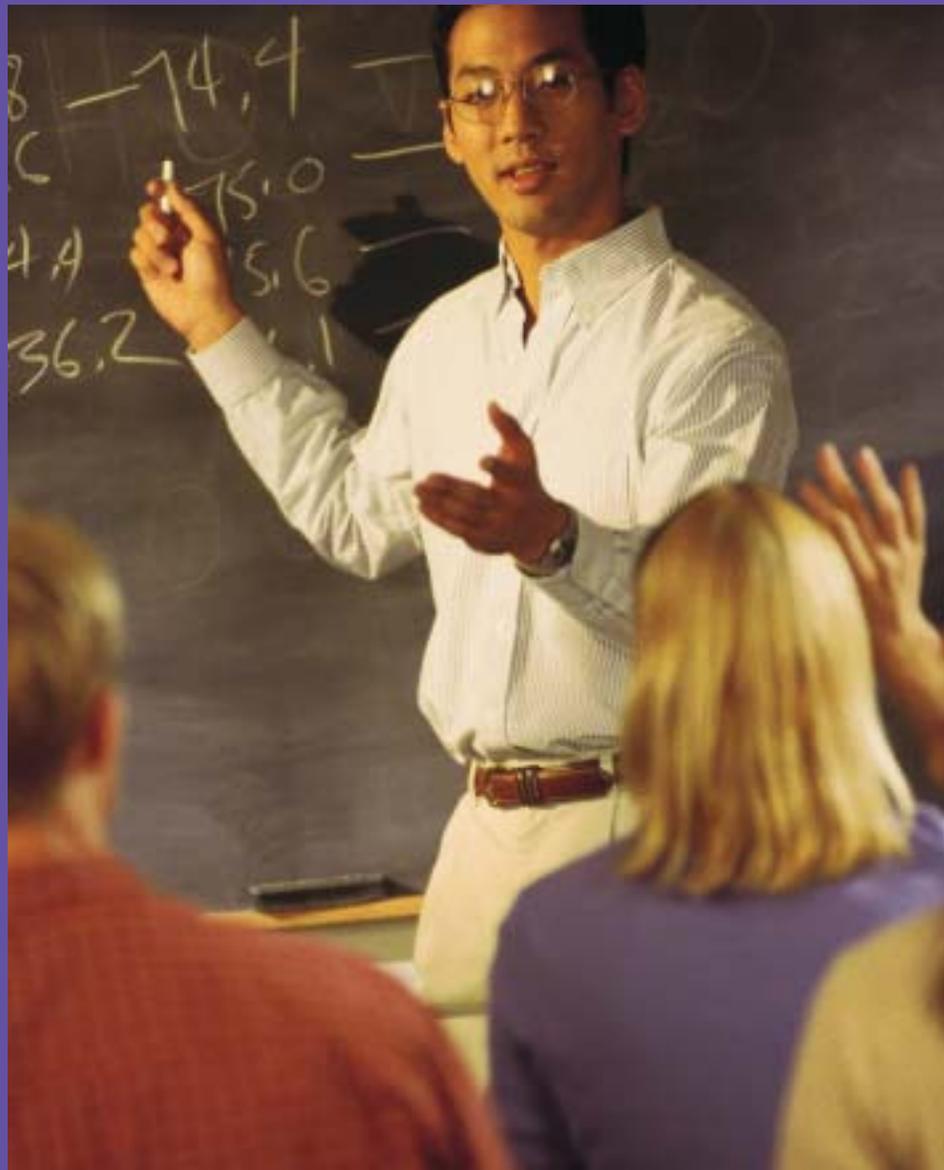




U.S. Department of Education
Office of Educational Research
and Improvement
NCES 2002-160

The Gender and Racial/Ethnic Composition of Postsecondary Instructional Faculty and Staff, 1992-98

E.D. Tabs



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National Study of
Postsecondary Faculty

U.S. Department of Education
Office of Educational Research
and Improvement
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The Gender and Racial/Ethnic Composition of Postsecondary Instructional Faculty and Staff, 1992-98

E.D. Tabs

August 2002

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Foreword

This publication utilizes data from the 1999 National Study of Postsecondary Faculty (NSOPF:99), a study of faculty and instructional staff in postsecondary institutions in the United States. The 1999 NSOPF and its predecessors, the 1988 and 1993 NSOPFs, were conducted by the National Center for Education Statistics within the U.S. Department of Education to fill the information gap about this important segment in postsecondary education. Additional support for NSOPF has been provided by the National Endowment for the Humanities and the National Science Foundation. Since its inception, NSOPF has stimulated wide interest at the federal, state, institution, and individual levels. Organizations and individual researchers have obtained faculty data that provided them with national estimates and knowledge in general about faculty backgrounds, responsibilities, workloads, compensation, and attitudes.

A number of publications based on NSOPF:99 data are planned or have been recently released. Topics of these publications include the use of the Internet/technology by faculty; faculty and staff who taught classes to undergraduates; distance education taught by faculty; minority and women faculty; part-time faculty; retirement and other departure plans of faculty; changes in the tenure status of faculty; and institutional policies and practices regarding faculty in degree-granting institutions.

As soon as publications are released from NSOPF, they can be found and downloaded at the NSOPF Web Site: <http://nces.ed.gov/surveys/nsopf>. Finally, researchers are encouraged to conduct their own in-depth analysis of the data. For information about using NSOPF:99 data, please read the Technical Notes to this report.

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Summary

The literature examining gender and race/ethnicity issues for faculty in postsecondary education has relied largely on data from two national studies conducted by the U.S. Department of Education, National Center for Education Statistics (NCES): the 1988 and 1993 National Study of Postsecondary Faculty (NSOPF:88 and NSOPF:93), and the Integrated Postsecondary Education Data System Fall Staff Surveys (IPEDS-S). These studies have consistently shown that the vast majority of full- and part-time faculty were White, non-Hispanic males (U.S. Department of Education, 1997; U.S. Department of Education, 2000).

The purpose of this E.D. Tab is to describe how the gender and racial/ethnic composition of full- and part-time instructional faculty and staff has changed between the fall of 1992 and the fall of 1998. In addition to this more focused report, two new NCES publications use data from NSOPF:99 to explore gender and racial/ethnic differences among faculty by several outcome variables such as salary, tenure status, and academic rank: *Gender and Racial/Ethnic Differences in Salary and Other Characteristics of Postsecondary Faculty* (U.S. Department of Education 2002a) and *Tenure Status of Postsecondary Instructional Faculty and Staff, 1992–98* (U.S. Department of Education 2002b).

The data for this report are analyzed by institution level, type and control, and academic program.¹ The analyses are based on instructional faculty and staff; that is, faculty and staff with some for-credit teaching responsibilities. The first part of the summary will focus on changes in the gender composition of instructional faculty and staff, and the second part will discuss changes in the racial/ethnic composition of instructional faculty and staff.²

All comparative statements in this report have been tested for statistical significance and are significant at the 0.05 level. However, not all statistically significant comparisons are presented in the text. In this report, some differences that appear large may not be statistically significant due in part to the relatively large standard errors surrounding the estimates because of small sample sizes.

Changes in the Composition of Faculty by Gender

Data from the NSOPF:99 indicate that some changes occurred in the gender composition of both full- and part-time instructional faculty and staff between the fall of 1992 and the fall of 1998. Among full-time faculty over the 6-year period, the percentage who were female increased by 3 percent from 33 percent to 36 percent across all institutions (table 1A). Similar changes in the gender composition of part-time faculty occurred between the fall of 1992 and the fall of 1998 (table 1B). Across all institutions, there was an increase in the percentage of part-time faculty who were female (from 45 to 48 percent).

¹ Institution types are based on the Carnegie classification and whether the institution is public or private not-for-profit. To improve readability, the phrase “not-for-profit” may be excluded when referring to “private not-for-profit” institutions. Private for-profit institutions are not part of the population for the NSOPF study. See the Technical Notes for a discussion of the institution types and the Glossary for a description of program areas used in this report.

² American Indian/Alaska Native respondents made up only 0.8 percent of the overall sample. Because the group is so small, analyses involving the comparison of this group to others, particularly if subdivided further, are inadvisable because the resulting standard errors are very large and very few apparent differences would achieve statistical significance. For this reason, this report excludes the American Indian/Alaska Native category from analysis, though estimates for this group are shown in the tables.

Gender Changes by Level of Institution

Full-Time Faculty

Similar to the overall percentage of full-time instructional faculty who were female, the percentage of female full-time instructional faculty in 4-year institutions increased by 3 percent over the 6-year period, and the percentage in 2-year institutions increased by 5 percent (table 1A).

In spite of this gain, the gender gap persisted among full-time faculty in 4-year institutions in the fall of 1998 (67 percent male vs. 33 percent female), as it did across all types of postsecondary institutions (64 percent male vs. 36 percent female). In 2-year institutions in the fall of 1998, there was no significant difference between the proportion of male and female full-time instructional faculty (50 percent each); whereas in the fall of 1992, full-time instructional faculty were more likely to be male than female (54 percent male vs. 46 percent female).

Part-Time Faculty

Several changes occurred in the gender composition of part-time instructional faculty (table 1B). Across institutions, there was an increase in the percentage of faculty who were female (from 45 percent to 48 percent). Over the 6-year period, the percentage of female faculty who taught in 2-year institutions increased 5 percent (from 44 percent in 1992 to 49 percent in 1998). Mirroring the pattern that existed among male and female full-time faculty, the gender gap that existed between male and female part-time faculty in the fall of 1992 (56 percent male vs. 44 percent female) was no longer significant by the fall of 1998 (51 percent male vs. 49 percent female; table 1B).

Gender Changes by Type and Control of Institution

Full-Time Faculty

The analysis of the gender composition of faculty between the fall of 1992 and the fall of 1998 by type and control of institution revealed that most, but not all, of the changes occurred in public institutions. The proportion of females among full-time faculty increased in public institutions (from 34 percent in 1992 to 37 percent in 1998; table 1A). The percentage of female faculty who taught full-time in public research, public comprehensive, public 2-year, and private doctoral institutions increased between the fall of 1992 and the fall of 1998 (table 2A). Over the 6-year period, the increase in the percentage of female faculty was larger for those teaching in private doctoral institutions than for female faculty teaching in either public comprehensive or public 2-year institutions.

Part-Time Faculty

Among part-time instructional faculty, the only gender changes that occurred over the 6-year period were an increase in the proportion of female faculty overall (from 45 to 48 percent) and an increase in the proportion of female faculty who taught in public 2-year institutions (from 43 to 48 percent; table 2B).

Gender Changes by Program Area in 4-Year Institutions

Full-Time Faculty

Between the fall of 1992 and the fall of 1998, the percentage of female full-time faculty teaching in 4-year institutions across all program areas increased by 3 percent over the 6-year period (from 30 to 33 percent; table 3A). For example, over this 6-year period, there was an increase in the percentage of female faculty teaching in the social sciences (from 26 to 30 percent). Although in the fall of 1998, male full-time faculty were more likely than female full-time faculty in 4-year institutions to teach in the natural sciences (79 percent vs. 21 percent), the proportion of female full-time faculty teaching in this area increased over the 6-year period.³ In the fall of 1992, education was the only area in which there were no significant differences between male and female faculty (table 3A). By the fall of 1998, female faculty outnumbered male faculty in this area.

Part-Time Faculty

Across all program areas, there were no significant changes in the proportion of male and female part-time faculty teaching at 4-year institutions between 1992 and 1998 (table 3B). In specific program areas, however, some gender changes did occur, with the proportion of female faculty increasing in some areas and decreasing in others. For example, in the fall of 1992, part-time male faculty were more likely than their female counterparts to teach in the fine arts. By the fall of 1998, no differences were detected between male and female faculty teaching in this program area. Conversely, in the fall of 1992, no differences were detected in the proportion of male and female faculty teaching in the social sciences. However, in the fall of 1998, part-time male faculty were more likely than their female counterparts to teach in the social sciences. The differences in the proportions of male and female part-time faculty teaching in the health sciences in both the fall of 1992 and the fall of 1998 were not significant.

Gender Changes by Program Area in 2-Year Institutions

Full-Time Faculty

Consistent with the findings for 4-year institutions, the proportion of female faculty teaching full time in 2-year institutions increased in the natural sciences (from 33 to 42 percent), the social sciences (from 34 to 46 percent), and education (from 68 to 81 percent) between the fall of 1992 and the fall of 1998 (table 4A). While male faculty dominated most remaining areas in both years, female faculty were more likely than their male counterparts to teach in the areas of education and the health sciences in both 1992 and 1998.

Part-Time Faculty

Among part-time faculty teaching business in 2-year institutions, the percentage of female faculty increased between the fall of 1992 and the fall of 1998 (35 to 49 percent; table 4B). However, the percentage of female part-time faculty who taught engineering in 2-year institutions declined over the 6-year period (from 13 to 2 percent). Within program years, there were more male than female part-time faculty teaching business and the social sciences in 2-year institutions in the fall of 1992. However, by

³ The apparent change in the proportion of female faculty teaching in the field of engineering between the fall of 1992 and 1998 is not statistically significant.

the fall of 1998, no differences were detected between male and female part-time faculty teaching in these areas. Conversely, there were more female part-time faculty in 2-year institutions than male part-time faculty teaching in the humanities in the fall of 1992, but by the fall of 1998, there were no significant differences between male and female part-time faculty teaching in the humanities (table 4B).

Changes in the Composition of Faculty by Race/Ethnicity

White, non-Hispanic faculty continued to hold the vast majority of full-time positions in postsecondary institutions (87 percent in 1992 and 85 percent in 1998; table 5A). The only identifiable change overall was in the percentage of Hispanic full-time faculty across all institutions, which increased between the fall of 1992 and the fall of 1998.

Race/Ethnicity Changes by Level and Type of Institution

Examining changes by institution level and type shows that there was an increase in the percentage of Hispanic full-time faculty teaching in 4-year institutions between the fall of 1992 and the fall of 1998 (table 5A). The percentage of White, non-Hispanic full-time faculty teaching in 4-year institutions declined between the fall of 1992 and the fall of 1998 (from 87 to 85 percent). There was also an increase in the percentage of Hispanic full-time faculty teaching in public institutions during the 6-year period (table 5A).

There were no changes in minority and White, non-Hispanic full-time faculty teaching in 2-year institutions between the fall of 1992 and the fall of 1998.

Race/Ethnicity Changes by Control of Institution

Examining changes by control of institution shows that there was a decline in the percentage of White, non-Hispanic full-time faculty teaching at public research institutions over the 6-year period (from 88 to 85 percent; table 6A). There were no significant differences between minority and White, non-Hispanic part-time faculty by control of institution (table 6B).

Race/Ethnicity Changes by Program Area in 4-Year Institutions

Full-Time Faculty

In individual program areas, several changes occurred in the racial/ethnic composition of instructional faculty and staff in 4-year institutions. The percentage of Asian/Pacific Islander full-time faculty teaching in the social sciences increased between the fall of 1992 and the fall of 1998 (from 3 to 6 percent; table 7A). The percentage of Hispanic full-time faculty declined from 3 to 1 percent among those teaching in the fine arts, while Hispanic faculty increased from 4 to 6 percent among those teaching in the humanities. Over the 6-year period, there was a decline in the percentage of White, non-Hispanic full-time faculty who taught in the humanities and social sciences.

Part-Time Faculty

There were also several changes in individual program areas among part-time minority and White, non-Hispanic faculty and staff who taught in 4-year institutions. The percentage of Black, non-Hispanic part-time faculty decreased in two program areas—education and the fine arts—and increased in the social sciences (table 7B). The percentage of Hispanic part-time faculty in 4-year institutions who taught in “all other fields” (i.e., other than agriculture/home economics, business, education, engineering, fine arts, health sciences, humanities, natural sciences, and social sciences) increased during the 6-year period (from 2 to 5 percent), as did the percentage of White, non-Hispanic part-time faculty teaching the fine arts (from 90 to 94 percent).

There were no significant differences between minority and White, non-Hispanic faculty who taught part-time or full-time in 2-year institutions between the fall of 1992 and the fall of 1998.⁴

⁴ Compared to 4-year institutions, estimates for 2-year institutions were based on small sample sizes and generally had larger standard errors. Thus, some differences that appear large for 2-year institutions were less likely to be statistically significant.

References

- U.S. Department of Education, National Center for Education Statistics. (1997). *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992*, NCES 97-470, by Rita J. Kirshstein, Nancy Matheson, and Zhongren Jing. Project Officer, Linda Zimbler. Washington, DC.
- U.S. Department of Education, National Center for Education Statistics (1998). *Fall Staff in Postsecondary Institutions, 1995*, NCES 98-228, by Shep Roey and Rebecca Rak-Skinner. Project Officer, Rosa Fernandez and Sam Barbett. Washington, DC.
- U.S. Department of Education, National Center for Education Statistics. (2000). *Salary, Promotion, and Tenure Status of Minority and Women Faculty in U.S. Colleges and Universities*, NCES 2000-173, by Michael Nettles, Laura Perna, and Ellen M. Bradburn. Project Officer, Linda Zimbler. Washington, DC.
- U.S. Department of Education, National Center for Education Statistics. (2002a). *Gender and Racial/Ethnic Differences in Salary and Other Characteristics of Postsecondary Faculty; Fall 1998*, NCES 2002-170, by Ellen M. Bradburn and Anna C. Sikora. Project Officer, Linda Zimbler. Washington, DC.
- U.S. Department of Education, National Center for Education Statistics. (2002b). *Tenure Status of Postsecondary Instructional Faculty and Staff: 1992–98*, NCES 2002-210, by Basmat Parsad and Denise Glover. Project Officer, Linda Zimbler. Washington, DC.

Compendium of Tables

Table 1A.—Percentage distribution of full-time instructional faculty and staff, by gender and by type of institution: Fall 1992 and fall 1998

| Type of institution | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions* | 66.8 | 63.7 | 33.2 | 36.3 |
| All 4-year institutions | 70.2 | 67.0 | 29.8 | 33.0 |
| All 2-year institutions | 54.4 | 49.6 | 45.6 | 50.4 |
| All public institutions | 66.5 | 62.8 | 33.5 | 37.2 |
| All private not-for-profit institutions | 67.5 | 65.9 | 32.5 | 34.1 |

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 1B.—Percentage distribution of part-time instructional faculty and staff, by gender and by type of institution: Fall 1992 and fall 1998

| Type of institution | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions* | 55.4 | 52.2 | 44.6 | 47.9 |
| All 4-year institutions | 55.0 | 53.1 | 45.0 | 46.9 |
| All 2-year institutions | 55.9 | 50.9 | 44.2 | 49.1 |
| All public institutions | 55.3 | 51.0 | 44.7 | 49.0 |
| All private not-for-profit institutions | 55.8 | 54.7 | 44.2 | 45.3 |

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 2A.—Percentage distribution of full-time instructional faculty and staff, by gender and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution | Gender | | | |
|--|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions ¹ | 66.8 | 63.7 | 33.2 | 36.3 |
| Public research | 76.7 | 70.5 | 23.3 | 29.5 |
| Private not-for-profit research..... | 69.1 | 73.9 | 30.9 | 26.2 |
| Public doctoral ² | 69.9 | 66.7 | 30.1 | 33.3 |
| Private not-for-profit doctoral ² | 76.4 | 63.6 | 23.6 | 36.4 |
| Public comprehensive..... | 66.1 | 61.7 | 33.9 | 38.3 |
| Private not-for-profit comprehensive..... | 64.9 | 63.3 | 35.1 | 36.7 |
| Private not-for-profit liberal arts | 61.1 | 62.2 | 38.9 | 37.9 |
| Public 2-year | 54.7 | 50.1 | 45.3 | 49.9 |
| Other ³ | 70.5 | 67.9 | 29.5 | 32.1 |

¹ All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

² Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

³ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 2B.—Percentage distribution of part-time instructional faculty and staff, by gender and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution | Gender | | | |
|--|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions ¹ | 55.4 | 52.2 | 44.6 | 47.9 |
| Public research | 56.7 | 55.2 | 43.3 | 44.8 |
| Private not-for-profit research..... | 58.7 | 60.3 | 41.3 | 39.8 |
| Public doctoral ² | 55.4 | 49.6 | 44.6 | 50.4 |
| Private not-for-profit doctoral ² | 63.1 | 58.6 | 36.9 | 41.4 |
| Public comprehensive..... | 49.0 | 46.5 | 51.0 | 53.5 |
| Private not-for-profit comprehensive..... | 56.4 | 59.1 | 43.6 | 40.9 |
| Private not-for-profit liberal arts | 46.6 | 44.0 | 53.4 | 56.1 |
| Public 2-year | 56.6 | 51.8 | 43.4 | 48.2 |
| Other ³ | 56.0 | 54.3 | 44.0 | 45.8 |

¹ All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

² Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

³ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 3A.—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by gender and by program area: Fall 1992 and fall 1998

| Program area | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All program areas in 4-year institutions..... | 70.2 | 67.0 | 29.8 | 33.0 |
| Agriculture/home economics | 77.3 | 81.8 | 22.7 | 18.2 |
| Business | 76.4 | 73.2 | 23.6 | 26.9 |
| Education..... | 52.7 | 45.9 | 47.3 | 54.1 |
| Engineering..... | 94.2 | 90.8 | 5.8 | 9.2 |
| Fine arts..... | 67.3 | 68.4 | 32.7 | 31.6 |
| Health sciences | 58.5 | 57.5 | 41.5 | 42.5 |
| Humanities | 62.2 | 58.8 | 37.8 | 41.2 |
| Natural sciences..... | 83.3 | 79.2 | 16.7 | 20.8 |
| Social sciences | 73.9 | 69.7 | 26.1 | 30.3 |
| All other fields..... | 68.4 | 66.6 | 31.6 | 33.4 |

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 3B.—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by gender and by program area: Fall 1992 and fall 1998

| Program area | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All program areas in 4-year institutions..... | 55.0 | 53.1 | 45.0 | 46.9 |
| Agriculture/home economics | (#) | (#) | (#) | (#) |
| Business | 75.0 | 70.3 | 25.0 | 29.7 |
| Education..... | 35.6 | 33.0 | 64.4 | 67.0 |
| Engineering..... | 95.9 | 94.8 | 4.1 | 5.2 |
| Fine arts..... | 55.0 | 47.5 | 45.0 | 52.5 |
| Health sciences | 51.3 | 48.0 | 48.7 | 52.0 |
| Humanities | 40.8 | 41.3 | 59.2 | 58.7 |
| Natural sciences..... | 68.7 | 64.4 | 31.3 | 35.6 |
| Social sciences..... | 53.7 | 59.7 | 46.3 | 40.3 |
| All other fields..... | 56.8 | 59.8 | 43.2 | 40.3 |

#Too small to report.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 4A.—Percentage distribution of full-time instructional faculty and staff in 2-year institutions, by gender and by program area: Fall 1992 and fall 1998

| Program area | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All program areas in 2-year institutions..... | 54.4 | 49.6 | 45.6 | 50.4 |
| Agriculture/home economics | 63.8 | 73.9 | 36.2 | 26.1 |
| Business | 49.1 | 43.1 | 50.9 | 56.9 |
| Education..... | 32.4 | 19.5 | 67.6 | 80.5 |
| Engineering..... | 92.6 | 90.3 | 7.4 | 9.7 |
| Fine arts..... | 65.4 | 69.1 | 34.6 | 30.9 |
| Health sciences | 15.0 | 10.1 | 85.0 | 89.9 |
| Humanities | 48.8 | 45.7 | 51.2 | 54.3 |
| Natural sciences..... | 67.4 | 58.3 | 32.6 | 41.7 |
| Social sciences..... | 65.7 | 54.5 | 34.3 | 45.5 |
| Vocational training..... | 86.6 | 84.1 | 13.4 | 15.9 |
| All other fields..... | 55.7 | 51.4 | 44.3 | 48.6 |

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 4B.—Percentage distribution of part-time instructional faculty and staff in 2-year institutions, by gender and by program area: Fall 1992 and fall 1998

| Program area | Gender | | | |
|---|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All program areas in 2-year institutions..... | 55.9 | 50.9 | 44.2 | 49.1 |
| Agriculture/home economics | (#) | (#) | (#) | (#) |
| Business | 65.3 | 50.6 | 34.7 | 49.4 |
| Education..... | 26.7 | 16.0 | 73.3 | 84.0 |
| Engineering..... | 87.1 | 97.6 | 12.9 | 2.4 |
| Fine arts..... | 46.3 | 50.6 | 53.7 | 49.4 |
| Health sciences | 27.5 | 28.6 | 72.5 | 71.4 |
| Humanities | 41.2 | 47.5 | 58.8 | 52.5 |
| Natural sciences..... | 67.3 | 61.6 | 32.7 | 38.4 |
| Social sciences..... | 61.8 | 48.4 | 38.2 | 51.6 |
| Vocational training..... | 87.1 | 85.5 | 12.9 | 14.5 |
| All other fields..... | 58.1 | 48.1 | 41.9 | 51.9 |

#Too small to report.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 5A.—Percentage distribution of full-time instructional faculty and staff, by race/ethnicity and by type of institution: Fall 1992 and fall 1998

| Type of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 0.7 | 5.8 | 5.1 | 3.3 | 85.1 |
| All 4-year institutions | 0.7 | 6.4 | 4.9 | 3.0 | 85.0 |
| All 2-year institutions | 0.7 | 3.4 | 5.8 | 4.5 | 85.6 |
| All public institutions | 0.7 | 6.2 | 5.1 | 3.7 | 84.4 |
| All private not-for-profit institutions..... | 0.7 | 4.9 | 5.0 | 2.5 | 86.9 |
| 1992 | | | | | |
| All institutions ² | 0.5 | 5.2 | 5.2 | 2.6 | 86.5 |
| All 4-year institutions | 0.3 | 5.8 | 4.9 | 2.2 | 86.8 |
| All 2-year institutions | 1.0 | 3.4 | 6.2 | 4.0 | 85.4 |
| All public institutions | 0.6 | 5.3 | 5.4 | 2.9 | 85.9 |
| All private not-for-profit institutions..... | 0.3 | 5.2 | 4.7 | 2.0 | 87.8 |

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 5B.—Percentage distribution of part-time instructional faculty and staff, by race/ethnicity and by type of institution: Fall 1992 and fall 1998

| Type of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 1.0 | 3.2 | 4.5 | 3.7 | 87.6 |
| All 4-year institutions | 0.9 | 3.8 | 4.0 | 3.0 | 88.2 |
| All 2-year institutions | 1.0 | 2.3 | 5.3 | 4.7 | 86.7 |
| All public institutions | 1.2 | 3.1 | 4.7 | 4.2 | 86.7 |
| All private not-for-profit institutions..... | 0.3 | 3.2 | 4.2 | 2.6 | 89.7 |
| 1992 | | | | | |
| All institutions ² | 0.6 | 3.2 | 4.8 | 3.0 | 88.4 |
| All 4-year institutions | 0.4 | 3.7 | 5.1 | 2.3 | 88.6 |
| All 2-year institutions | 0.9 | 2.7 | 4.5 | 3.8 | 88.1 |
| All public institutions | 0.6 | 3.5 | 4.7 | 3.5 | 87.6 |
| All private not-for-profit institutions..... | 0.5 | 2.6 | 5.1 | 1.7 | 90.1 |

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 6A.—Percentage distribution of full-time instructional faculty and staff, by race/ethnicity and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|-------------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 0.7 | 5.8 | 5.1 | 3.3 | 85.1 |
| Public research | 0.5 | 8.5 | 3.2 | 3.4 | 84.5 |
| Private not-for-profit research..... | 0.2 | 7.0 | 3.7 | 3.5 | 85.6 |
| Public doctoral ³ | 1.3 | 6.0 | 3.9 | 3.0 | 85.8 |
| Private not-for-profit doctoral ³ | 0.7 | 9.2 | 4.4 | 3.9 | 81.8 |
| Public comprehensive..... | 0.5 | 5.9 | 7.4 | 3.6 | 82.6 |
| Private not-for-profit comprehensive..... | 1.2 | 3.7 | 4.5 | 2.7 | 87.8 |
| Private not-for-profit liberal arts | 1.1 | 2.9 | 6.4 | 1.6 | 88.1 |
| Public 2-year | 0.8 | 3.4 | 6.0 | 4.6 | 85.3 |
| Other ⁴ | 0.6 | 4.6 | 7.1 | 1.3 | 86.4 |
| 1992 | | | | | |
| All institutions ² | 0.5 | 5.2 | 5.2 | 2.6 | 86.5 |
| Public research | 0.1 | 6.9 | 2.8 | 2.2 | 88.0 |
| Private not-for-profit research..... | 0.2 | 9.0 | 5.0 | 2.1 | 83.7 |
| Public doctoral ³ | 0.8 | 6.1 | 3.1 | 2.5 | 87.6 |
| Private not-for-profit doctoral ³ | 0.2 | 7.1 | 4.9 | 3.7 | 84.1 |
| Public comprehensive..... | 0.5 | 5.1 | 9.1 | 2.6 | 82.7 |
| Private not-for-profit comprehensive..... | 0.2 | 3.3 | 3.5 | 1.6 | 91.3 |
| Private not-for-profit liberal arts | 0.5 | 2.8 | 5.4 | 1.3 | 90.0 |
| Public 2-year | 1.0 | 3.3 | 6.2 | 4.1 | 85.5 |
| Other ⁴ | 0.5 | 5.2 | 3.7 | 1.4 | 89.2 |

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

³ Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

⁴ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 6B.—Percentage distribution of part-time instructional faculty and staff, by race/ethnicity and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|-------------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 1.0 | 3.2 | 4.5 | 3.7 | 87.6 |
| Public research | 1.9 | 4.6 | 2.9 | 3.5 | 87.1 |
| Private not-for-profit research..... | (#) | 2.5 | 3.3 | 4.3 | 89.9 |
| Public doctoral ³ | 2.3 | 3.1 | 3.6 | 3.1 | 87.9 |
| Private not-for-profit doctoral ³ | 0.4 | 7.1 | 3.4 | 2.3 | 86.8 |
| Public comprehensive..... | 1.2 | 5.5 | 4.1 | 3.8 | 85.5 |
| Private not-for-profit comprehensive..... | 0.5 | 1.7 | 2.7 | 2.0 | 93.1 |
| Private not-for-profit liberal arts | 0.2 | 3.2 | 6.9 | 3.1 | 86.7 |
| Public 2-year | 1.0 | 2.3 | 5.3 | 4.8 | 86.6 |
| Other ⁴ | 0.2 | 2.9 | 4.6 | 2.0 | 90.3 |
| 1992 | | | | | |
| All institutions ² | 0.6 | 3.2 | 4.8 | 3.0 | 88.4 |
| Public research | # | 6.6 | 2.5 | 3.2 | 87.8 |
| Private not-for-profit research..... | 0.4 | 3.0 | 4.4 | 2.7 | 89.5 |
| Public doctoral ³ | 0.4 | 3.3 | 3.3 | 1.6 | 91.4 |
| Private not-for-profit doctoral ³ | 0.2 | 3.5 | 7.2 | 1.5 | 87.7 |
| Public comprehensive..... | 0.7 | 4.1 | 7.2 | 3.0 | 85.0 |
| Private not-for-profit comprehensive..... | 0.5 | 2.5 | 5.0 | 1.1 | 90.9 |
| Private not-for-profit liberal arts | 0.1 | 1.6 | 5.8 | 2.9 | 89.6 |
| Public 2-year | 0.8 | 2.7 | 4.6 | 4.0 | 88.0 |
| Other ⁴ | 1.1 | 3.8 | 3.2 | 1.1 | 90.8 |

Too small to report.

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

³ Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

⁴ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 7A.—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by race/ethnicity and by program area: Fall 1992 and fall 1998

| Program area and year | Race/ethnicity* | | | | |
|--|-----------------------------------|-------------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All program areas in 4-year institutions | 0.7 | 6.4 | 4.9 | 3.0 | 85.0 |
| Agriculture/home economics | 1.2 | 3.5 | 4.1 | 1.5 | 89.8 |
| Business | 1.6 | 6.8 | 5.7 | 1.1 | 84.9 |
| Education..... | 1.0 | 3.1 | 8.3 | 3.1 | 84.6 |
| Engineering..... | 0.5 | 16.8 | 2.5 | 3.5 | 76.8 |
| Fine arts..... | 0.5 | 2.3 | 7.1 | 1.2 | 88.9 |
| Health sciences | 0.8 | 6.9 | 4.1 | 3.4 | 84.8 |
| Humanities | 0.3 | 4.8 | 4.8 | 6.2 | 83.8 |
| Natural sciences..... | 0.3 | 9.2 | 2.6 | 2.3 | 85.5 |
| Social sciences..... | 1.1 | 5.5 | 5.7 | 2.8 | 84.9 |
| All other fields..... | 0.9 | 3.1 | 6.3 | 2.2 | 87.6 |
| 1992 | | | | | |
| All program areas in 4-year institutions..... | 0.3 | 5.8 | 4.9 | 2.2 | 86.8 |
| Agriculture/home economics | 0.8 | 2.7 | 4.1 | 1.6 | 90.8 |
| Business | 0.6 | 5.9 | 3.7 | 1.4 | 88.5 |
| Education..... | 0.5 | 1.2 | 9.2 | 2.1 | 87.1 |
| Engineering..... | 0.2 | 18.9 | 3.0 | 2.5 | 75.4 |
| Fine arts..... | 0.5 | 2.6 | 6.1 | 2.7 | 88.2 |
| Health sciences | 0.2 | 6.6 | 4.6 | 2.3 | 86.4 |
| Humanities | 0.3 | 3.4 | 4.2 | 3.9 | 88.2 |
| Natural sciences..... | 0.3 | 9.1 | 3.6 | 1.7 | 85.3 |
| Social sciences..... | 0.4 | 3.2 | 5.5 | 2.2 | 88.6 |
| All other fields..... | 0.3 | 3.4 | 6.2 | 1.7 | 88.4 |

*In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 7B.—Percentage distribution of part-time instructional faculty and staff in 4-year institutions, by race/ethnicity and by program area: Fall 1992 and fall 1998

| Program area and year | Race/ethnicity* | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All program areas in 4-year institutions | 0.9 | 3.8 | 4.0 | 3.0 | 88.2 |
| Agriculture/home economics | | | | | |
| Business | (#) | 2.9 | 3.3 | 0.6 | 93.2 |
| Education..... | 2.3 | 0.3 | 3.6 | 2.3 | 91.5 |
| Engineering..... | (#) | 10.5 | 7.0 | 7.9 | 74.6 |
| Fine arts..... | 0.7 | 1.0 | 2.2 | 1.7 | 94.4 |
| Health sciences | 1.9 | 5.0 | 2.1 | 1.8 | 89.3 |
| Humanities | 1.2 | 4.4 | 2.3 | 4.5 | 87.7 |
| Natural sciences..... | (#) | 5.5 | 7.7 | 1.8 | 85.0 |
| Social sciences..... | 0.9 | 1.7 | 8.6 | 3.9 | 84.9 |
| All other fields..... | 0.5 | 5.6 | 3.1 | 4.7 | 86.1 |
| 1992 | | | | | |
| All program areas in 4-year institutions..... | 0.4 | 3.7 | 5.1 | 2.3 | 88.6 |
| Agriculture/home economics | (#) | (#) | (#) | (#) | (#) |
| Business | 0.3 | 1.9 | 4.5 | 2.4 | 90.9 |
| Education..... | 1.0 | 1.0 | 7.0 | 1.2 | 89.9 |
| Engineering..... | (#) | 12.2 | 1.5 | 2.6 | 83.6 |
| Fine arts..... | 0.6 | 2.6 | 5.3 | 1.7 | 89.8 |
| Health sciences | 0.2 | 5.1 | 6.1 | 1.5 | 87.1 |
| Humanities | 0.1 | 2.6 | 4.1 | 4.7 | 88.5 |
| Natural sciences..... | 0.6 | 7.1 | 4.0 | 2.3 | 86.0 |
| Social sciences..... | 0.5 | 3.4 | 6.1 | 2.4 | 87.7 |
| All other fields..... | 0.2 | 2.4 | 5.7 | 1.6 | 90.2 |

Too small to report.

* In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 8A.—Percentage distribution of full-time instructional faculty and staff in 2-year institutions, by race/ethnicity and by program area: Fall 1992 and fall 1998

| Program area and year | Race/ethnicity* | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All program areas in 2-year institutions | 0.7 | 3.4 | 5.8 | 4.5 | 85.6 |
| Agriculture/home economics | (#) | (#) | 4.0 | 0.8 | 95.3 |
| Business | 0.5 | 0.7 | 4.3 | 3.1 | 91.5 |
| Education..... | (#) | 6.9 | 10.6 | 4.4 | 78.1 |
| Engineering..... | 1.7 | 10.9 | 1.4 | 7.1 | 78.9 |
| Fine arts..... | 0.8 | 2.5 | 4.9 | 0.9 | 91.0 |
| Health sciences | 0.5 | 2.3 | 5.7 | 2.8 | 88.8 |
| Humanities | 0.5 | 4.3 | 3.7 | 7.5 | 84.0 |
| Natural sciences..... | 0.2 | 3.9 | 5.1 | 5.3 | 85.5 |
| Social sciences..... | 2.4 | 2.4 | 12.6 | 4.1 | 78.4 |
| Vocational training..... | 2.6 | 0.6 | 5.8 | 4.8 | 86.3 |
| All other fields..... | 0.1 | 4.6 | 5.8 | 2.8 | 86.6 |
| 1992 | | | | | |
| All program areas in 2-year institutions..... | 1.0 | 3.4 | 6.2 | 4.0 | 85.4 |
| Agriculture/home economics | (#) | 3.7 | 2.6 | 3.3 | 90.4 |
| Business | 2.0 | 2.0 | 5.2 | 2.2 | 88.6 |
| Education..... | 3.3 | 3.4 | 10.2 | 8.8 | 74.3 |
| Engineering..... | 2.8 | 6.1 | 2.2 | 5.9 | 83.0 |
| Fine arts..... | 0.6 | 3.2 | 4.1 | 1.2 | 90.9 |
| Health sciences | 0.3 | 3.7 | 9.9 | 2.3 | 83.9 |
| Humanities | 0.9 | 2.7 | 4.2 | 4.7 | 87.6 |
| Natural sciences..... | 0.7 | 5.4 | 3.6 | 2.7 | 87.7 |
| Social sciences..... | 0.6 | 3.5 | 9.4 | 5.4 | 81.1 |
| Vocational training..... | 0.7 | 2.0 | 3.4 | 4.4 | 89.6 |
| All other fields..... | 0.5 | 1.7 | 8.1 | 5.3 | 84.5 |

Too small to report.

* In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

Table 8B.—Percentage distribution of part-time instructional faculty and staff in 2-year institutions, by race/ethnicity and by program area: Fall 1992 and fall 1998

| Program area and year | Race/ethnicity* | | | | |
|--|-----------------------------------|-------------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All program areas in 2-year institutions | 1.0 | 2.3 | 5.3 | 4.7 | 86.7 |
| Agriculture/home economics | (#) | (#) | (#) | (#) | (#) |
| Business | (#) | 1.3 | 8.2 | 2.3 | 88.2 |
| Education..... | 0.8 | 0.8 | 8.7 | 6.3 | 83.4 |
| Engineering..... | 2.5 | 3.6 | 1.0 | 17.3 | 75.7 |
| Fine arts..... | 0.6 | 1.1 | 4.2 | 5.9 | 88.2 |
| Health sciences | 0.5 | 1.4 | 4.0 | 2.1 | 92.1 |
| Humanities | 1.5 | 2.9 | 3.1 | 7.2 | 85.4 |
| Natural sciences..... | 0.9 | 3.5 | 4.7 | 2.9 | 88.1 |
| Social sciences..... | 0.9 | (#) | 7.4 | 6.1 | 85.6 |
| Vocational training..... | 3.8 | 1.3 | 6.2 | 3.4 | 85.3 |
| All other fields..... | (#) | 3.1 | 6.1 | 3.0 | 87.8 |
| 1992 | | | | | |
| All program areas in 2-year institutions | 0.9 | 2.7 | 4.5 | 3.8 | 88.0 |
| Agriculture/home economics | (#) | (#) | (#) | (#) | (#) |
| Business | 0.8 | 2.3 | 5.7 | 2.9 | 88.3 |
| Education..... | 0.8 | 2.4 | 10.1 | 3.6 | 83.3 |
| Engineering..... | 4.3 | 2.0 | 2.5 | 1.2 | 90.1 |
| Fine arts..... | 0.6 | 1.9 | 4.8 | 4.2 | 88.4 |
| Health sciences | 1.2 | 1.8 | 4.8 | 1.8 | 90.3 |
| Humanities | 1.4 | 2.9 | 2.6 | 6.8 | 86.3 |
| Natural sciences..... | 0.8 | 4.0 | 4.2 | 2.6 | 88.4 |
| Social sciences..... | 0.6 | 2.6 | 7.4 | 3.0 | 86.4 |
| Vocational training..... | 0.1 | 1.3 | 3.5 | 6.3 | 88.8 |
| All other fields..... | # | 2.7 | 3.3 | 2.7 | 91.3 |

Too small to report.

* In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see Technical Notes for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 because of rounding.

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

APPENDIX A

Technical Notes

Technical Notes

Overview

Since the fall of 1987, the U.S. Department of Education's National Center for Education Statistics (NCES) has sponsored three cycles of the National Study of Postsecondary Faculty (NSOPF) to provide national profiles of postsecondary faculty, including their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes. This report analyzes data from the second and third cycles of NSOPF.

The first cycle of NSOPF (NSOPF:88), conducted in 1987–88, sampled 480 institutions (including 2-year, 4-year, doctorate-granting, and other colleges and universities), over 3,000 department chairpersons, and over 11,000 faculty. The second cycle (NSOPF:93), administered in 1992–93, was limited to surveys of institutions and faculty, but with a substantially expanded sample of 974 public and private, not-for-profit degree-granting postsecondary institutions and 31,354 faculty and instructional staff.⁵ A similar sample was designed for the most recent study (NSOPF:99); it included 960 degree-granting postsecondary institutions and a final sample of 19,813 faculty and instructional staff from those institutions. (See table A1 on p. A-10 for weighted sample sizes.) Additional information about NSOPF is available at <http://nces.ed.gov/surveys/nsopf/>.

Institution Universe

The institution universe for NSOPF:99 included

- Title IV degree-granting institutions;⁶
- Public and private not-for-profit institutions;⁷
- Institutions that confer associate's, bachelor's, or advanced degrees; and
- Institutions that are located in the United States.

The universe excluded institutions that offered only less-than-2-year programs, those that did not participate in federal Title IV student aid programs, those that were private for-profit, and those located outside the United States (for example, in U.S. territories). It also excluded institutions that offer instruction only to employees of the institutions, tribal colleges, and institutions that offer only correspondence courses. According to the NCES Integrated Postsecondary Education Data System (IPEDS), 3,396 institutions met these criteria and were eligible for the NSOPF:99 sample.

⁵ For more details on the sample and methodology for NSOPF:93, see R. Kirshstein, N. Matheson, and Z. Jing, *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992*. (NCES 97-470), U.S. Department of Education, National Center for Education Statistics, 1997.

⁶ The U.S. Department of Education is no longer distinguishing among institutions based on accreditation level. As a result, NCES now subdivides the postsecondary institution universe into schools that are eligible to receive Title IV federal financial assistance and those that are not.

⁷ Private for-profit institutions are not included even though they may be Title IV degree-granting institutions.

Faculty Universe

Unlike NSOPF:88, which was limited to faculty whose assignment included instruction, the faculty universe for NSOPF:93 and NSOPF:99 was expanded to include all those who were designated as faculty, whether or not their responsibilities included instruction, and other (nonfaculty) personnel with instructional responsibilities. Under this definition, researchers and administrators and other institutional staff who hold faculty positions, but who do not teach, were included in the sample. Instructional staff without faculty status also were included. Teaching assistants were not included in any cycle of NSOPF.

Sample Universe

As in NSOPF:93, the NSOPF:99 sample was selected through a two-stage stratified, clustered probability design. The first-stage sampling frame consisted of the 3,396 postsecondary institutions in IPEDS⁸ that were public or private, not-for-profit Title IV institutions and provided formal degree programs of at least 2 years' duration. While the IPEDS universe includes private institutions that are both for-profit and not-for-profit, the institutional universe for NSOPF:99 *excluded* private for-profit institutions.

The 3,396 institutions in the NSOPF:99 universe were stratified based on the highest degrees they offered and the amount of federal research dollars they received. These strata distinguished public and private institutions, as well as several types of institutions based on the Carnegie Foundation's classification system.⁹ The following institutional categories were used in this report:

- **Public research:** Publicly controlled institutions among the leading universities in federal research funds. Each of these universities awards substantial numbers of doctorates across many fields.
- **Private not-for-profit research:** Privately controlled not-for-profit institutions among the leading universities in federal research funds. Each of these universities awards substantial numbers of doctorates across many fields.
- **Public doctoral:** Publicly controlled institutions that offer a full range of baccalaureate programs and doctoral degrees in at least three disciplines, but tend to be less focused on research and receive fewer federal research dollars than the research universities. In this report, this group also includes publicly controlled institutions classified by the Carnegie Foundation as specialized medical schools.
- **Private not-for-profit doctoral:** Privately controlled not-for-profit institutions that offer a full range of baccalaureate programs and doctoral degrees in at least three disciplines, but tend to be less focused on research and receive fewer federal research dollars than the research universities. In this report, this group also includes privately controlled institutions classified by the Carnegie Foundation as specialized medical schools.
- **Public comprehensive:** Publicly controlled institutions that offer liberal arts and professional programs; these institutions offer a full range of baccalaureate programs and are

⁸For more information on IPEDS data, go to the NCES Web Site (<http://nces.ed.gov/ipeds>).

⁹ See the Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education*, 1994.

committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.

- **Private not-for-profit comprehensive:** Privately controlled not-for-profit institutions that offer liberal arts and professional programs; these institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.
- **Private not-for-profit liberal arts:** Privately controlled not-for-profit institutions that are smaller than comprehensive colleges and universities; they primarily offer bachelor's degrees, although some offer master's degrees.
- **Public 2-year:** Publicly controlled institutions that offer certificate or degree programs only through the associate's degree level.
- **Other:** Public liberal arts, private 2-year,¹⁰ and religious and other specialized institutions, except medical.

Data Collection Procedures

Prior to collecting data from faculty, it was first necessary to obtain cooperation from the sampled institutions. Each institution was asked to provide lists of all faculty and instructional staff at their institution and to complete an Institution Questionnaire.

Institution coordinators were asked to provide a list of full- and part-time faculty and instructional staff that included all personnel who had faculty status or instructional responsibilities during the 1998 fall term (i.e., the term that included November 1, 1998).

Response Rates

Of the 960 institutions in the sample, one was ineligible because it had merged with another institution. A total of 818 institutions provided lists of faculty and instructional staff, for a weighted list participation rate of 88.4 percent. A total of 865 institutions returned the institution questionnaire, for a weighted response rate of 92.8 percent. Institution weights were based on the inverse of the institutional probability of selection.

Initially, 28,576 faculty and instructional staff were selected from institutions that provided a list of their faculty and instructional staff. Subsequently, a subsample of 19,813 faculty and instructional staff was drawn for intensive followup. Approximately 18,000 faculty and instructional staff questionnaires were completed for a weighted response rate of 83.0 percent. The overall weighted faculty response rate (institution list participation rate multiplied by the faculty questionnaire response rate) was 73.4 percent.

¹⁰ Public liberal arts and private not-for-profit 2-year institutions have been placed in the "other" category because there are relatively few of them in the United States.

Faculty nonresponse bias analyses indicated no significant bias. Item nonresponse occurred when a respondent did not answer one or more survey questions. The item nonresponse rates were generally low for the faculty questionnaire.¹¹

Data Analysis System

The estimates presented in this report were produced using the NSOPF:99 Data Analysis System (DAS). The DAS software makes it possible for users to specify and generate their own tables from the NSOPF:99 data. With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors¹² and weighted sample sizes for these estimates. For example, table B1 contains standard errors that correspond to table 2A in the essay of this report, and was generated by the DAS. If the number of valid cases is too small to produce a reliable estimate (less than 30 cases), the DAS prints the message “low-N” instead of the estimate.

In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlation matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute regression coefficients based on simple random sample assumptions, the standard errors must be adjusted with the design effects to take into account the NSOPF:99 stratified sampling method.

The DAS can be accessed electronically at <http://nces.ed.gov/DAS>. For more information about the NSOPF:99 Data Analysis System, contact:

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Sources of Error and Statistical Procedures Used

The survey estimates provided in the NSOPF:99 analytical reports are subject to two types of error: sampling errors and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population. The standard error measures the variability of the sample estimator in repeated sampling, using the same sample design and sample size.

¹¹ For a full description of faculty and item nonresponse, see the *1999 National Study of Postsecondary Faculty: Methodology Report* (NCES 2001–151).

¹² The NSOPF:99 samples are not simple random samples and, therefore, simple random sample techniques for estimating sampling errors cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

Standard errors for all estimates presented in this report's tables were computed using a technique known as Taylor series approximation. Standard errors for selected characteristics are presented in tables B1–B6 in appendix B. Standard errors for all other estimates presented in this report are available upon request. The DAS software as well as other specialized computer programs, such as SUDAAN¹³ and CENVAR,¹⁴ calculate variances with the Taylor-series approximation method.

Since the estimates in this report are based on a sample, observed differences between two estimates can reflect either of two possibilities: differences that exist in the population at large and are reflected in the sample, or differences due solely to the composition of the sample that do not reflect underlying population differences. To minimize the risk of erroneously interpreting differences due to sampling alone as signifying population differences (a Type I error), the statistical significance of differences between estimates was tested using a *t*-test. Statistical significance was determined by calculating *t* values for differences between pairs of means or proportions and comparing these with published values of *t* for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of .05).¹⁵

The *t* values may be computed to test the difference between estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \quad (1)$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. Note that this formula is valid only for independent estimates. When estimates are not independent, a covariance term must be added to the formula:

$$\frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2(r)se_1 se_2}} \quad (2)$$

where r is the correlation between the two variables.¹⁶ The denominator in this formula will be at its maximum when the two estimates are perfectly negatively correlated, that is, when $r = -1$. This means that a conservative dependent test may be conducted by using -1 for the correlation in this formula, or

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2 + 2se_1 se_2}} \quad (3)$$

The estimates and standard errors are obtained from the DAS.

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large *t* statistics may appear to merit special attention. This can be misleading since the magnitude of the *t* statistic is related not only to the observed differences in means or percentages but also to the number of

¹³B V. Shah, B. G. Barnwell, and G. S. Bieler, *SUDAAN User's Manual, Release 6.4*, Research Triangle Institute, 1995.

¹⁴U.S. Bureau of the Census, *CENVAR IMPS Version 3.1*, 1995.

¹⁵A Type I error occurs when one erroneously concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn.

¹⁶U.S. Department of Education, National Center for Education Statistics, *A Note from the Chief Statistician*, no. 2, 1993.

sample members in the specific categories used for comparison. Hence, a small difference compared across a large number of sample members would produce a large t statistic.

A second hazard in reporting statistical tests for each comparison occurs when making multiple comparisons between categories of an independent variable. For example, when making paired comparisons between different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or “families” are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report only when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the individual comparison would have $p \leq .05$ and that for k comparisons within a family of possible comparisons, the significance level for all the comparisons would sum to $p \leq .05$.¹⁷

For example, when comparing males and females, only one comparison is possible. In this family, $k=1$, and there is no need to adjust the significance level. When faculty members are divided into five racial/ethnic groups and all possible comparisons are made, then $k=10$ and the significance level for each test within this family of comparisons must be $p \leq .05/10$, or $p \leq .005$. The formula for calculating family size (k) is as follows:

$$k = \frac{j(j-1)}{2} \quad (4)$$

where j is the number of categories for the variable being tested. For example, in the case of a variable with five categories such as race/ethnicity, one substitutes 5 for j in equation 4:

$$k = \frac{5(5-1)}{2} = 10$$

Different schools of thought exist on the application of the Bonferroni adjustment: while some would use an experiment-wise calculation of k , where all the dependent variables were considered simultaneously in selecting a critical value, here the calculation of k and the accompanying critical value were restricted to a single dependent variable at a time, since the Bonferroni adjustment is already a conservative strategy.

Sample estimates also are subject to bias from nonsampling errors. It is more difficult to measure the magnitude of these errors. They can arise for a variety of reasons: nonresponse, undercoverage, differences in the respondent’s interpretation of the meaning of questions, memory effects, misrecording of responses, incorrect editing, coding, and data entry, time effects, or errors in data processing. Whereas general sampling theory can be used, in part, to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure. Measurement of nonsampling errors usually requires the incorporation of a methodological experiment into the survey or the use of external data to assess and verify survey results.

To minimize the potential for nonsampling errors, the faculty and institution questionnaires (as well as the sample design, data collection, and data processing procedures) were field-tested with a national

¹⁷The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, “Multiple Comparisons Among Means,” *Journal of the American Statistical Association*, 56 (1961): 52–64.

probability sample of 162 postsecondary institutions and 512 faculty members in 1997-98. An extensive item nonresponse analysis was also conducted followed by additional evaluation of the instruments and survey procedures.¹⁸ An item nonresponse analysis was also conducted for the full-scale surveys. See the *1999 National Study of Postsecondary Faculty: Methodology Report* (NCES 2002-154) for a detailed description of the item nonresponse analysis.

In addition, for the full-scale surveys, a computer-based editing system was used to check data for range errors, logical inconsistencies, and skip patterns that were not properly followed by respondents. For improperly followed skip patterns, values were logically assigned on the basis of the presence or absence of responses within the skip pattern, given the responses. Some small inconsistencies between different data elements remained in the data files. In these situations, it was impossible to resolve the ambiguity as reported by the respondent.

¹⁸A complete description of the field test design and results can be found in Abraham, Sameer Y., Steiger, Darby M., Montgomery, Margarethe, Kuhr, Brian D., Tourangeau, Roger, Montgomery, Bob, and Chattopadhyay, Manas. (2000). *1999 National Study of Postsecondary Faculty (NSOPF:99): Field Test Report* (NCES 2000-01), U.S. Department of Education, National Center for Education Statistics, Working Paper.

Table A1.—Weighted sample sizes (in thousands), full-time and part-time instructional faculty and staff, by type of institution: Fall 1992 and fall 1998

| Type of institution and year | Total | Full-time | Part-time |
|---|-------|-----------|-----------|
| 1998 | | | |
| All institutions* | 976 | 560 | 416 |
| All 4-year institutions..... | 692 | 453 | 239 |
| All 2-year institutions..... | 284 | 107 | 177 |
| All public institutions..... | 684 | 395 | 289 |
| All private not-for-profit institutions | 293 | 166 | 127 |
| 1992 | | | |
| All institutions* | 905 | 528 | 377 |
| All 4-year institutions..... | 614 | 412 | 202 |
| All 2-year institutions..... | 291 | 116 | 175 |
| All public institutions..... | 636 | 373 | 263 |
| All private not-for-profit institutions | 269 | 155 | 114 |

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

APPENDIX B

Standard Error Tables

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Standard Error Tables**

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Table B1.—Standard errors for table 2A, percentage distribution of full-time instructional faculty and staff, by gender and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution | Gender | | | |
|--|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions ¹ | 0.52 | 0.60 | 0.52 | 0.60 |
| Public research | 1.08 | 1.00 | 1.08 | 1.00 |
| Private not-for-profit research..... | 2.41 | 2.01 | 2.41 | 2.01 |
| Public doctoral ² | 1.15 | 1.69 | 1.15 | 1.69 |
| Private not-for-profit doctoral ² | 1.67 | 2.88 | 1.67 | 2.88 |
| Public comprehensive..... | 0.85 | 1.41 | 0.85 | 1.41 |
| Private not-for-profit comprehensive..... | 1.86 | 2.09 | 1.86 | 2.09 |
| Private not-for-profit liberal arts | 2.43 | 1.86 | 2.43 | 1.86 |
| Public 2-year | 1.01 | 1.33 | 1.01 | 1.33 |
| Other ³ | 3.21 | 3.62 | 3.21 | 3.62 |

¹ All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

² Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

³ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

Table B2.—Standard errors for table 2B, percentage distribution of part-time instructional faculty and staff, by gender and by type and control of institution: Fall 1992 and fall 1998

| Type and control of institution | Gender | | | |
|--|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All institutions ¹ | 0.83 | 1.08 | 0.83 | 1.08 |
| Public research | 4.16 | 3.50 | 4.16 | 3.50 |
| Private not-for-profit research..... | 5.79 | 4.62 | 5.79 | 4.62 |
| Public doctoral ² | 3.93 | 5.56 | 3.93 | 5.56 |
| Private not-for-profit doctoral ² | 3.61 | 3.48 | 3.61 | 3.48 |
| Public comprehensive..... | 2.08 | 2.95 | 2.08 | 2.95 |
| Private not-for-profit comprehensive..... | 2.16 | 3.19 | 2.16 | 3.19 |
| Private not-for-profit liberal arts | 2.87 | 4.33 | 2.87 | 4.33 |
| Public 2-year | 1.22 | 1.62 | 1.22 | 1.62 |
| Other ³ | 3.41 | 3.82 | 3.41 | 3.82 |

¹ All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

² Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

³ Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

Table B3.—Standard errors for table 3A, percentage distribution of full-time instructional faculty and staff in 4-year institutions, by gender and by program area: Fall 1992 and fall 1998

| Program area | Gender | | | |
|--|--------|------|--------|------|
| | Male | | Female | |
| | 1992 | 1998 | 1992 | 1998 |
| All program areas in 4-year institutions | 0.56 | 0.62 | 0.56 | 0.62 |
| Agriculture/home economics | 3.90 | 3.16 | 3.90 | 3.16 |
| Business | 1.65 | 2.03 | 1.65 | 2.03 |
| Education..... | 1.99 | 2.59 | 1.99 | 2.59 |
| Engineering..... | 1.06 | 1.92 | 1.06 | 1.92 |
| Fine arts..... | 1.86 | 2.49 | 1.86 | 2.49 |
| Health sciences | 1.94 | 1.87 | 1.94 | 1.87 |
| Humanities | 1.33 | 1.80 | 1.33 | 1.80 |
| Natural sciences..... | 0.99 | 1.16 | 0.99 | 1.16 |
| Social sciences..... | 1.33 | 1.65 | 1.33 | 1.65 |
| All other fields..... | 1.52 | 2.00 | 1.52 | 2.00 |

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

Table B4.—Standard errors for table 5A, percentage distribution of full-time instructional faculty and staff, by race/ethnicity and by type of institution: Fall 1992 and fall 1998

| Type of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 0.09 | 0.30 | 0.36 | 0.24 | 0.53 |
| All 4-year institutions | 0.11 | 0.34 | 0.42 | 0.25 | 0.60 |
| All 2-year institutions | 0.19 | 0.62 | 0.62 | 0.71 | 1.14 |
| All public institutions | 0.12 | 0.39 | 0.39 | 0.31 | 0.63 |
| All private not-for-profit institutions..... | 0.15 | 0.40 | 0.40 | 0.35 | 1.02 |
| 1992 | | | | | |
| All institutions ² | 0.06 | 0.25 | 0.39 | 0.18 | 0.52 |
| All 4-year institutions | 0.06 | 0.29 | 0.46 | 0.18 | 0.59 |
| All 2-year institutions | 0.20 | 0.49 | 0.68 | 0.50 | 1.10 |
| All public institutions | 0.08 | 0.30 | 0.45 | 0.23 | 0.60 |
| All private not-for-profit institutions..... | 0.09 | 0.48 | 0.80 | 0.25 | 1.04 |

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

Table B5.—Standard errors for table 5B, percentage distribution of part-time instructional faculty and staff, by race/ethnicity and by type of institution: Fall 1992 and fall 1998

| Type of institution and year | Race/ethnicity ¹ | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All institutions ² | 0.21 | 0.40 | 0.40 | 0.38 | 0.70 |
| All 4-year institutions | 0.28 | 0.64 | 0.45 | 0.35 | 0.89 |
| All 2-year institutions | 0.32 | 0.35 | 0.72 | 0.74 | 1.14 |
| All public institutions | 0.30 | 0.51 | 0.50 | 0.50 | 0.91 |
| All private not-for-profit institutions..... | 0.13 | 0.60 | 0.66 | 0.44 | 1.01 |
| 1992 | | | | | |
| All institutions ² | 0.11 | 0.31 | 0.36 | 0.35 | 0.60 |
| All 4-year institutions | 0.11 | 0.49 | 0.58 | 0.31 | 0.86 |
| All 2-year institutions | 0.20 | 0.37 | 0.42 | 0.65 | 0.83 |
| All public institutions | 0.14 | 0.39 | 0.38 | 0.48 | 0.72 |
| All private not-for-profit institutions..... | 0.18 | 0.47 | 0.83 | 0.32 | 1.07 |

¹ In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority category they selected (see Technical Notes for more information).

² All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

Table B6.—Standard errors for table 7A, percentage distribution of full-time instructional faculty and staff in 4-year institutions, by race/ethnicity and by program area: Fall 1992 and fall 1998

| Program area and year | Race/ethnicity* | | | | |
|--|-----------------------------------|----------------------------|------------------------|----------|------------------------|
| | American Indian/ Alaska Native | Asian/ Pacific Islander | Black, non-Hispanic | Hispanic | White, non-Hispanic |
| 1998 | | | | | |
| All program areas in 4-year institutions | 0.11 | 0.34 | 0.42 | 0.25 | 0.60 |
| Agriculture/home economics | 1.15 | 1.13 | 1.38 | 0.74 | 2.23 |
| Business | 1.12 | 1.02 | 1.09 | 0.36 | 1.81 |
| Education..... | 0.36 | 0.95 | 1.65 | 0.65 | 1.87 |
| Engineering..... | 0.33 | 2.19 | 0.59 | 1.48 | 2.37 |
| Fine arts..... | 0.31 | 0.64 | 1.40 | 0.37 | 1.62 |
| Health sciences | 0.23 | 0.76 | 0.64 | 0.62 | 1.27 |
| Humanities | 0.16 | 1.21 | 1.01 | 0.93 | 1.67 |
| Natural sciences..... | 0.13 | 0.74 | 0.50 | 0.51 | 1.08 |
| Social sciences..... | 0.32 | 0.90 | 0.83 | 0.51 | 1.33 |
| All other fields..... | 0.29 | 0.64 | 0.88 | 0.63 | 1.30 |
| 1992 | | | | | |
| All program areas in 4-year institutions | 0.06 | 0.29 | 0.46 | 0.18 | 0.59 |
| Agriculture/home economics | 0.78 | 0.98 | 1.17 | 1.12 | 1.93 |
| Business | 0.27 | 0.83 | 0.64 | 0.33 | 1.19 |
| Education..... | 0.23 | 0.30 | 1.24 | 0.78 | 1.45 |
| Engineering..... | 0.24 | 2.10 | 0.91 | 0.63 | 2.51 |
| Fine arts..... | 0.25 | 0.96 | 0.94 | 0.70 | 1.51 |
| Health sciences | 0.11 | 0.82 | 0.85 | 0.53 | 1.20 |
| Humanities | 0.11 | 0.52 | 0.53 | 0.41 | 0.82 |
| Natural sciences..... | 0.12 | 0.73 | 0.68 | 0.26 | 1.11 |
| Social sciences..... | 0.17 | 0.47 | 0.73 | 0.49 | 0.98 |
| All other fields..... | 0.16 | 0.87 | 0.82 | 0.37 | 1.22 |

*In 1998, respondents were allowed to report more than one race/ethnicity category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority category they selected (see Technical Notes for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

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

APPENDIX C

Glossary

This glossary describes the variables used in this report. The variables were taken directly from the Data Analysis System (DAS), an NCES software application that generates tables from the NSOPF data. A description of the DAS software can be found in appendix A.

In the index below, the variables are organized by the order they appear in the summary. The glossary is in alphabetical order by the variable label.

Glossary Index to Variables Used in this Summary

| Variable | Page Number in Summary |
|--|-------------------------------|
| Gender | 1 |
| Full- or part-time employment | 1 |
| Instructional faculty and staff | 1 |
| Level of institution | 2 |
| Type and control of institution | 2 |
| Program area (principal field of teaching) | 3 |
| Race/ethnicity | 4 |

Glossary

(NSOPF: 99 and NSOPF: 93)

Full- or part-time employment at this institution **(Q5 in NSOPF:99 and A4 in NSOPF:93)**

Faculty responses to the question, “During the 1998 Fall Term, did this institution consider you to be employed part-time or full- time?”

Part-time
Full-time

Gender

(Q81 in NSOPF:99 and F51 in NSOPF:93)

Faculty response to the question “Are you male or female?”

Male
Female

Instructional faculty and staff

(X01Z1 in NSOPF: 99 and NSOPF: 93)

This derived variable was created from NSOPF:93 faculty survey data and included faculty who answered yes to the question for the Fall of 1992 and 1998: “During Fall Term, did you have any instructional duties at this institution?” Instructional duties for credit included teaching one or more classes for credit, or advising, or supervising academic activities for credit, e.g., individualized instruction.”

Level of institution, 4-year versus 2-year

X06Z0 in NSOPF:99 and X06 in NSOPF:93

This derived variable reflects the type of institution (2- or 4-year) sampled for NSOPF:99.

Four year

Two year

Principal field of teaching

4-year institutions

**X02Z14 in NSOPF:99 and
X01A12 in NSOPF:93**

2-year institutions

**X01Z14 in NSOPF:99 and
X02A12 in NSOPF:93**

To identify the general program area of a respondent’s principal field of teaching, this derived variable was created from variable Q14 in NSOPF:99, and Q12 in NSOPF:93. The variables are different for 4-year and 2-year institutions because vocational training is offered by 2-year but not 4-year institutions.

Program in 4-year institutions

Program in 2-year institutions

- Agriculture & home economics
- Business
- Education
- Engineering
- Fine arts
- Health sciences
- Humanities
- Natural sciences
- Social sciences
- All other programs

- Agriculture & home economics
- Business
- Education
- Engineering
- Fine arts
- Health sciences
- Humanities
- Natural sciences
- Social sciences
- Vocational training
- All other programs

Race/ethnicity, recoded

(X03Z84 in NSOPF:99 and X02F53 in NSOPF: 93)

This derived variable was created to categorize individuals into one and only one racial/ethnic category. In 1988 and 1993, respondents were asked to pick only one race category to identify themselves. They also were asked to identify if they were of Hispanic origin. In 1999, respondents were asked to pick one or more race categories to identify themselves. They also were asked to identify if they were of Hispanic origin. Very few individuals picked more than one racial/ethnic category (about 1 percent). For those individuals who picked more than one racial/ethnic category, a coding scheme was devised to place them into one and only one racial/ethnic category. If respondents identified themselves as Hispanic and Black or Hispanic and White, they were coded as Hispanic. Otherwise, they were coded according to the following scheme: if respondents indicated they were Black or African American and any other race, they were coded as Black. If they were Asian or Pacific Islander and any other race (except for Black), they were coded as Asian. If they were Native American or Alaska Native and any other race (except for Black or Asian), they were coded as Native American.

American Indian or Alaska Native
Asian or Pacific Islander
Black, not of Hispanic origin
Hispanic
White, not of Hispanic origin

Type and control of institution

(X02Z0 in NSOPF:99 and X02 in NSOPF:93)

This variable was used to identify control of institution according to a modified Carnegie classification. The 1994 Carnegie classification was used. See a description of each type of Carnegie classification under the “Sample Universe” section of the Technical Notes.

| | |
|-----------------------|---|
| Public research | control=public and carnegie=11 or 12 |
| Private research | control=private and carnegie=11 or 12 |
| Public doctoral | control=public and carnegie=13, 14, or 52 |
| Private doctoral | control=private and carnegie=13, 14, or 52 |
| Public comprehensive | control=public and carnegie=21 or 22 |
| Private comprehensive | control=private and carnegie=21 or 22 |
| Private liberal arts | control=private and carnegie=31 or 32 |
| Public 2-year | control=public and carnegie=40 |
| Other | control=public and carnegie=31 or 32, or control=private and carnegie=40, or carnegie=51 or 53-65 |

