 | 0.002 |
| A13E | 2981 | 20 | 0.68 | 0.002 |
| A13F | 2981 | 20 | 0.68 | 0.002 |
| A13G | 2981 | 20 | 0.68 | 0.002 |
| A13H | 2981 | 20 | 0.68 | 0.002 |
| A13\| | 2981 | 20 | 0.68 | 0.002 |
| A14 | 2981 | 238 | 7.98 | 0.005 |
| A15A | 2981 | 18 | 0.60 | 0.001 |
| A15B | 2981 | 82 | 2.77 | 0.003 |
| A16A | 2981 | 55 | 1.84 | 0.002 |
| A16B | 2981 | 55 | 1.84 | 0.002 |
| A16C | 2981 | 55 | 1.84 | 0.002 |
| A16D | 2981 | 55 | 1.84 | 0.002 |
| A16E | 2981 | 55 | 1.84 | 0.002 |
| A16F | 2981 | 55 | 1.84 | 0.002 |
| A16G | 2981 | 55 | 1.84 | 0.002 |
| A16H | 2981 | 55 | 1.84 | 0.002 |
| A16I | 2981 | 55 | 1.84 | 0.002 |


| 2. Item Nonresponse Rates, Sorted by Variable |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| B17 | 2924 | 34 | 1.17 | 0.002 |
| B18A1 | 1615 | 20 | 1.22 | 0.003 |
| B18A2 | 977 | 18 | 1.88 | 0.004 |
| B18B1 | 1615 | 16 | 0.98 | 0.002 |
| B18B2 | 846 | 5 | 0.64 | 0.003 |
| B18C1 | 1615 | 15 | 0.92 | 0.002 |
| B18C2 | 761 | 45 | 5.87 | 0.009 |
| B18D1 | 1615 | 7 | 0.45 | 0.002 |
| B18D2 | 187 | 12 | 6.36 | 0.018 |
| B18E1 | 1615 | 22 | 1.34 | 0.003 |
| B18E2 | 411 | 33 | 8.10 | 0.013 |
| B19A | 1615 | 33 | 2.02 | 0.003 |
| B20A1 | 2924 | 22 | 0.76 | 0.002 |
| B20A2 | 1036 | 9 | 0.91 | 0.003 |
| B20B1 | 2924 | 22 | 0.76 | 0.002 |
| B20B2 | 851 | 13 | 1.57 | 0.004 |
| B20C1 | 2924 | 22 | 0.76 | 0.002 |
| B20C2 | 764 | 10 | 1.34 | 0.004 |
| B20D1 | 2924 | 22 | 0.76 | 0.002 |
| B20D2 | 779 | 16 | 2.08 | 0.005 |
| B20E1 | 2924 | 11 | 0.39 | 0.001 |
| B20E2 | 331 |  | 0.00 | 0.000 |
| B20F1 | 2924 | 15 | 0.50 | 0.001 |
| B20F2 | 427 | 21 | 4.87 | 0.010 |
| B20G1 | 2924 | 15 | 0.51 | 0.001 |
| B20G2 | 247 | 19 | 7.70 | 0.017 |
| B21A | 2924 | 9 | 0.32 | 0.001 |
| B21B | 2924 | 18 | 0.60 | 0.001 |
| B21C | 2924 | 19 | 0.63 | 0.001 |
| B21D | 2924 | 1 | 0.03 | 0.000 |
| B21E | 2924 | 10 | 0.35 | 0.001 |
| B21F | 2924 | 25 | 0.86 | 0.002 |
| B25G | 2924 | 127 | 4.34 | 0.004 |
| B21G | 2924 | 12 | 0.42 | 0.001 |
| B21H | 2924 | 31 | 1.07 | 0.002 |
| B21I | 2924 | 18 | 0.62 | 0.001 |
| B22A | 2924 | 133 | 4.54 | 0.004 |
| B23 | 2917 | 479 | 16.44 | 0.007 |
| B24A | 2924 | 48 | 1.64 | 0.002 |
| B24B | 2924 | 98 | 3.36 | 0.003 |
| B25A | 2924 | 127 | 4.34 | 0.004 |
| B25B | 2924 | 127 | 4.34 | 0.004 |
|  | 2924 | 127 | 4.34 | 0.004 |
|  | 2924 | 127 | 4.34 | 0.004 |
|  | 127 | 4.34 | 0.004 |  |
|  | 2924 | 127 | 4.34 | 0.004 |


| 2. Item Nonresponse Rates, Sorted by Variable |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| B25H | 2924 | 127 | 4.34 | 0.004 |
| B25I | 2924 | 127 | 4.34 | 0.004 |
| C26A | 2981 | 305 | 10.22 | 0.006 |
| C26B | 2981 | 312 | 10.47 | 0.006 |
| C26C | 2981 | 271 | 9.09 | 0.005 |
| C26D | 2981 | 280 | 9.40 | 0.005 |


| 3. Item Nonresponse, Sorted by Percent Missing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Variable | Number Eligible | Number Missing | Percent Missing | Std Err |
| B20E2 | 331 |  | 0.00 | 0.000 |
| A1A | 2981 | 1 | 0.03 | 0.000 |
| A5F4 | 2981 | 1 | 0.03 | 0.000 |
| B21D | 2924 | 1 | 0.03 | 0.000 |
| B21A | 2924 | 9 | 0.32 | 0.001 |
| B21E | 2924 | 10 | 0.35 | 0.001 |
| A2C | 2981 | 11 | 0.38 | 0.001 |
| B20E1 | 2924 | 11 | 0.39 | 0.001 |
| B21G | 2924 | 12 | 0.42 | 0.001 |
| A4 | 2981 | 13 | 0.45 | 0.001 |
| B18D1 | 1615 | -7 | 0.45 | 0.002 |
| A1B | 2981 | 15 | 0.49 | 0.001 |
| B20F1 | 2924 | 15 | 0.50 | 0.001 |
| B20G1 | 2924 | 15 | 0.51 | 0.001 |
| A11A1 | 2981 | 17 | 0.57 | 0.001 |
| A11B1 | 2981 | 17 | 0.57 | 0.001 |
| A11C1 | 2981 | 17 | 0.57 | 0.001 |
| A11D1 | 2981 | 17 | 0.57 | 0.001 |
| A11E1 | 2981 | 17 | 0.57 | 0.001 |
| A12A1 | 2981 | 18 | 0.60 | 0.001 |
| A12B1 | 2981 | 18 | 0.60 | 0.001 |
| A12C1 | 2981 | 18 | 0.60 | 0.001 |
| A12D1 | 2981 | 18 | 0.60 | 0.001 |
| A12E1 | 2981 | 18 | 0.60 | 0.001 |
| A12F1 | 2981 | 18 | 0.60 | 0.001 |
| A12G1 | 2981 | 18 | 0.60 | 0.001 |
| B21B | 2924 | 18 | 0.60 | 0.001 |
| A15A | 2981 | 18 | 0.60 | 0.001 |
| B211 | 2924 | 18 | 0.62 | 0.001 |
| B21C | 2924 | 19 | 0.63 | 0.001 |
| B18B2 | 846 | 5 | 0.64 | 0.003 |
| A13A | 2981 | 20 | 0.68 | 0.002 |
| A13B | 2981 | 20 | 0.68 | 0.002 |
| A13C | 2981 | 20 | 0.68 | 0.002 |
| A13D | 2981 | 20 | 0.68 | 0.002 |
| A13E | 2981 | 20 | 0.68 | 0.002 |
| A13F | 2981 | 20 | 0.68 | 0.002 |
| A13G | 2981 | 20 | 0.68 | 0.002 |
| A13H | 2981 | 20 | 0.68 | 0.002 |
| A131 | 2981 | 20 | 0.68 | 0.002 |
| A2A | 2981 | 21 | 0.70 | 0.002 |
| B20A1 | 2924 | 22 | 0.76 | 0.002 |
| B20B1 | 2924 | 22 | 0.76 | 0.002 |
| B20C1 | 2924 | 22 | 0.76 | 0.002 |
| B20D1 | 2924 | 22 | 0.76 | 0.002 |
| B21F | 2924 | 25 | 0.86 | 0.002 |


| 3. Item Nonresponse, Sorted by Percent Missing |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| B20A2 | 1036 | 9 | 0.91 | 0.003 |
| B18C1 | 1615 | 15 | 0.92 | 0.002 |
| B18B1 | 1615 | 16 | 0.98 | 0.002 |
| B21H | 2924 | 31 | 1.07 | 0.002 |
| B17 | 2924 | 34 | 1.17 | 0.002 |
| B18A1 | 1615 | 20 | 1.22 | 0.003 |
| A12C2 | 2689 | 36 | 1.32 | 0.002 |
| B18E1 | 1615 | 22 | 1.34 | 0.003 |
| B20C2 | 764 | 10 | 1.34 | 0.004 |
| A12B2 | 2642 | 36 | 1.35 | 0.002 |
| A12D2 | 2836 | 40 | 1.40 | 0.002 |
| A11B2 | 1611 | 23 | 1.40 | 0.003 |
| A12A2 | 2950 | 45 | 1.52 | 0.002 |
| B20B2 | 851 | 13 | 1.57 | 0.004 |
| A3A | 2981 | 48 | 1.60 | 0.002 |
| A3B | 2981 | 48 | 1.60 | 0.002 |
| A3C | 2981 | 48 | 1.60 | 0.002 |
| A3D | 2981 | 48 | 1.60 | 0.002 |
| A3E | 2981 | 48 | 1.60 | 0.002 |
| B24A | 2924 | 48 | 1.64 | 0.002 |
| A2B | 2981 | 54 | 1.80 | 0.002 |
| A16A | 2981 | 55 | 1.84 | 0.002 |
| A16B | 2981 | 55 | 1.84 | 0.002 |
| A16C | 2981 | 55 | 1.84 | 0.002 |
| A16D | 2981 | 55 | 1.84 | 0.002 |
| A16E | 2981 | 55 | 1.84 | 0.002 |
| A16F | 2981 | 55 | 1.84 | 0.002 |
| A16G | 2981 | 55 | 1.84 | 0.002 |
| A16H | 2981 | 55 | 1.84 | 0.002 |
| A161 | 2981 | 55 | 1.84 | 0.002 |
| B18A2 | 977 | 18 | 1.88 | 0.004 |
| A9A | 1978 | 37 | 1.88 | 0.003 |
| B19A | 1615 | 33 | 2.02 | 0.003 |
| B20D2 | 779 | 16 | 2.08 | 0.005 |
| A15B | 2981 | 82 | 2.77 | 0.003 |
| A11C2 | 1397 | 40 | 2.85 | 0.004 |
| A8F | 1993 | 59 | 2.96 | 0.004 |
| A8A | 1988 | 63 | 3.15 | 0.004 |
| A8B | 1988 | 63 | 3.15 | 0.004 |
| A8C | 1988 | 63 | 3.15 | 0.004 |
| A8D | 1988 | 63 | 3.15 | 0.004 |
| A8E | 1988 | 63 | 3.15 | 0.004 |
| A11AB | 2924 | 98 | 3.36 | 0.003 |
| A11D2 | 2039 | 72 | 3.53 | 0.004 |
|  | 894 | 32 | 3.61 | 0.006 |
|  | 603 | 22 | 3.69 | 0.008 |


| 3. Item Nonresponse, Sorted by Percent Missing |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| B25A | 2924 | 127 | 4.34 | 0.004 |
| B25B | 2924 | 127 | 4.34 | 0.004 |
| B25C | 2924 | 127 | 4.34 | 0.004 |
| B25D | 2924 | 127 | 4.34 | 0.004 |
| B25E | 2924 | 127 | 4.34 | 0.004 |
| B25F | 2924 | 127 | 4.34 | 0.004 |
| B25G | 2924 | 127 | 4.34 | 0.004 |
| B25H | 2924 | 127 | 4.34 | 0.004 |
| B25I | 2924 | 127 | 4.34 | 0.004 |
| B22A | 2924 | 133 | 4.54 | 0.004 |
| A5D4 | 2981 | 142 | 4.75 | 0.004 |
| A5C4 | 2981 | 144 | 4.82 | 0.004 |
| B20F2 | 427 | 21 | 4.87 | 0.010 |
| A5A4 | 2981 | 145 | 4.87 | 0.004 |
| A12F2 | 1659 | 84 | 5.04 | 0.005 |
| A5A1 | 2981 | 158 | 5.30 | 0.004 |
| A5A3 | 2981 | 158 | 5.30 | 0.004 |
| A5A2 | 2981 | 159 | 5.34 | 0.004 |
| A5E4 | 2981 | 165 | 5.55 | 0.004 |
| A7A | 1972 | 111 | 5.62 | 0.005 |
| B18C2 | 761 | 45 | 5.87 | 0.009 |
| A5C1 | 2981 | 183 | 6.14 | 0.004 |
| A5D1 | 2981 | 185 | 6.20 | 0.004 |
| A5F1 | 2981 | 185 | 6.21 | 0.004 |
| A5B1 | 2981 | 188 | 6.32 | 0.004 |
| B18D2 | 187 | 12 | 6.36 | 0.018 |
| A10 | 2981 | 193 | 6.47 | 0.005 |
| A6B | 1974 | 130 | 6.58 | 0.006 |
| A5F3 | 2981 | 197 | 6.63 | 0.005 |
| A6A | 1956 | 130 | 6.64 | 0.006 |
| A5F2 | 2981 | 198 | 6.66 | 0.005 |
| A5D3 | 2981 | 199 | 6.67 | 0.005 |
| A5C3 | 2981 | 201 | 6.76 | 0.005 |
| A5C2 | 2981 | 206 | 6.92 | 0.005 |
| A5D2 | 2981 | 215 | 7.20 | 0.005 |
| A5E1 | 2981 | 219 | 7.35 | 0.005 |
| C26A | 2981 | 292 | 9.78 | 0.005 |
| A5B4 | 2981 | 222 | 7.46 | 0.005 |
| B20G2 | 247 | 19 | 7.70 | 0.017 |
| A14 | 2981 | 238 | 7.98 | 0.005 |
| B18E2 | 411 | 33 | 8.10 | 0.013 |
| A12G2 | 890 | 72 | 8.12 | 0.009 |
| C2B2 | 2981 | 258 | 8.65 | 0.005 |
|  | 2981 | 271 | 9.09 | 0.005 |
|  | 2981 | 280 | 9.40 | 0.005 |


| 3. Item Nonresponse, Sorted by Percent Missing |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| C26B | 2981 | 312 | 10.47 | 0.006 |
| A5E3 | 2981 | 339 | 11.38 | 0.006 |
| A5B3 | 2981 | 344 | 11.54 | 0.006 |
| A12E2 | 714 | 83 | 11.58 | 0.012 |
| B23 | 2917 | 479 | 16.44 | 0.007 |
| A8F2 | 925 | 238 | 25.71 | 0.014 |

## Appendix I: Critical Items And Nonresponse: 1999 NSOPF Faculty Questionnaire

Item Nonresponse Rates for the Faculty Questionnaire

| 1. Item Nonresponse rates, Critical Items |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Number <br> Eligible | Number <br> Missing | Percent <br> Missing | Std Err |
| Q1 | 1468 | 790768 | 0.19 | 0.0000 |
| Q2 | 29731 | 758840 | 3.92 | 0.0002 |
| Q5 | 10173 | 790768 | 1.29 | 0.0001 |
| Q8 | 2283 | 790768 | 0.29 | 0.0001 |
| Q10 | 18123 | 790768 | 2.29 | 0.0002 |
| Q14 | 12557 | 790768 | 1.59 | 0.0001 |
| Q15 | 20905 | 589876 | 3.54 | 0.0002 |
| Q16A1 | 21895 | 784743 | 2.79 | 0.0002 |
| Q16D1 | 60397 | 784743 | 7.70 | 0.0003 |
| Q40 | 10866 | 684403 | 1.59 | 0.0002 |
| Q41A2G | 13504 | 654925 | 2.06 | 0.0002 |
| Q41A3 | 13188 | 654925 | 2.01 | 0.0002 |
| Q41B2G | 13504 | 654925 | 2.06 | 0.0002 |
| Q41B3 | 13188 | 654925 | 2.01 | 0.0002 |
| Q41C2G | 13504 | 654925 | 2.06 | 0.0002 |
| Q41C3 | 13188 | 654925 | 2.01 | 0.0002 |
| Q41D2G | 13504 | 654925 | 2.06 | 0.0002 |
| Q41D3 | 13188 | 654925 | 2.01 | 0.0002 |
| Q41E2G | 13504 | 654925 | 2.06 | 0.0002 |
| Q41E3 | 13188 | 654925 | 2.01 | 0.0002 |
| Q81 | 9468 | 790768 | 1.20 | 0.0001 |
| Q84A | 27312 | 790768 | 3.45 | 0.0002 |


| 2. Item nonresponse for selected low, medium and high item nonresponse rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number | Number | Percent |  |
| Type | Critical | Variable | eligible | missing | missing | Std Err |
| Low | Yes | Q1 | 790768 | 1468 | 0.19 | 0.0000 |
| Low | Yes | Q8 | 790768 | 2283 | 0.29 | 0.0001 |
| Low | Yes | Q81 | 790768 | 9468 | 1.20 | 0.0001 |
| Low | Yes | Q5 | 790768 | 10173 | 1.29 | 0.0001 |
| Low | Yes | Q40 | 684403 | 10866 | 1.59 | 0.0002 |
| Low | Yes | Q14 | 790768 | 12557 | 1.59 | 0.0001 |
| Low | Yes | Q41A3 | 654925 | 13188 | 2.01 | 0.0002 |
| Low | Yes | Q41B3 | 654925 | 13188 | 2.01 | 0.0002 |
| Low | Yes | Q41C3 | 654925 | 13188 | 2.01 | 0.0002 |
| Low | Yes | Q41D3 | 654925 | 13188 | 2.01 | 0.0002 |
| Low | Yes | Q41A2G | 654925 | 13504 | 2.06 | 0.0002 |
| Low | Yes | Q41B2G | 654925 | 13504 | 2.06 | 0.0002 |
| Low | Yes | Q41C2G | 654925 | 13504 | 2.06 | 0.0002 |
| Low | Yes | Q41D2G | 654925 | 13504 | 2.06 | 0.0002 |
| Low | Yes | Q10 | 790768 | 18123 | 2.29 | 0.0002 |
| Medium | No | Q31A1 | 790768 | 39555 | 5.00 | 0.0002 |
| Medium | No | Q50 | 589876 | 29899 | 5.07 | 0.0003 |
| Medium | No | Q69M | 790768 | 41479 | 5.25 | 0.0003 |
| Medium | No | Q57A | 174330 | 9596 | 5.50 | 0.0005 |
| Medium | No | Q66H | 589876 | 33393 | 5.66 | 0.0003 |
| Medium | No | Q80 | 790768 | 46199 | 5.84 | 0.0003 |
| Medium | No | Q12A | 589876 | 36239 | 6.14 | 0.0003 |
| Medium | No | Q18E | 55268 | 3531 | 6.39 | 0.0010 |
| Medium | No | Q67A | 790768 | 51971 | 6.57 | 0.0003 |
| Medium | No | Q16A4 | 51732 | 3488 | 6.74 | 0.0011 |
| Medium | No | Q70 | 790768 | 59114 | 7.48 | 0.0003 |
| Medium | No | Q76D | 790768 | 66963 | 8.47 | 0.0003 |
| Medium | No | Q76Q | 589876 | 50273 | 8.52 | 0.0004 |
| Medium | No | Q56 | 134183 | 12253 | 9.13 | 0.0008 |
| Medium | No | Q76A | 589876 | 57173 | 9.69 | 0.0004 |
| High | No | Q66F | 589876 | 61591 | 10.44 | 0.0004 |
| High | No | Q31B3 | 790768 | 84861 | 10.73 | 0.0003 |
| High | No | Q93A | 589876 | 64468 | 10.93 | 0.0004 |
| High | No | Q93E | 589876 | 67594 | 11.46 | 0.0004 |
| High | No | Q32B2 | 790768 | 101368 | 12.82 | 0.0004 |
| High | No | Q42A | 472417 | 65545 | 13.87 | 0.0005 |
| High | No | Q75B1 | 325616 | 48732 | 14.97 | 0.0006 |
| High | No | Q28B4 | 250520 | 37786 | 15.08 | 0.0007 |
| High | No | Q63 | 717851 | 113781 | 15.85 | 0.0004 |
| High | No | Q24B6A | 372667 | 67008 | 17.98 | 0.0006 |
| High | No | Q59B2 | 174425 | 32103 | 18.41 | 0.0009 |
| High | No | Q32B1 | 790768 | 162942 | 20.61 | 0.0005 |
| High | No | Q24B5B | 199734 | 45002 | 22.53 | 0.0009 |
| High | No | Q79 | 790768 | 190409 | 24.08 | 0.0005 |
| High | No | Q77 | 589876 | 170136 | 28.84 | 0.0006 |

## Appendix J: Sample Discrepancy Report

## Comparison of faculty counts

1999 Mail Study Quex Data vs. 1999 Main Study List Data
Institution ID: 123456
Institution Name:

| Faculty | $\text { \| }{ }^{1999 \text { Main }} \text { Study Quex }$ | 1999 Main Study List | Difference | Relative Difference |
| :---: | :---: | :---: | :---: | :---: |
| Total | 1860 | 1840 | 20 | 1\% |
| Full-time | 1119 | 1119 | 0 | 0\% |
| Part-time | 741 | 721 | 20 | 3\% |
| Male | 940 | 927 | 13 | 1\% |
| Female | 920 | 913 | 7 | 1\% |
| Black | undefined | undefined | undefined | undefined |
| Hispanic | undefined | undefined | undefined | undefined |
| Asian | undefined | undefined | undefined | undefined |
| White | undefined | undefined | undefined | undefined |
| Native-American | undefined | undefined | undefined | undefined |

## Summary Statistics

Total defined difference 20
Total absolute defined difference 20
Average defined \% difference 1\%
Average absolute defined $\%$ difference $1 \%$

## Appendix K: NSOPF:99 National Technical Review Panel (NTRP) Members

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[^0]:    ${ }^{1}$ In the interest of brevity, this report uses the term "faculty" interchangeably with "faculty and other instructional staff."
    ${ }^{2}$ Information about IPEDS, as well as data and publications, can be found on the Internet at http://nces.ed.gov/ipeds/

[^1]:    ${ }^{3}$ See Cleo R. Jenkins and Don A. Dillman, "Towards a Theory of Self-Administered Questionnaire Design," in Lars Lyberg, et al., Survey Measurement and Process Quality (John Wiley and Sons, Inc.: New York 1997), pages 165-198.

[^2]:    ${ }^{4}$ Information about IPEDS, as well as data and publications, can be found on the Internet at http://nces.ed.gov/ipeds/.

[^3]:    ${ }^{5}$ The clusters were the sample institutions. The cutoff for initial faculty selections was set at 15 because it yielded roughly the number of cases the budget would accommodate while reducing the variation in the sample sizes by school and the impact of subsampling on the weights. The number of subsample cases $(1,078)$ reflected both the budget and schedule constraints.

[^4]:    ${ }^{6}$ For a more in-depth discussion of finite population correction factors, see Kaufman, S., "A New Model for Estimating the Variance under Systematic Sampling," Proceedings of the Section on Survey Research Methods, American Statistical Association, 2001.
    ${ }^{7}$ For the purpose of weighting the faculty data, the "final" institution weight is based on all institutions that provided faculty lists for sampling (not on those that completed an institution questionnaire). These institution weights were not trimmed, but were adjusted to bring them into line with estimates of the institution stratum sizes. Because trimmed weights are slightly biased, the untrimmed weights are to be preferred, other things being equal. Even though the trimming step was skipped, the faculty weights showed less variation (relative to the mean) than the institution weights did (see Table 3.6).

[^5]:    ${ }^{8}$ Due to the complexity of the sample design, a number of unique weights exist on the faculty file. This is a result of the cumulative effect of the initial institution selection probabilities (selected according to a PPS design), the stratification of faculty within institutions, and the non-response and post-stratification adjustments. This is not a cause for concern, as small variations in individual weights are far less important than the overall variance of the weights relative to the mean (see Table 3.6.)

[^6]:    ${ }^{9}$ See, for example, Frankel, M., Inference from Survey Samples: An Empirical Investigation (Ann Arbor, MI: Institute for Social Research, 1971).

[^7]:    ${ }^{10}$ Statistical packages are available that implement both the BHS (e.g., WesVar, SUDAAN) and Taylor Series (SUDAAN) approaches to variance estimation. SUDAAN is described in more detail in Shah, B., Barnwell, B., and Bieler, G., SUDAAN User's Manual Release 7.5 (Research Triangle Park, NC: Research Triangle Institute, 1997). WesVar is documented in A User's Guide to WesVarPC, Version 2.0 (Rockville, MD: Westat, 1996).
    ${ }^{11}$ With WesVar, it is not necessary to use VREP or VSTRAT. Instead it is sufficient to identify the variables that constitute the replicate weights and the variable that represents the full sample weight. With Stata, VSTRAT would be used as the stratum variable and VREP would be used as the PSU variable.
    ${ }^{12}$ See Tables 3.5 and 3.6 in Selfa, L., et al., 1993 National Study of Postsecondary Faculty (NSOPF:93): Methodology Report (Washington, DC: U.S. Department of Education, Office of Research and Improvement, NCES 97-467). Much of the large increase in efficiency for the faculty estimates probably reflects the smaller cluster sizes in the 1999 study. This difference in turn reflects the smaller overall number of respondents ( 25,780 faculty respondents in the 1993 study versus about 17,600 in the 1999 study).

[^8]:    See notes at end of table.

[^9]:    ${ }^{13}$ Shah, B.V., Barnwell, B.G., \& Bieler, G.S. (1996). SUDAAN: User's Manual (Release 7.0). North Carolina: Research Triangle Institute.

[^10]:    ${ }^{14}$ For a discussion of the recruitment and data collection procedures used in NSOPF:93, see 1993 National Study of Postsecondary Faculty (NSOPF:93) Methodology Report, NCES 97-467.
    ${ }^{15}$ The results appear in 1992-93 National Study of Postsecondary Faculty Field Test Report, NCES 93390 and in 1999 National Study of Postsecondary Faculty (NSOPF:93) Field Test Report, Working Paper No. 2000-01.

[^11]:    ${ }^{16}$ A prenotification letter was not used in NSOPF:93.
    ${ }^{17}$ In 1993, the packet was sent to the CAO, who was asked to forward the materials to the designated coordinator. The field test confirmed that a direct mailing was much more efficient, and eliminated unnecessary remails. For more detail, see 1999 National Study of Postsecondary Faculty Field Test Report (NCES, Working Paper No. 2000-01)
    ${ }^{18}$ In 1993, the questionnaire was mailed separately, and the school had the option of naming a separate institution coordinator and institution respondent.

[^12]:    ${ }^{19}$ For a discussion of the field test, see the 1999 National Study of Postsecondary Faculty (NSOPF:99): Field Test Report. (U.S. Department of Education, National Center for Education Statistics, January 2000) Working Paper No. 2000-01.

[^13]:    ${ }^{20}$ See the 1999 National Study of Postsecondary Faculty (NSOPF:99): Field Test Report. (U.S. Department of Education, National Center for Education Statistics, January 2000) Working Paper No. 2000-01, pages 69-72.

[^14]:    ${ }^{21}$ For a description of this procedure, 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.

[^15]:    ${ }^{22}$ In NSOPF:88 and NSOPF:93 the reference date was October 15 .
    ${ }^{23}$ In NSOPF:93, due to delays in questionnaire redesign, the institution questionnaire was not distributed to institutions until September 1993, whereas the list request was mailed in October 1992. The long delay between these two requests may have been at least partially responsible for the large discrepancies between the list and questionnaire, even though the definitions and reference periods were identical. Thus caution should be exercised when making comparisons between 1993 and 1999 discrepancies.

[^16]:    ASSURANCE OF CONFIDENTIALITY
    All information that permits the identification of individuals will be kept strictly confidential. Individual responses, and all responses that permit the identification of individuals, will be protected by the National Education Statistics Act, Public Law 103-382 [20 U.S.C. 9001 et seq.], the Carl D. Perkins Vocational Education Act, and the Privacy Act of 1974 [5 U.S.C. 552a].

[^17]:    SPECIAL NOTE: The number of faculty and instructional staff reported in the list of faculty and instructional staff should be consistent with the number of personnel reported in Question \#1 on the Institution Questionnaire included in this mailing. If you have any questions about preparing the lists, please contact Brian Kuhr at the Gallup Organization at 1-800-633-0209.

