# THE AMERICAN FACULTY POLL

TIAA-CREF New York, New York

NATIONAL OPINION RESEARCH CENTER Chicago, Illinois

2000

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# **Highlights**

- At the present time, over 90 percent of faculty members express a clear satisfaction
  with their career choice, and a similar proportion would likely pursue a career in
  higher education again. They are satisfied both in general and with specific factors they
  deem important for their job.
- The attraction of teaching, the love of learning, professional autonomy, and intellectual freedoms are the most important factors in their decision to pursue an academic career; the attraction of a flexible work schedule as well as job security are also important.
- The influence of role models and mentors -- parents, relatives, and former high school teachers and college faculty members -- was critical in their career decision-making, though some say they fell into higher education by accident.
- Low salaries, the poor state of the academic job market, a simple need for new challenges, and dissatisfaction with bureaucracy and politics in higher education were important factors when faculty members considered a career change.
- The opportunity to educate students, teaching courses of interest, and having time for personal and family needs are very important professional considerations for faculty members; other personal and professional factors are far less important.
- Workload and the lack of student preparation and commitment are the most often cited negative factors impinging upon faculty members' academic work.
- Health-related problems and personal finances interfered less with their professional obligations.
- Except for a feeling that resources are inadequate, faculty members appear remarkably satisfied with the priorities that their institutions place on important policy matters, such as academic values, teaching and research.
- Faculty members are in agreement about most of the substantive issues covered in the survey with regard to levels and sources of satisfaction, attitudes about work and career, institutional policies and priorities, tenure and tuition. However, there are some differences on the basis of respondents' demographics as well as type and size of institution.
- In commenting about the present and future state of higher education, faculty members express concerns about lack of public support and interest, inadequate resources for research and low salaries. They are also concerned about the poor preparation of students entering college today.



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# THE AMERICAN FACULTY POLL

### Introduction

The American Faculty Poll, sponsored by TIAA-CREF, assesses the opinions, needs, and concerns of faculty members in higher education on a variety of topics. The survey covers faculty members' attitudes about their career choices and professional life, their level of satisfaction with various aspects of the work environment, their opinions about institutional policies and priorities, and their views about the present state of higher education and prospects for its future. The National Opinion Research Center (NORC) at the University of Chicago was responsible for the data collection, processing, and analyses. NORC conducted telephone interviews in the spring of 1999 with a nationally representative sample of full-time college and university faculty members whose duties included undergraduate teaching. This report provides an overview of the project and principal findings.

### Organization

This report is organized into eight sections, beginning with a brief methodological overview. That is followed by a description of the socio-demographics of the sample. The third section examines faculty overall career choices and attitudes. The discussion continues with a section covering factors that faculty members consider important in their work and career as well as their levels of satisfaction with these factors. In the fifth section, the report examines factors that impinge upon the academic work of faculty. Next, the report presents faculty members' assessments of institutional policies and priorities. The seventh section provides faculty members' opinions on tenure, tuition, and fees. The report concludes with faculty members' views on the present state of higher education, and possible future directions.

Appendix I contains a copy of the questionnaire (the actual survey was administered electronically by CATI, Computer-Assisted Telephone Interview). Appendix II provides additional demographic data. Appendix III contains tables and figures referenced in the text. Appendix IV includes technical notes on sample design and selection, descriptions of data collection and preparation, the weighting scheme and sampling errors.

### The American Faculty Poll Design

NORC employed a stratified, two-stage cluster sample design with the first stage, institution selection, having probability proportional to estimated institution size, and with representation by region and type of institution. At the second stage, a sufficient number of faculty members were drawn from each of the three institution types to yield approximately five completed interviews from each selected institution, after allowing for non-response. Only full-time faculty members who teach undergraduate courses, either exclusively or as part of their duties, were selected as interviewees. A total of 1,511 full-time faculty members from the 285 selected institutions were interviewed (see Table 1). The overall response rate was 66 percent.

**Table 1: Institution Type and Location** 

Institution Type	Number of Institutions	Number of Respondents
Two-year Institution	97	507
Four-year Private Institution	93	503
Four-year Public Institution	<u>95</u>	<u>501</u>
	285	1,511
<b>Location</b>		
Northern U.S.	73	379
Southern U.S.	71	378
Eastern U.S.	71	378
Western U.S.	<u>70</u>	<u>376</u>
	285	1,511

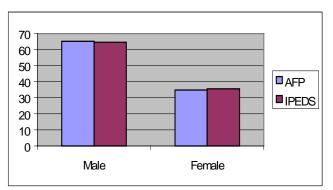
**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

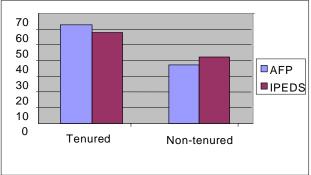
### A Comparison with IPEDS

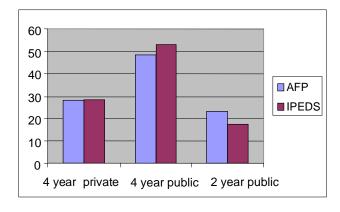
To gauge the reliability of the American Faculty Poll data, we compared selected weighted characteristics from the American Faculty Poll with those from IPEDS (Integrated Post-Secondary Education Data System). A major difference between the American Faculty Poll and IPEDS is the sample population. While IPEDS includes all full-time faculty members, the American Faculty Poll is restricted to full-time faculty members who are involved in undergraduate teaching either exclusively or as part of their activities.

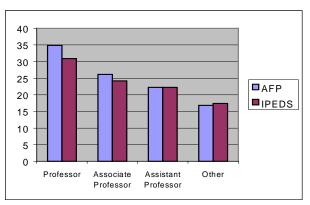
As shown in Figure 1, the differences in selected characteristics are less than five percentage points. When comparing the number of full-time faculty members who teach undergraduates, the American Faculty Poll (by design) shows a higher percentage of full-time faculty in two-year colleges when compared to IPEDS, while the reverse is true for four-year public universities. This illustrates the fact that there are proportionately more faculty members involved primarily in research or graduate student training in four-year public universities than in two-year public colleges where the focus is more on undergraduate teaching.

Figure 1: Comparisons Between IPEDS and AFP









**SOURCE:** American Faculty Poll, NORC and TIAA-CREF, and US Department of Education, National Center for Education Statistics. Digest of Education Statistics, 1998, NCES 1999-036, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman. Program Analyst, Claire M Geddes. Washington, DC: 1999.

Other differences in sample characteristics between the American Faculty Poll and IPEDS are also generally minor. In IPEDS, males constitute 64 percent of all faculty members, and 31 percent hold the rank of professor, compared with 65 percent and 35 percent, respectively, in the American Faculty Poll. In the American Faculty Poll, 63 percent are tenured, compared with 58 percent in IPEDS.

### **Demographic Background**

### Introduction

This section provides an overview of some demographic characteristics of the 1,511 American Faculty Poll respondents, focusing on age, academic rank, tenure status, gender, race/ethnicity, and academic discipline. These characteristics generally relate to how faculty members think and feel about higher education in general, about their institutions and policies, and about the personal and career decisions they have made. They also provide some background to understanding the differences in faculty opinions and attitudes in subsequent sections. (More details of the demographic characteristics, including marital status, children, citizenship, and household income can be found in Appendix II; differences by type of institution are contained in Table A1 in Appendix III.)

### Socio-Demographic Characteristics

Among respondent faculty members, there are twice as many males as females. Of those whose race/ethnicity is known, 86 percent are white, with each minority group constituting less than 5 percent of the sample (see Table 2). Almost all faculty members are U.S. citizens or permanent residents. Two-thirds are between ages 40-59. About a third are full professors. Not surprisingly, age and academic rank have a positive relationship.

Survey respondents were initially classified into one of sixteen academic disciplines; subsequently these groupings were collapsed into seven broad fields. About one-fourth (24 percent) of faculty members list the humanities as their academic discipline. Another 14 percent are in the social sciences. Almost a third (32 percent) are in the sciences or engineering. The remaining fields are education (5 percent), business (6 percent), health/medicine (8 percent), and other (9 percent), which includes areas such as communications and theology/religion.

### Institution Type and Size

Approximately one-fourth of the respondent faculty members are in two-year institutions, another 28 percent are in four-year private colleges and universities, with 48 percent in four-year

**Table 2: Full-Time Faculty Member Demographic Data** 

Age	<u>Percentage</u>	Academic Rank	<u>Percentage</u>
< 40	17.1	Lecturer/Instructor/Other	16.8
40 – 49	30.3	Assistant Professor	22.2
50 – 59	34.3	Associate Professor	26.1
60 +	16.7	Professor	34.9
<u>Gender</u>		Citizenship	
Male	65.2	U.S.	92.6
Female	34.8	Non-U.S.	7.3
Race / Ethnicity		Academic Discipline	
White	85.6	Humanities	24.1
Non-White	12.4	Social Sciences	14.2
African American	3.8	Science/Engineering	32.4
Asian/Asian American	4.6	Education	5.1
Hispanic	2.8	Business	6.5
Other	1.2	Health/Medicine	8.5
		Other	9.1

Note: Because of missing data, including occasional refusals, not all categories will sum to 100 percent.

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

public institutions. Sixteen percent teach in colleges or universities with fewer than 2,000 undergraduate students; 23 percent are in institutions with between 2,000 and 4,000 undergraduates; 22 percent teach at institutions with 4,000 to 8,000 undergraduates; and 15 percent, 15 percent, and 9 percent, respectively, teach at institutions with 8,000 to 12,000, 12,000 to 20,000, and over 20,000 undergraduate students. As expected, four-year public institutions have comparatively the largest enrollment of undergraduate and graduate students. There are few observed differences in opinions or concerns among faculty by institution size. Where statistically significant differences do occur, they are noted.

## Teaching Loads and Levels of Instruction

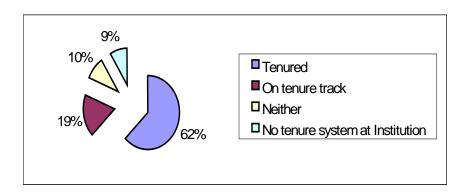
Overall, 54 percent of the 1,511 respondent faculty members teach only undergraduate students; 46 percent teach both undergraduates and graduate/ professional students (see Table 3). Those of lower academic rank — lecturers, instructors, and assistant professors — are more likely to teach only undergraduates than are associate or full professors. Not surprisingly, faculty members at two-year colleges (mostly lecturers and instructors) engage mainly in undergraduate teaching when compared to faculty members at four-year institutions. A higher proportion of males than females teach a mix of undergraduate and graduate/professional students, partly because men are more likely to be faculty members at a four-year public institution and women are more likely to be at a two-year college.

**Table 3: Distribution of Teaching Responsibilities** 

	<u>Teach Only Undergraduate</u> <u>Students</u>	<u>Teach Both Undergraduate and</u> <u>Graduate/Professional Students</u>
<b>Total</b>	54.0%	46.0%
Gender		
Male	47.5	52.5
Female	66.2	33.8
Academic Rank		
Lecturer/Instructor/Other	81.9	18.1
Assistant Professor	50.9	49.1
Associate Professor	49.3	50.7
Professor	46.0	54.0
<b>Tenure Status</b>		
Tenured	50.2	49.8
Tenure-Track	47.2	52.8
Not Tenure Eligible	62.2	37.8
No Tenure System	88.8	11.2
<b>Institution Type</b>		
Two-year Institution	95.0	5.0
Four-year Private Institution	58.7	41.3
Four-year Public Institution	31.4	68.6

With regard to tenure status, faculty members in the poll fall into one of four categories. Most (62 percent) have tenure or are on tenure-track appointments (19 percent). Another 10 percent are at colleges and universities that have formal tenure systems but do not hold tenure-eligible appointments, and the remaining 9 percent teach at institutions that do not have a tenure system (see Figure 2). Those in the latter two categories — without tenure or prospects of tenure — are more likely to teach only undergraduates. This is in part a function of the type of institution, but also a result of the way teaching duties are assigned and priorities and expectations are established. For example, at institutions with a tenure system, over 60 percent of those not currently eligible for tenure teach only undergraduates, compared with 47 percent of their tenured or tenure-track colleagues.

**Figure 2: Distribution of Tenure** 



Faculty members overwhelmingly list teaching as their principal activity in their current position (79 percent); the remaining faculty indicate their main responsibility is research, administration, or a combination of responsibilities (see Table 4). A higher percentage of female faculty members (85 percent) list teaching as their principal activity than do their male counterparts (75 percent), which again is likely to be a function of the gender distribution by type of institution.

More than 9 in 10 lecturers/instructors indicate that their time is spent mainly teaching, consistent with the fact that they are more prevalent in two-year institutions. But also, 3 in 4 of faculty in the other ranks indicate that teaching is their principal activity. There are consistent differences by type of institution as well. Teaching is the main responsibility of 92 percent of faculty members in two-year colleges, 80 percent of those in four-year private colleges and universities, and 71 percent of those in four-year public colleges and universities.

Table 4: Distribution of Faculty Work Load: Principal Activity

	<b>Teaching</b>	Research	Administration	<u>Other</u>
<u>Total</u>	78.6%	8.4%	5.3%	7.7%
<u>Gender</u>				
Male	75.3	10.7	5.8	8.2
Female	84.7	4.0	4.5	6.8
Academic Rank				
Lecturer/Instructor/Other	91.3	1.3	5.1	2.3
Assistant Professor	76.2	11.4	1.8	10.6
Associate Professor	76.3	9.5	6.2	8.0
Professor	75.5	9.0	7.1	8.4
Institution Type				
Two-year Institution	92.2	0.0	4.5	3.3
Four-year Private Institution	80.6	8.2	6.5	4.7
Four-year Public Institution	70.8	12.5	5.1	11.6

### Faculty Unions

Over a third of the faculty members (38 percent) note that their institution has a faculty union; in those cases, about two-thirds (64 percent) belong to it (see Figure 3). There are large differences by type of institution. About 60 percent of faculty members at two-year institutions report having a faculty union at their institution, and 82 percent of them are union members. On the other hand, only about one in ten (12 percent) faculty members at four-year private colleges and universities indicate the presence of a union, and only about half of them (52 percent) are union members. Four-year public institutions fall between these extremes with regard to unionization — 43 percent indicate the presence of one, and 54 percent of them belong to it. Interestingly, 3 percent of faculty members at four-year private and 4 percent at four-year public institutions do not know whether there is a union at their institution, compared to less than one percent at two-year institutions.

6.1 100 10.5 13.5 5.5 19.7 80 24 48.9 23. 60 ☐ Have union but not a member 85 40 ■ Have union and is a member 59 5 40 20 No union at institution 0 Total 2 year 4-year 4-year public private

Figure 3: Distribution of Faculty Union Membership

### **Occupational Mobility**

About one-third (31 percent) of faculty members have been employed at only one institution (see Table 5). Younger faculty members (under age 40) are about 1.4 times more likely than their older counterparts to have been employed at only one institution. More institutions for older faculty members reflect their longer career path in academia, but, interestingly, about 30 percent of faculty members currently in their 40s, 50s, and 60s have taught at only one institution, reflecting some degree of job stability over their career. Women are somewhat more likely than men (36 percent to 29 percent), and whites than non-whites (32 percent to 25 percent) to have been at only one institution.

Faculty members split almost evenly in thirds — 34 percent, 29 percent, and 37 percent — with regard to the number of years they have held full-time teaching appointments, using the categories 0-10 years, 11-20 years, and more than 20 years, respectively. Women and ethnic minorities report fewer numbers of years in teaching and research, reflecting their relative youth and more recent increase in faculty positions in higher education.

<u>Table 5: Distribution of Number of Institutions Where Worked and Number of Years in Research/Teaching Full-Time</u>

	Number of Institutions Worked <u>During Career</u>		Numbe	Number of Years Research/Teaching Full-Time			
	1	2-3	<u>4 +</u>	0 - 10	<u>11 – 20</u>	<u>21 – 30</u>	<u>31 +</u>
<u>Total</u>	31.4%	50.8%	17.8%	33.9%	29.4%	23.2%	13.5%
Age							
< 40	41.3	46.8	11.8	90.6	9.4		
40 – 49	29.2	55.9	14.9	38.8	52.3	8.9	
50 – 59	29.6	49.3	21.1	12.6	30.1	46.2	11.0
60 +	28.6	50.3	21.1	9.0	7.3	26.0	57.6
<u>Gender</u>							
Male	29.0	51.5	19.6	30.9	27.0	24.2	18.0
Female	36.0	49.7	14.3	39.4	34.0	21.5	5.1
Race							
White	32.5	50.7	16.8	31.9	29.2	24.5	14.3
Non-White	25.1	49.2	25.7	45.4	32.1	15.1	7.4

### **Overall Career Choices and Attitudes**

### Introduction

This section begins with a description of the level of satisfaction faculty members have with their current positions. Next, the section covers faculty members' overall career choices and attitudes towards their career, including factors that led them to pursue an academic career, the extent to which they had at some point contemplated an alternative profession, and when, why, and what type of option they considered.

### Levels of Satisfaction

In the aggregate, respondent faculty members seem content with their career choices. Almost nine in ten faculty members (87 percent) indicate that, could they begin their professional career anew, they would definitely (63 percent) or probably (24 percent) pursue an academic career. Only 5 percent say that they would probably not want to be in academe; the remaining 7 percent are not sure. However, at one time or other, about two-fifths of these faculty members (41 percent) note that they had seriously considered switching to a career outside of higher education.

The percentage reporting that they would definitely pursue the same career again (63 percent) fluctuates, but within fairly narrow bounds, across age, gender, race/ethnicity, academic rank, and institution type. Faculty members 40 years of age and older, females, whites, those in the humanities and those employed in four-year institutions report the lowest "definitely yes" totals, though the proportions are all at least 55 percent (see Table 6). Faculty members who are in institutions with a tenure system but who do not have tenure or the prospects of tenure themselves have a lower percentage saying they would definitely pursue the same career.

Over 90 percent of faculty members indicate that they are either very satisfied (40 percent) or satisfied (52 percent) with their current position; only 1 percent are not at all satisfied (see Table 7). The "very satisfied" percentage increases with age (36 percent for those under 50 to 45 percent for aged 60 years of age and older).

Faculty members' satisfaction level appears to be largely independent of race, academic field, and size of institution, but not institution type. The level of "very satisfied" is lowest

<u>Table 6: Distribution of Faculty Who Would "Definitely"</u>
<u>Pursue an Academic Career Again</u>

Age	Percentage
< 40	67.7
40 – 49	60.6
50 – 59	62.8
60 +	63.2
<u>Gender</u>	
Male	65.0
Female	58.8
Race/Ethnicity	
White	62.1
Non-White	71.5
Institution Type	
Two-Year Institution	68.5
Four-Year Private Institution	61.3
Four-Year Public Institution	61.0
Discipline	
Humanities	55.6
Social Sciences	60.3
Science/Engineering	65.0
Education	59.4
Business	64.0
Health/Medicine	69.2
Other	73.8
<b>Tenure Status</b>	
Tenured	60.8
On tenure track	68.9
Neither	59.8
No tenure system at institution	67.4

for faculty members in four-year public institutions (34 percent). However, the proportion who are dissatisfied, i.e., either "not very" or "not at all" satisfied, is similar across the three institutional types.

Faculty members at institutions without a tenure system report the highest levels of "very satisfied," but the proportion who are dissatisfied is quite consistent across the four tenure categories.

**Table 7: Distribution of Satisfaction with Current Position** 

	Distribution of Satisfaction with Current Position			
	<u>Very</u> Satisfied	Satisfied	Not Very Satisfied	Not at All Satisfied
<u>Total</u>	39.9%	51.9%	6.9%	1.3%
Age				
< 40	36.5	57.7	5.0	0.7
40 – 49	36.0	55.2	6.7	2.1
50 – 59	43.0	47.1	9.3	0.6
60 +	45.5	48.1	4.7	1.7
Race/Ethnicity				
White	40.5	51.5	6.7	1.3
Non-White	36.2	53.9	8.7	1.2
<b>Institution Type</b>				
Two-year Public Institution	46.8	45.2	7.3	0.7
Four-year Private Institution	43.8	48.6	5.8	1.8
Four-year Public Institution	34.2	57.2	7.3	1.2
<u>Institution Size</u>				
< 2,000	40.1	51.7	6.6	1.6
2,000 – 4,000	40.2	51.3	6.9	1.6
4,001 – 8,000	40.7	49.1	8.6	1.6
8,001 – 12,000	35.2	55.2	8.9	0.7
12,001 – 20,000	39.0	54.0	5.1	2.0
> 20,000	43.3	50.8	5.9	
Tenure Status				
Tenured	40.8	50.8	7.6	0.8
On tenure track	33.9	58.6	5.2	2.4
Neither	32.8	58.9	7.0	1.4
No tenure system at institution	53.9	38.1	5.9	2.1

### Career Alternatives

About 4 in 10 respondent faculty members report that they had considered a career change. This proportion is fairly constant (or shows no observable trend) with regard to gender, race/ethnicity, academic discipline, and type of institution. One difference occurs at the top age group (60 and above), where the percentage is discernibly lower; also faculty members not on a tenure-track appointment or who are at institutions where there is no tenure system report a somewhat higher incidence of considering a career change (see Table 8). For those who had considered a career change, the average — both mean and median — time frame reported is around age 39, with virtually all of these contemplations taking place between ages 30 and 50. As to when such decisions took place with respect to time spent in higher education, about two-thirds of them said it occurred when they had been teaching between one and 10 years.

**Table 8: Distribution of Whether Considered Switching Careers** 

	<u>Yes</u>	<u>No</u>
<u>Total</u>	41.3%	58.7%
Age		
< 40	40.8	59.2
40 – 49	45.0	55.0
50 – 59	45.5	54.5
60 +	26.5	73.5
<b>Tenure Status</b>		
Tenured	41.0	59.0
On tenure track	38.7	61.3
Neither	44.9	55.1
No tenure system at institution	45.4	54.6

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

### Sources of Career Dissatisfaction

For those faculty members who had considered a career change, when asked why, they offered a number of firmly stated factors behind those contemplations: <sup>1</sup>

- The most frequently mentioned factor was money there is dissatisfaction with financial compensation in higher education, e.g., "my students make more than I do," as well as unhappiness with available research funding (n = 186).
- Personal issues, such as new opportunities in an outside field (the arts or nursing), and family considerations (spouse got a new job and had to relocate, or the need to balance work and family) are mentioned (n = 105).
- A third set of factors that may drive faculty members to consider another
  career is the feeling of being burned out and in a rut, wanting a new challenge,
  feeling restless, or simply wanting a change of professional and personal
  scenery (n = 90).
- A related consideration is frustration with higher education itself "the system," institution-wide and intradepartmental politics, administrations, and bureaucracy (n = 75).
- Job market factors also affect faculty members' deliberations the difficulty of finding another position if denied tenure, the lack of permanent college/university teaching positions, and a poor academic job market in general (n = 65).

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<sup>&</sup>lt;sup>1</sup>Unweighted totals appear in parentheses; some poll participants could have given multiple responses.

Faculty members scarcely mention teaching or students when explaining factors that could have led to a career change out of higher education. As discussed later, given the importance that they place on teaching, the quality of students they teach, and concerns they express about the preparation of college students today, one might have expected more mentions about the poor quality of students playing a role in their consideration to leave teaching.

### Important Career Considerations for Faculty Members

When asked about important factors in their decision to pursue an academic career, faculty members' responses fall into a small number of well-defined categories: <sup>2</sup>

- By far, the factor they mention most frequently is the attraction of teaching the love of teaching, the satisfaction and enjoyment they receive from teaching and working with students; the need to help others; many faculty members note that they always knew that they wanted to teach (n = 647).
- The influence of others also looms large in the decision of some to become a faculty member: parents and relatives (including those who are academics themselves), former high school teachers and college professors, and other role models and mentors are mentioned frequently (n = 186).
- A third set of factors noted relates to learning the love of learning, a strong interest in one's subject matter or discipline, the intellectual freedom and creativity, as well as the challenges of an academic career (n = 152).
- The opportunities to pursue research and other intellectual interests are important to many faculty members (n = 101).
- Having a flexible work schedule was also a frequently mentioned factor (n = 80).

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<sup>&</sup>lt;sup>2</sup> Unweighted totals appear in parentheses; some poll participants could have given multiple responses.

• In addition, small sets of calculated and random influences appear in many responses. That college teaching is a "nice life" is expressed by some who note the attractions of tenure and job security and stability; the collegiate environment (n = 29); and tenure and job security (n = 14). Some faculty stated that they fell into it by chance, accident, or fortune rather than by an explicit calculation; others indicate that the choice is more like avoiding an unpleasant alternative — such as Vietnam, which led some men in the 1960s and 1970s to pursue doctoral study (n = 14).

# Work and Career: Important Factors and Levels of Satisfaction *Introduction*

Question 5 on the survey asks faculty members for their opinion about 17 specific professional factors along two dimensions — first how <u>important</u> each of these items is to them personally, followed by how <u>satisfied</u> they are with each factor at their current institution (or as a faculty member in general). These factors include the opportunity to educate students, teaching loads, teaching courses of interest, the quality of students, the intellectual and physical working environment, and personal factors, such as a flexible schedule, salary and benefits accorded academics, having job security, and time for family and personal needs.

### Important Career Factors

The faculty members were asked to rate 17 work and career related factors in terms of how important these factors are to them personally. The four possible response categories are "very important," "important," "not very important," and "not at all important." In this section, we first examine the factors that faculty members deem very important, followed with a discussion of the ratings of "very important" and "important" combined.

The "opportunity to educate" students is by far the most important consideration for faculty members — 86 percent consider it very important. "Teaching courses of interest" (77 percent) and "having time for family and personal needs" (76 percent) are the next most important factors (see Table A2 in Appendix III). Twelve other factors each receives at least 50 percent rating as "very important," but the first three noted dominate in the aggregate as well as by gender, race/ethnicity, rank and age, and academic discipline. The "opportunity to educate" receives the highest "very important" scores from faculty members in education (95 percent) and from those at two-year colleges (92 percent); only for social scientists is this not the most important consideration (for them it is "teaching courses of interest").

At the other end, only 27 percent of faculty members rate "opportunities for professional recognition" as very important; non-white faculty members (40 percent) and those in the highest age range (34 percent) place the most importance on recognition, while those in education fields rate it the lowest (20 percent). Other relatively lower "very important" ratings are given to what one might view as complementary academic or scholarly areas — "departmental reputation" (41 percent) and "institutional reputation" (also 41 percent). Given the importance placed on teaching by faculty members and the distribution of their work loads between teaching, research, and other duties, it is perhaps not surprising that many would place less importance on factors related more

to scholarship. Faculty members at two-year institutions place especially higher importance on these two factors (60 percent and 56 percent, respectively), greater by 20 percentage points or more over faculty members at either public or private four-year institutions.

Two highly personal considerations — money and job security — are also important for faculty members but lag behind other factors in terms of being "very important." However, they loom larger for faculty members at two-year institutions, where 65 percent and 71 percent, respectively, rate them as "very important."

Combining the two positive response options of "very important" and "important," fourteen of the seventeen factors receive combined importance ratings of over 90 percent (see Figure 4). "The opportunity for professional recognition" receives the lowest combined percent of responses, although 77 percent of faculty members consider it "important" or "very important." The other two factors that less than 90 percent of faculty members rate as "very important" or "important" are "reputation of department" (88 percent) and "physical working conditions" (86 percent).

### Satisfaction

For the same 17 factors they rated for importance, respondent faculty members also assessed each in terms of their level of satisfaction with it — either "very satisfied," "satisfied," "not very satisfied," or "not at all satisfied." Similar to the discussion of the importance of work and career factors, this section begins by covering factors that faculty members consider "very satisfied," followed by a discussion of the combined ratings of "very satisfied" and "satisfied." Happily, many faculty members are very satisfied with the same factors that they consider very important (see Table A3 in Appendix III). Faculty members are currently most satisfied with their "opportunities to educate students" and "teaching courses in which they are interested." A "flexible work schedule," the "opportunity to work independently," and "job security" are three other highly ranked factors in terms of satisfaction. There is, however, a sizable gap between those top five factors and any of the other twelve.

99 4 99 94.6 94.4 93.8 100 92.4 92.1 918 77.1 50 shallenging environment Teaching courses that interest Time for family Teaching load Job security Flexible work schedule Opportunity to advance Quality of students Reputation of department Opportunity to educate students Attractive salary and benefits Working in collegial environment Having institutional support for Opportunity to work independently Reputation of institution Physical working conditions Opportunity for professional Vorking in intellectually knowledge in field

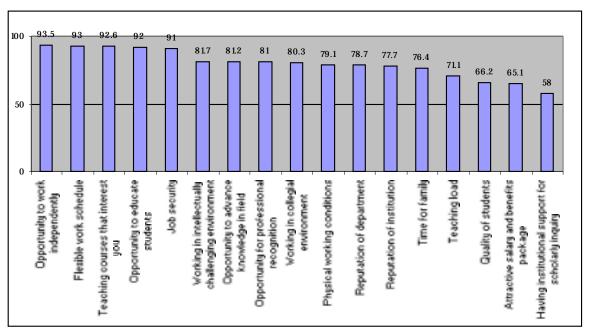
Figure 4: Distribution of the Sum of "Very Important" and "Important" Work and Career Factors

In general, female faculty members may feel more strongly than males about these 17 factors, as reflected in proportionately more of them giving "very important" responses. Males, however, are relatively more satisfied with their situations — for 11 of the 17 factors the percentage of males indicating "very satisfied" exceeds that for their female colleagues. One of the lowest levels of satisfaction reported across any sub-population is by female faculty members with regard to their perceived opportunities for professional recognition, with only 9 percent saying that they are "very satisfied."

Merging the "very satisfied" and "satisfied" responses, only four of the 17 factors receive less than 75 percent of the combined responses, and several are above 90 percent (see Figure 5). Most faculty members (93 percent) are very satisfied or satisfied with the "opportunity to work independently" while the lowest number (still a sizable 58 percent) are satisfied with "having institutional support for scholarly inquiry." The picture that emerges, then, is one of faculty members being overwhelmingly content with both the professional and personal benefits of

Figure 5: Distribution of the Sum of "Very Satisfied" and "Satisfied"

Work and Career Factors



holding an academic appointment. To the extent they are not satisfied, the discontent centers around the level of institutional support, either for scholarly inquiry, the teaching load, or compensation. Student quality is another issue that a sizable number of faculty members are not satisfied with currently.

### Very Important versus Very Satisfied

Even with the generally high overall levels of satisfaction, comparing "importance" versus "satisfaction" responses across the same 17 factors produces some noticeable disparities between what faculty members consider very important and what they are very satisfied with. For example, the mean percentage of faculty who indicate that the factors listed are "very important" to them is 57 percent (the median is 58 percent), whereas the average "very satisfied" percentage is half that at 29 percent (the median is 24 percent). In fact, for 10 of the 17 factors," very satisfied" lags "very important" by at least 25 percentage points (see Table 9). For example, while 86 percent of faculty members say that the opportunity to educate students is "very important" to them, only 48 percent indicate that they are "very satisfied" with their current

opportunities to educate. Similarly, 76 percent of faculty members consider having time for family and personal needs to be "very important," yet only 30 percent are currently "very satisfied" with the time their positions in higher education afforded them. The largest single disparity (50 percent) is between the importance placed on having institutional support for research and the level of satisfaction that faculty members feel with the current state of such support.

This wide-ranging disconnect between faculty members' views of what is very important to them in their careers and what they are very satisfied with is a significant survey finding. It certainly contributes to their general outlook on higher education today, which is reflected in their comments to the final survey question, asking for their views on the current and expected future state of higher education.

It should be noted that when "very satisfied" and "satisfied" responses are combined, the differences between the levels of "very important" and "satisfied/very satisfied" greatly narrow and sometimes disappear. This implies that the respondent faculty members are generally satisfied with the factors that are very important to them, if not very satisfied.

<u>Table 9: Comparisons of "Very Important" versus "Very Satisfied"</u>
<u>Ratings Given to Work and Career Factors</u>

	Very Important	Very Satisfied	<u>Difference</u>
Having institutional support for scholarly inquiry	62%	12%	+50
Time for family	76	30	+46
Working in intellectually challenging environment	70	27	+43
Attractive salary and benefits package	52	13	+39
Opportunity to educate students	86	48	+38
Teaching load	56	20	+36
Opportunity to advance knowledge in the field	56	23	+33
Working in collegial environment	61	29	+32
Quality of students	46	15	+31
Teaching courses that interest you	77	51	+26
Reputation of institution	41	20	+21
Reputation of department	41	24	+17
Opportunity to work independently	62	46	+16
Flexible work schedule	60	47	+13
Job security	58	45	+13
Opportunity for professional recognition	27	15	+12
Physical working conditions	32	22	+10

#### Personal Factors

A set of four of the 17 factors — attractive salary and benefits, job security, a flexible work schedule, and time for family and personal needs — contrasts how faculty members think about their personal lives in relation to other professional and intellectual interests. While more than 50 percent of respondent faculty members list all four of these items as "very important," there is considerable variation across the four generally, and especially when examined across the various socioeconomic and institutional groupings.

An attractive salary and benefits package, noted as "very important" by 52 percent of faculty members overall, is more important for women and racial/ethnic minorities, 58 percent and 71 percent, respectively, than for men and whites. Salary and benefits also seem to be less important for faculty members in the sciences and engineering (47 percent) and education (45 percent) compared to those in health and medical fields (75 percent). Similarly, compensation is relatively more important for those in two-year institutions (65 percent) and for faculty members not on tenure track positions (60 percent), as well as for instructors or lecturers (59 percent) than for professors of any rank — assistant, associate, or full professor.

The level of satisfaction that faculty members derive from salary and benefits is dramatically lower. Only 13 percent of faculty members are "very satisfied" with the direct economic side of their current position. This may help explain some of the importance attached to finances in faculty members' considerations for leaving higher education, and their concerns about the present state of and future for higher education. The level of satisfaction with salary and benefits increases steadily with age. Faculty members at two-year institutions report the highest level of satisfaction — 18 percent very satisfied — while faculty members at colleges and universities with tenure systems in place but who are not on tenure-track have the lowest proportion who are very satisfied, 7 percent.

Job security is "very important" for 58 percent of faculty members. It appears to be relatively more important for female faculty members, 61 percent very important, than their male counterparts (56 percent), and for non-whites (68 percent) than for whites (57 percent). Those teaching in two-year institutions report the highest "very important" percentage (71 percent), compared with 55 percent for those in four-year colleges and universities. Forty-five percent of faculty members are "very satisfied" with job security, one of the higher satisfaction levels of all 17 factors. The level of satisfaction with job security in academic appointments rises steadily by age and rank, and it is much higher (57 percent) for those with tenure than for those without (21

percent), and lowest (18 percent) for those on tenure-track appointments but not yet tenured. There are no major differences by gender, or academic field, while white faculty members (47 percent very satisfied) are more satisfied with their current level of job security than are non-whites (31 percent).

A flexible work schedule is "very important" for 60 percent of faculty surveyed. There are few if any differences with regard to age, rank, tenure status, or type of institution. However, this benefit is more important for females (68 percent) than for males (55 percent), and for non-white faculty members (67 percent) than for whites (59 percent). The overall level of satisfaction with having a flexible schedule — 47 percent report being "very satisfied" — is the third highest across the 17 factors, and generally at the same level across the various institutional and socioeconomic categories.

Time for family and personal needs, the fourth of these personal variables, is rated "very important" by 76 percent of faculty members. More non-white faculty members (84 percent) and those in the health/medical professions (87 percent) rate it as "very important" than other groups. Other differences across groups are modest in size. Although the importance placed on personal and family time is relatively high, the corresponding "very satisfied" response is low (30 percent), creating the second largest "very important" versus "very satisfied" disparity. There is a disparity in gender, where more women (78 percent) rate "time for family" as "very important" but fewer of them (24 percent) rate it "very satisfied" when compared to men (76 percent and 33 percent, respectively).

### **Factors That Impinge Upon Academic Work**

#### Introduction

Poll participants were given the opportunity to reflect upon nine personal and professional considerations that could have interfered with their academic work and/or caused them stress within the last year. The nine factors include both personal issues (family responsibilities, physical or health problems, and personal finances) and work-related topics, such as the work load, students, financial support at the institution, and interpersonal strains inside and beyond the faculty member's home department. The survey format called for only "yes" or "no" response options.

#### **Findings**

Of the nine factors, those which relate directly to teaching responsibilities — student preparation and commitment (50 percent) and the current work load (47 percent) — are the only ones that about half of faculty members agree affected their work life within the last year (see Table 10 and Table A4 in Appendix III). Health-related problems (15 percent) and personal finances (13 percent) appear to have produced the least amount of interference for these faculty members.

For eight of the nine factors, a higher percentage of women report interference than do men, with the work load and health factors being at least 10 percentage points higher for female faculty members. The percentage for males is only higher than for females with regard to obtaining research funding or other financial support.

These same two factors — work load and student preparation/commitment — appear at the top of lists by tenure status and by institutional type as well, with the latter factor having the largest "yes" percentage of any factor (61 percent) for faculty members in two-year institutions. For faculty members at public four-year colleges and universities, however, the lack of institutional support for scholarly activity garners the second highest percentage, moving work load to third place. The lack of adequate institutional support also affects more women, non-white faculty members, and those affiliated with four-year public institutions than their counterparts.

Across most socioeconomic and institutional categories, health and personal finances appear to be the least significant factors in the set of interfering considerations.

**Table 10: Distribution of Factors that Interfered with Academic Work** 

Student preparation and commitment	<b>Total</b> 50 %
Work load	47
Lack of institutional support	41
Intradepartmental strains	35
Interdepartmental strains	31
Family responsibilities	31
Inability to obtain research grants	30
Physical or health problems	15
Personal finances	13

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

#### **Institutional Policies and Priorities**

#### Introduction

The survey instrument contains a series of questions designed to gather faculty opinions about institutional policies and priorities on various aspects of teaching and research, affirmative action, students and colleagues (including administrators), technology, tenure, and the level of tuition. For the most part, question formats allow faculty members some degree of agreement or disagreement, not just a simple yes-no format alternative.

#### **Findings**

When asked about 20 different institutional policies, faculty members were given four possible responses: "strongly agree," "somewhat agree," "somewhat disagree," and "strongly disagree." In general, agreement or disagreement on the issues is relatively consistent among faculty members. This section covers what faculty members most strongly agree on.

The statement with which faculty members in the aggregate agree the most (45 percent "strongly agree" and another 34 percent "somewhat agree") is that "intrusions on academic freedom by the administration are rare" (see Table 11 and Table A5 in Appendix III). In fact, the largest area of strong agreement — 57 percent — for faculty members at two-year institutions, and the largest single "strongly agree" comparison among the 20 variables is on the hiring of adjunct and part-time faculty. The agreements are generally consistent across gender, racial/ethnic, and institution-type lines.

There are a few noticeable areas in which there is substantial disagreement among faculty members, and these differences break perhaps along predictable lines. For example, more minority (28 percent) than white (20 percent) faculty members strongly agree that affirmative-action programs have made their institutions a better place. Whites (40 percent) are more likely to strongly agree that faculty members are treated fairly at their institutions irrespective of gender or race/ethnicity than do minorities (19 percent). Minorities (14 percent) also are less likely than whites (24 percent) to strongly agree that non-conforming views are readily accepted and that "collegiality is what it should be" at their institution (22 percent versus 39 percent for whites).

Table 11: The Distribution of "Strongly Agree" For Institutional Policies

	<u>Total</u>
Intrusions on academic freedom are rare	45.4 %
There is pressure to increase faculty work load	37.4
Collegiality is what it should be	37.4
Faculty members are treated fairly	36.9
Institution is hiring more P/T versus F/T faculty	36.1
Teaching effectiveness is prime promotional concern	32.0
Research is rewarded more than teaching	26.8
Technology meets needs of faculty	25.2
Admin. actions are consistent with mission	23.7
Non-conformist views are accepted	22.2
Faculty views are consistent with institution	21.1
Admin. views are consistent with institution	21.1
Affirmative action has made institution better	20.6
Quality of undergrads has improved	18.9
Admin. support for programs is balanced	18.3
Good performance is rewarded at institution	14.7
Quality of students has improved	10.3
Faculty specialization has hindered dialogue	9.7
Financial resources are sufficient for faculty needs	8.6
Post-tenure review has impacted faculty performance	5.6

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

Faculty members at four-year public colleges and universities are more likely to strongly agree that research is rewarded more than teaching (42 percent, compared with 5 percent and 18 percent for faculty at two-year and four-year private institutions, respectively). On the other hand, more faculty members (43 percent) at four-year private colleges and universities strongly agree that teaching effectiveness is a primary criterion for promotion, compared with 32 percent and 25 percent for faculty at the other two classifications of institutions.

With regard to institutional priorities, faculty members were asked to indicate whether they think that their employer places too high a priority on each of 16 items, too low a priority, or just the right amount. "Increasing student enrollment" garners the highest percentage of "too high a priority" (29 percent) of any of the 16 items (see Table 12 and Table A6 in Appendix III). The next highest "too high" category, "enhancing the institution's competitive standing," is a distant second (16 percent), but is a factor that faculty members generally consider not very important.

**Table 12: Opinion For Institution's Emphasis on Priorities** 

<u>Statement</u>	Just Right	Too High	Too Low
Preparing students well for work	75%	8%	15%
Hiring more women faculty	69	6	20
Keeping tuition low	68	10	16
Integrating technology	68	10	16
Maintaining atmosphere of open expression	67	3	29
Keeping up-to-date with technology	65	10	23
Promote intellectual development of students	61	2	36
Increasing student enrollment	59	29	9
Facilitate student involvement in community service	59	6	30
Recruiting more minority students	57	6	31
Allocating funds to undergraduate education	57	5	26
Enhance institution's competitive standing	57	16	25
Developing sense of community	54	5	39
Help students examine personal values	52	6	34
Hiring more minority faculty	51	6	39
Provide sufficient resources for faculty needs	34	1	64

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

At the other end by far — at 64 percent — the institutional policy that most faculty members say has "too low a priority" is "providing sufficient financial resources for the faculty's academic needs." Over half of every subgroup — gender, race/ethnicity, age/rank, institutional type — rate this as too low a priority at their college/university.

A second item that a significant proportion of faculty members feels receives too little attention at their institution is the hiring of more minority faculty. In the aggregate, 39 percent rate this as having too low a priority, with it being the highest for faculty members in education (57 percent). Women (48 percent) and minority faculty (48 percent) also are more likely to think this has too low a priority.

Except for thinking that financial resources are inadequate, at least half of all faculty members agree that their institutions place the appropriate priority on the other 15 items. "Preparing students well for work" garners the highest "right priority" percentage (75 percent), though this is also a source of irritation for some faculty members who feel that their institutions and curricula are currently more "trade" and career-oriented than they think desirable (see section on responses to the final open-ended question in the survey). Other factors broadly considered to receive the right priority are hiring women faculty (70 percent), two technology-related areas (68 percent and 66 percent), and maintaining an atmosphere conducive to the open expression of ideas (68 percent). Compared with the "too high" and "too low" alternatives, for which the median responses are roughly 6 percent and under 30 percent respectively, the overall agreement among faculty members with regard to institutional priorities is rather remarkable.

Some pronounced differences in opinion occur along racial/ethnic lines. Minority faculty members are more likely than whites to rate their institutions' priorities as too low for "hiring more minority faculty," "maintaining an atmosphere that encourages open expression of ideas," "keeping tuition low," and "recruiting more minority students." Interestingly, albeit a small percentage, a higher percentage of minority faculty members (13 percent) compared to whites (5 percent) feel that "hiring more minority faculty" receives too high a priority. Similar racial differences are noted for "hiring more women faculty."

Male-female differences are most pronounced regarding hiring more female faculty, where 8 percent of male faculty members assign it too high a priority, but only 2 percent of their female colleagues do. Compared to males, females feel that recruiting more minority students, hiring more minority faculty, and the technology-related issues have too low a priority at the institutions.

## Tenure, Tuition, and Fees

#### Introduction

A set of questions in the survey asks faculty members for their opinions about two important and sometimes controversial aspects of higher education today — awarding faculty members tenure and the level of tuition and fees across the nation's colleges and universities.

#### **Tenure**

Ninety-one percent of respondent faculty members are at institutions with a tenure system. These faculty members were asked whether there have been any efforts in the past two years to eliminate, weaken, or modify tenure at their institutions. Thirty-two percent of them say that there have been efforts to effect changes or eliminate the tenure system at their institutions, and 59 percent say that there has been no such initiatives at their institutions. The other 9 percent do not know whether there have been any efforts to modify or eliminate their institution's tenure system. Faculty members at four-year public institutions (37 percent) are more likely to say that there have been efforts to affect the tenure system at their institutions than those at four-year private (25 percent) and two-year institutions (30 percent).

Faculty members (n=382) at institutions where there have been efforts in the past two years to eliminate, weaken, or modify tenure overwhelmingly (97 percent) favor its retention (as is or with some modification).<sup>3</sup> Fifty-five percent of them prefer the retention of tenure in its current format (see Table 13). Perhaps not surprisingly, there is a difference in opinion about tenure according to one's current tenure status. Faculty members already with tenure (59 percent) or on tenure track (55 percent) are much more likely to favor the status quo than are those not on tenure-track appointments (31 percent). Inasmuch as few faculty members are opposed to tenure outright, those who are not on tenure-track appointments (7 percent) are more likely to oppose tenure.

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<sup>&</sup>lt;sup>3</sup> In the survey only faculty members who are employed by colleges and universities that have formal tenure systems were asked about recent efforts to eliminate, weaken, or modify tenure at their institution, which reduces the number of respondents from 1,511 to 1,322. Also, only those who answered "yes" to that question (N=382) were asked if they themselves favor retention of tenure as it is currently, favor some modification, or oppose it altogether.

**Table 13: Favorability Towards Tenure** 

	<u>Favor Retention</u> <u>as Is</u>	<u>Favor Some</u> <u>Modification</u>	Oppose the Retention
<b>Total</b>	55.4%	41.4%	3.0%
<u>Gender</u>			
Male	56.6	40.7	2.5
Female	53.0	42.9	4.2
Race			
White	55.2	41.4	3.2
Non-white	56.8	41.0	2.2
<u>Tenure</u>			
Tenured	59.4	38.0	2.4
On Tenure Track	54.6	42.4	3.0
Not on Tenure Track	31.2	61.8	7.0
Institutional Type			
2 yr. Public	54.0	45.2	
4 yr. Private	60.9	37.4	1.7
4 yr. Public	53.8	41.8	4.4

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

When these 382 faculty members were asked to elaborate on their institution's efforts to affect the tenure system, two actions are noted besides the forming of committees to evaluate the tenure system or the changing of existing tenure evaluation criteria. First, some faculty members see the hiring of more part-time, adjunct, and non-tenure-track positions as an indirect way of tackling the situation. In this way, the tenure system could remain as it is but would be offered to fewer faculty members. For example, one faculty member mentions that there is an "increase in hiring lecturers, and when tenured people retire, they are not replaced." This is consistent with earlier results (Question 7) that 64 percent agree that their institution is hiring more part-time than full-time faculty members.

Second, some mention post-tenure review as a way for their institutions to maintain the integrity of the tenure system and to ensure the productivity of tenured professors. But there are different views on the merits of post-tenure review. One faculty member says "If faculty members who have tenure get two unsatisfactory reviews in two consecutive years, then they can be fired." Another counters that "the post-tenure review is positive but may be viewed by faculty as weakening tenure," while another contends that "post-tenure process can lead to dissolution of tenure." One faculty member even goes so far as to say that creating "a new post-tenure review essentially eliminates tenure." Not surprisingly, 47 percent of faculty members disagree that post-tenure review has improved faculty performance, in answer to an earlier question.

#### **Tuition**

More than half of respondent faculty members (53 percent) think that undergraduate tuition and fees are too high nationally, but less than one-fourth (24 percent) feel that way about the level of tuition at their own institution (see Table 14 and Table A7 in Appendix III). This is consistent with responses to the priority item in Question 8, where 68 percent of faculty members say that their own institutional priorities are on target when it comes to keeping tuition low and competitive. About two in five (40 percent) express the sentiment that overall tuition and fees are currently at about the right level, while three in five (59 percent) feel that is true at their own institution. Only 3 percent feel that tuition and fees are too low nationally, and 15 percent feel that it is so at their own college or university.

**Table 14: Distribution of Opinions Concerning Tuition and Fees** 

	<u>Tuitio</u>	on and Fees in Ge	<u>neral</u>	<b>Tuition and Fees at Own Institution</b>					
	Too High	About Right	Too Low	Too High	About Right	Too Low			
<b>Total</b>	52.8%	39.8%	3.3%	23.9%	59.3%	15.4%			

**SOURCE:** 1999 American Faculty Poll, NORC and TIAA-CREF.

There is a slight downward drift by age and rank in those expressing the sentiment that, nationally, college tuition is too high. Females and non-white faculty members are more likely to feel that way than are male and white faculty members; with regard to academic disciplines, the ends of the "too high" spectrum are the humanities (63 percent) and business (33 percent). With regard to tuition at one's own institution, the only pronounced difference is by institution type. About 43 percent of faculty members at four-year private institutions think that their tuition is too high, compared with only 20 percent and 9 percent of those employed by four-year public and two-year institutions, respectively.

# The Present State of Higher Education

#### Introduction

This final section examines the response to the final survey question that asked respondent faculty members to comment on concerns they might have about the future of higher education in the United States. The majority of survey participants, even after spending 20 minutes or more with an interviewer, did not pass up this opportunity to express their concerns. Overall, more than 99 percent of all survey respondents commented, some quite lengthily.

Responses were perhaps influenced by the question wording, which asks about "concerns" as opposed to a less normative, more objective phrasing. This may have contributed to the general negative flavor of faculty members' comments. In some respects, responses appear inconsistent with those to earlier answers on important professional and personal factors, and on institutional policies and priorities.

## Aggregate Results

These qualitative comments (as opposed to the more quantitative responses to most of the other American Faculty Poll questions) fall into a few selected, well-defined categories and views:<sup>4</sup>

• The issue that garners the most comment (n=412), and again on which there seems to be widespread agreement, is the lack of preparation on the part of students entering college today. There is also the feeling that current students are simply less serious about their work and less motivated, which has resulted in "dumbing down" curricula, "spoon feeding" students, and pressure to give higher marks (grade inflation) and not to fail anyone (n=173). Some lay the blame on elementary and secondary education in general, and especially note the poor preparation that college students have in science, mathematics, English, reading, writing, and technical fields. In addition, a few faculty members fault students for being too career- or job-oriented and "being in college to get a job not an education" (n=30).

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<sup>&</sup>lt;sup>4</sup>Unweighted totals appear in parentheses; individual poll participants could have given multiple responses.

- Faculty members appear quite concerned about the financial realities facing higher education today, especially with respect to the level of, and rates of increase in, tuition, as well as the escalating costs of attending college (n=249). They fear that the middle class and students on lower economic rungs will be priced out, and that higher education "will become a luxury rather than available for every child." Affordability and availability to students from all income ranges and ethnic groups are essential.
- Finding and retaining good qualified faculty members in the future is a concern expressed by some (n=121). They cite the level of remuneration, the increased work load, lack of respect for the profession and assaults on tenure as principal factors leading to the increased use of part-time and adjunct faculty and other "itinerant teachers."
- A number of faculty members express the opinion that a major concern facing higher education today is the lack of respect and public support, financial and otherwise, and the low priority assigned to higher education by government officials at all levels, by taxpayers, and by the general public (n=119). That "public sentiment toward higher education is becoming sour" is reflected in many comments, as well as comments about interference and meddling with some higher educational programs and excessive bureaucracy, paperwork, and numerical evaluations.
- Some complain about the "commodification" of higher education, with one byproduct being an all-out assault on the humanities and liberal arts, and another byproduct being training that is too narrow and too vocational. They see colleges
  becoming more like employment agencies and stressing job-related or
  preprofessional education, overemphasizing "trade" and technology areas of
  instruction (n=72). They are not sanguine about the fate of traditional academic
  disciplines, liberal education, or the development of the mind and the whole
  person. There also is a strong sentiment of "them versus us" when it comes to their
  own college administrators. Some also fault college administrators for being out of

touch, and insistent on accountability by relying on simple numerical measures of performance, and for determining reward (or punishment) on the basis of quantity rather than quality.

• Although some note a concern about the need to keep abreast of and to incorporate the latest technologies into their teaching, as well as preparing students for the world in which they will enter, other faculty members express strong antitechnology sentiments. These range from complaints that their institutions and curricula are becoming "too bewitched by technology" and too geared to commercial and job-market interests, to a sense that "the unbridled use of technology" is privileged over teaching and is leading to breakdowns in faculty-student interactions and relationships (n=55).

Apart from these major concerns and themes, there is a scattering of comments that touch on other common issues in higher education today: training and retaining the next generation of teachers and scholars, dwindling financial support for research, affirmative action (which receives some support and some criticism), political correctness and curbs on free speech (comments are generally negative), the disproportionate influence of intercollegiate athletics on the campuses, multi-culturalism (which elicits both positive and negative comments), distance learning, and some bashing of both liberals and conservatives. But none of these topics attracts the amount of attention nor the depth of feeling anywhere close to the set of concerns discussed above.

#### **APPENDICES**

**APPENDIX I:** The 1999 American Faculty Poll Questionnaire

**APPENDIX II: Other Demographic Information** 

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APPENDIX IV: Methodology Report

- A. Sample Design and Selection
- **B.** Questionnaire Development
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# APPENDIX I:

The 1999 American Faculty Poll Questionnaire

Hello, I am	from the National Opinion Research Center at The University
of Chicago. May I please speak with	?
XX 1 1	d

We are conducting a study of the attitudes and opinions of college and university faculty members regarding issues affecting their careers and the current higher education environment. The study is sponsored by TIAA-CREF in partnership with several national faculty associations; its purpose is to hear the collective voice of faculty and to present their views to the public and to government and education leaders. You were selected at random to participate and we would greatly appreciate your assistance. The success of the survey depends in large part on obtaining a high cooperation rate from those selected for an interview. It should take about 20 minutes to complete, and of course, we want to interview you at your convenience. Is now a good time?

[**If asked**] -- In addition to distributing findings to the media and to government and education leaders, results will be presented in professional journals, reports, and conference papers.

Your responses would be held in strictest confidence, and study results will be released only in statistical summary form.

[**If asked**] -- A report of findings can be sent to you, if you wish; in addition, findings will be provided on the TIAA-CREF Web site once analysis has been completed.

**Screener Questions** (to be asked prior to the start of the interview)

<b>S</b> 1)	At you	r institution are you employed: [CHECK ONE ANSWER]
		full time? (if yes, then go to S2)
		part time? (if yes, thank them and end the interview)
S2)	During	g the typical academic year, do you teach: [CHECK ONE ANSWER]
		only undergraduate students? (if yes, continue with the interview)
		undergraduate and graduate/professional students? (if yes, continue with the
		interview)
		only graduate/professional students? (if yes, thank them and end the interview)

Fo Beg L		were the most important factors in your decision to pursue an academic							
•	career?								
2.		a were to begin your career again, would you still want to be a faculty member? Would ay: [READ RESPONSES]							
		Definitely yes1							
		Probably2							
		Not sure3							
		Probably not4							
	Have	you ever seriously considered switching to a different career, outside of higher							
	educa	ation?							
		Yes1							
		No							
	3a.	Why?							
	3b.	What type of different career did you							
		11.0							
		consider?							
	3c.	How many years ago did you consider this career change?							
		would you rate your overall satisfaction with your current position? Would you say: AD RESPONSES]							
		Very satisfied1							
		Satisfied2							
		Not very satisfied							
		Not at all satisfied4							

Refused/Don't know/Not applicable ......5

5. Next, I would like you to tell me how important the following work and career factors are to you personally. Response options are: Very Important, Important, Not very important, and Not at all important. And then I would like you to tell me how satisfied you are currently with each of these same factors using a scale of Very Satisfied, Satisfied, Not very satisfied, and Not at all satisfied. [VI = Very Important; I = Important; NV = Not Very Important; NI = Not At All Important; R/DK/NA = Refused/Don't Know/Not Applicable; VS = Very Satisfied; S = Satisfied; NV = Not Very Satisfied; NS = Not At All Satisfied; R/DK/NA = Refused/Don't Know/Not Applicable]

# [CIRCLE ONE]

# [CIRCLE ONE]

						R/ DK/						R/ DK/
		VI	I	NV	NI	NA	_	VS	S	NV	NS	NA
a.	Opportunity to educate students	1	2	3	4	5		1	2	3	4	5
b.	Teaching load	1	2	3	4	5		1	2	3	4	5
c.	Teaching courses that interest you	1	2	3	4	5		1	2	3	4	5
d.	Quality of the students you teach	1	2	3	4	5		1	2	3	4	5
e.	Working in a collegial environment	1	2	3	4	5		1	2	3	4	5
f.	Working in an intellectually challenging environment	1	2	3	4	5		1	2	3	4	5
g.	Opportunity to advance knowledge in your field	1	2	3	4	5		1	2	3	4	5
h.	Having institutional support for your scholarly inquiry	1	2	3	4	5		1	2	3	4	5
i.	Opportunity for professional recognition	1	2	3	4	5		1	2	3	4	5
j.	Opportunity to work independently	1	2	3	4	5	Ī	1	2	3	4	5
k.	Flexible work schedule	1	2	3	4	5		1	2	3	4	5
1.	Having time for family and other personal needs	1	2	3	4	5		1	2	3	4	5
m.	An attractive salary and benefits package	1	2	3	4	5	Ī	1	2	3	4	5

# [CIRCLE ONE]

# [CIRCLE ONE]

		VI	I	NV	NI	R/ DK/ NA	VS	S	NV	NS	R/ DK/ NA
n.	Job security	1	2	3	4	5	1	2	3	4	5
0.	Physical working conditions	1	2	3	4	5	1	2	3	4	5
p.	Reputation of department	1	2	3	4	5	1	2	3	4	5
q.	Reputation of your institution	1	2	3	4	5	1	2	3	4	5

. Family responsibilities	
Yes	
No	
o. Physical or health problems	
Yes	
No	
e. Work load	
Yes	
No	
I. Lack of adequate institutional support	
Yes	
No	
e. Inability to obtain research grants or other financial	support
Yes	
No	
. Personal finances	
Yes	
No	
g. Student preparation and commitment	
• •	
Yes	
No	
n. Intradepartmental strains	
Yes	
No	
. Interdepartmental strains	
Yes	
No	

7. Now, I would like you to indicate the extent to which you agree or disagree with each of the following statements about your college or university. Response options are Strongly agree, Somewhat agree, Somewhat disagree, and Strongly disagree.

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Refused/ Don't Know/ Not Applicable
a.	Teaching effectiveness is a primary criterion for promotion of faculty	1	2	3	4	5
b.	Research is rewarded more than teaching	1	2	3	4	5
c.	Post-tenure review has improved the performance of faculty	1	2	3	4	5
d.	The institution is hiring more part- time and adjunct faculty instead of full-time faculty	1	2	3	4	5
e.	Good performance is rewarded at your institution	1	2	3	4	5
f.	Affirmative action programs have made your institution a better place for teaching and learning	1	2	3	4	5
g.	The quality of undergraduate education has improved in recent years	1	2	3	4	5
h.	The quality of students has improved in recent years	1	2	3	4	5
i.	There is pressure to increase faculty work load	1	2	3	4	5
j.	Faculty members are treated fairly regardless of gender, race, or ethnicity	1	2	3	4	5
k.	Faculty specialization has become so narrow as to hinder collegial dialogue	1	2	3	4	5
1.	Financial resources available at your institution are sufficient for the academic needs of faculty members	1	2	3	4	5
m.	Technology available at your institution meets the needs of faculty members	1	2	3	4	5
n.	Non-conforming views of faculty on political and social issues are accepted as well as popular views	1	2	3	4	5

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Refused/ Don't Know/ Not Applicable
0.	Intrusions on academic freedom by the administration are rare	1	2	3	4	5
p.	The administration's actions are consistent with the institution's educational mission	1	2	3	4	5
q.	Collegiality within your department is what it should be	1	2	3	4	5
r.	The faculty's views are consistent with respect to the institution's priorities	1	2	3	4	5
s.	The administration's views are consistent with respect to the institution's priorities	1	2	3	4	5
t.	The administration's support for undergraduate educational programs is fairly balanced with its support for graduate and professional education programs	1	2	3	4	5

8. In your opinion, do the following activities receive the right priority, too high a priority, or too low a priority at your institution?

		Too high a priority	The right priority	Too low a priority	Refused/ Don't Know/ Not Applicable
a.	Allocating appropriate budget funds to undergraduate education	1	2	3	4
b.	Promoting the intellectual development of students	1	2	3	4
c.	Helping students examine their personal values	1	2	3	4
d.	Recruiting more minority students	1	2	3	4
e.	Developing a sense of community among students and faculty	1	2	3	4
f.	Maintaining an atmosphere that encourages the open expression of ideas	1	2	3	4
g.	Hiring more women faculty	1	2	3	4
h.	Hiring more minority faculty	1	2	3	4
i.	Facilitating student involvement in community service	1	2	3	4
j.	Enhancing the institution's competitive standing	1	2	3	4
k.	Providing sufficient financial resources for the faculty's academic needs	1	2	3	4
1.	Increasing student enrollment	1	2	3	4
m.	Keeping up-to-date with technology	1	2	3	4
n.	Integrating technology into the classroom, library, and laboratories	1	2	3	4
о.	Preparing students well for the work force	1	2	3	4
p.	Keeping tuition low or competitive	1	2	3	4

# Next, I have some questions about tenure and tuition.

9.	First, is there a tenure system for faculty at your institution?				
	Yes		1		
	No		.1)		
	9a.	Do you have tenure now or are you on a tenure-track appointment?			
		Have tenure	1		
		On tenure track	2		
		Neither	3		
	9b.	Have there been any efforts in the past two years to eliminate, weaken or modify tenure at your institution?			
		Yes			
		No			
		Not aware	.1)		
	9c.	What were those? (RECORD VERBATIM)	_		
10.		comes to the tenure system for faculty at your institution, would you say that you: RESPONSES]			
	Favor	the retention of tenure as is	1		
	Favor some modification of tenure				
	Oppose the retention of tenure				
	• •	are, don't know, refused, not applicable			
11.		pinion, are undergraduate tuition and fees at colleges and universities in general: RESPONSES]			
	Too hi	igh	1		
	About	right	2		
		bly too low			
		know/Refused/Not applicable			

12.	In your	opinion, are the current tuition and fees at your own institution: [REAI	O RESPONSES]
	Too	high	1
	Abou	ut right	2
	Prob	ably too low	3
	Don'	't know/Refused/Not applicable	4
Fin	ally, these	last questions are about you and your current job.	
13.	What is	your principal activity in your current position at this institution? [RE	AD
	RESPO	NSES]	
	Rese	earch	1
	Teac	ching	2
	Adm	iinistration	3
	Othe	т	4
14	What is	your present academic rank?	
17.		essor	1
		ociate professor	
		stant professor	
		urer	
		uctorer	
	Othe	<u>1</u>	0
15.	Is there	a faculty union at your institution?	
		Yes	1
		No	2 (Skip to 16)
	15a.	Do you belong to it?	
		Yes	1
		Ma	2

16.	How many years have you been in research or teaching full time?
17.	At how many different colleges and universities have you worked during your career?
18.	How many years have you been at your current institution?
19.	What is the longest time you ever spent working at one college or university during your career?     years months
20.	Please tell me the discipline in which you hold your position? [DO NOT READ LIST]
	Education
	Arts and Humanities (foreign languages, English, philosophy, classics)
	Psychology
	Social Sciences (anthropology, economics, political sciences, sociology)4
	Biological sciences5
	Physical sciences (chemistry, geology, physics)6
	Mathematics, statistics, or computer science
	Engineering8
	Agricultural sciences9
	Business
	Communications
	Medicine
	Public administration/Public policy
	Theology/Religion
	Law15
	Other16
	Not sure/Refused

21.	With res	spect to race or ethnicity, how would you describe yourself?	
	Whit	te/Caucasian	1
	Afric	can American/Black	2
	Ame	rican Indian/Native American/Alaskan Native	3
	Nativ	ve Hawaiian/Other Pacific Islander	4
	Asia	n	5
	Asia	n American	6
	Arab	o/Middle Eastern	7
	Mexi	ican American/Chicano	8
	Hispa	anic/Latino	9
	Puert	to Rican American	10
	Othe	er Latino	11
	Mult	ti Racial/Mixed Race	12
	Othe	т	13
	Don'	't know/Refused	14
			<b>a</b>
22.	•	: [ASK ONLY IF CAN'T DETERMINE WITH REASONABLE CERTAINTY	_
		2	
	Fema	ale	2
23.	-	ou please tell me what year you were born? 19	
	Don'	't know/Refused	9
2.4			
24.	•	a U.S. citizen?	
			•
			2
	24a.	What is your citizenship status?	
		Non-U.S. citizen with a permanent visa	
		Non-U.S. citizen with a temporary visa	2

25.	What is y	our marital status? [READ RESPO	NSES]			
	Marrie	ed		1		
	Living	g in a marriage-like relationship		2		
	Widov	wed		3 (Skip to 27)		
	Separa	ated/Divorced		4 (Skip to 27)		
	Never	married		5 (Skip to 27)		
	Don't	know/Refused		6 (Skip to 27)		
26.	Does you	Does your spouse/partner work full-time, part-time, or not at all?				
	Full-ti	me		1		
	Part-ti	me		2		
	Does 1	not work		3		
	Don't	know/Refused		4		
27.	Do you have any children?					
	Yes			1		
	No			2 (Skip to 28)		
	Don't	know/Refused		3		
	27a.	How many children do you have:	[READ RESPONSES]			
		Under 6 years of age				
		Between 6 and 12 years of age				
		Between 13 and 18 years of age				
		Between 19 and 24 years of age				
		25 years of age or older				
		Don't know/Refused		9		

28.	Is your total household income, before taxes: [READ RESPONSES]	
	Less than \$25,000	1
	At least \$25,000 but less than \$50,000	2
	At least \$50,000 but less than \$75,000	3
	At least \$75,000 but less than \$100,000	4
	At least \$100,000 but less than \$150,000	5
	\$150,000 or more	6
	Don't know/Refused	7

29. I have one final question for you: We have asked you a lot of questions about the present state of higher education; what concerns, if any, do you have for the future of higher education in the United States? (RECORD VERBATIM)

# **APPENDIX II: Other Demographic Information**

Citizenship, Marital Status, Children, and Household Income

Less than 2 percent of American Faculty Poll respondents are not U.S. citizens or permanent residents; 93 percent are U.S. citizens, and 6 percent are permanent residents. Only 15 respondents are in the United States on temporary visas, and 10 of those are in the first age category — under 40; thus no analyses for this report are undertaken by citizenship status.

Seventy-six percent of respondents are currently married or living in a marriage-like relationship; 2 percent are widowed; 11 percent are divorced or separated. Also, 11 percent have never been married. Not surprisingly, those under 40 are more likely not to have been married, while those over 40 are less likely to have never married and more likely to be widowed or divorced/separated. (That a higher percentage of faculty males than females—65 percent to 34 percent — as well as whites than non-whites and those in more senior academic ranks are married is largely a function of the underlying distributions of ages than of anything else.) Eighty-five percent of those who are married or in a marriage-like relationship indicate that the spouse or partner is employed, and about two-thirds of the time that person is working full time. The incidence of a spouse working full-time declines at the upper age and academic rank categories; married women are far more likely to have a spouse who works full-time.

Three-fourths of respondents have at least one child (including adult children), and the percentage rises steadily, as one might surmise, with age (and rank). This gives a mean of 2.3 children per married household.

Household income is usually the most difficult area to elicit information in a survey, but only 5 percent of respondents refused to provide an income range. Fifty-three percent of respondents report before-tax household income between \$50,000 and \$100,000; 14 percent indicate a gross income figure less than that range, and 27 percent say their household income is make more than \$100,000 (the question asked for total household income, not individual earnings). The distribution of household income is inversely — and strongly — correlated with age, rank, and tenure status. Thirty-three percent of faculty members under the age of 40 report incomes of under \$50,000, whereas only 4 percent of those 60 years of age and older do. Seven percent of faculty members with tenure have household incomes under \$50,000, while between 23 percent and 29 percent of those in the three non-tenured groups fall into that income bracket. Whites and non-whites exhibit approximately the same distribution of income (especially at

higher income brackets), but females are more likely than males to show lower incomes. This is in part a function of underlying factors such as age, marital status, and academic discipline. Faculty members at public two-year colleges tend to report lower household incomes than those in four-year private and four-year public institutions do. No attempt is made to adjust income for differences in cost of living by region or size of community.

# **APPENDIX III: Tables**

**Table A1: Characteristics by Type of Institution** 

	<u>Total</u>	Two-year Public	Four-year Private	Four-year Public
	%	%	%	%
Teaching Level	<b>7.4.0</b>	05.0	50.5	21.4
Undergraduate only	54.0	95.0	58.7	31.4
Undergraduate and graduate	46.0	5.0	41.3	68.6
<b>Tenure System</b>				
Yes	91.2	71.4	93.8	99.3
No	8.7	28.2	6.2	0.7
Tenure (among those in insti			64.0	60.6
Have tenure	68.7	76.5 18.4	64.0 24.9	68.6
On tenure track	20.9			19.4
Neither	10.3	4.6	11.1	11.9
Principal Activity				
Research	8.4	0.0	8.2	12.5
Teaching	78.6	92.2	80.6	70.8
Administration	5.3	4.5	6.5	5.1
Other	7.7	3.3	4.7	11.6
Academic Rank				
Professor	34.9	27.1	34.8	38.8
Associate professor	26.1	14.5	31.5	28.5
Assistant professor	22.2	14.7	24.5	24.4
Lecturer/Instructor/Other	16.8	43.7	9.2	8.4
Faculty Union				
Yes	37.8	59.3	11.6	42.8
No	59.1	40.1	85.0	53.0
Union Monthaushin (among	41. a a a	:44:		
<u>Union Membership (among t</u> Member	64.3	82.4	52.5	54.0
Non-member	35.7	17.6	32.3 47.5	46.0
Non-member	33.1	17.0	77.5	40.0
<b>Academic Discipline</b>				
Humanities	24.1	24.0	27.9	21.9
Social Sciences	14.2	9.7	17.0	14.7
Science/Engineering	32.4	27.9	28.8	36.8
Education	5.1	3.1	6.4	5.2
Business	6.5	9.0	6.0	5.5
Health/Medicine	8.5	11.4	4.5	9.5
Other	9.1	14.8	9.1	6.4
<b>Number of Institutions Ever</b>				
One	31.4	41.9	28.2	28.2
Two	30.2	24.1	28.7	33.9
Three or more	38.5	33.9	43.2	37.9
Number of Years Teaching/I	Research			
<=10	33.9	36.2	38.0	30.3
11–20	29.4	30.8	27.6	29.9
21–30	23.2	22.3	19.1	26.1
30+	13.5	10.7	15.3	13.8

Table A1: Characteristics by Type of Institution (continued)

-	Total	Two-year Public	Four-year Private	Four-year Public
	%	%	%	%
Gender				
Male	65.2	51.9	66.1	71.0
Female	34.8	48.1	33.9	29.0
Age				
Under 40	17.1	14.4	21.5	15.8
40–49	30.3	31.5	29.6	30.2
50-59	34.3	40.8	29.2	34.2
60+	16.7	11.4	18.8	18.0
Race				
White	85.6	83.4	85.1	87.0
Non-white	12.5	15.0	13.0	11.1
U.S. Citizenship				
Yes	92.6	98.4	91.1	90.6
No	7.3	1.4	8.9	9.1
Marital Status				
Married/				
Married-like relationship	76.1	70.4	77.0	78.4
Widowed	1.4	3.0	1.4	0.6
Separated/divorced	10.6	14.8	7.5	10.4
Never married	11.1	10.2	13.4	10.2
Spouse's Employment (ame				
Full-time	66.0	70.3	64.6	65.0
Part-time	19.2	14.3	19.1	21.3
Does not work	14.7	15.3	16.0	13.7
<u>Children</u>	72.0	7.1.5	72.4	74.2
Have children	73.8	74.5	72.4	74.2
No children	25.4	24.1	26.7	25.2
Household Income	0.5	0.0	0.0	0.2
<\$25,000 \$25,000 \$40,000	0.5	0.8	0.8	0.2
\$25,000-\$49,999	13.9	18.0	17.2	10.1
\$50,000-\$74,999 \$75,000-\$99,999	30.4 22.6	36.0	28.1 23.8	29.1 24.2
		18.0		
\$100,000-\$149,999	20.7	17.8	16.4	24.7
>\$150,000	6.7	2.2	8.3	8.0

Table A2: The Distribution of "Very Important" Work and Career Factors

			1	Age		G	ender	Race/	Ethnicity		Institution T	Гуре
	<u>Total</u>	<u>&lt; 40</u>	40-49	<u>50–59</u>	<u>60+</u>	Male	<u>Female</u>	White	Non- White	2 yr. Public	4 yr. Private	4 yr. Public
Opportunity to educate students	85.8%	78.6%	83.4%	90.0%	88.4%	84.2%	88.9%	86.2%	82.7%	92.8%	83.0%	84.1%
Teaching load	56.5	59.4	59.8	53.4	53.9	52.4	64.3	56.4	59.4	52.6	54.9	59.4
Teaching courses that interest you	77.2	66.7	79.0	79.0	81.8	77.1	77.4	77.3	77.3	77.6	77.7	76.8
Quality of students	45.8	38.4	45.8	47.6	49.5	47.2	43.2	44.8	53.8	41.2	43.9	49.2
Working in collegial environment	61.4	56.3	61.2	63.5	61.2	59.3	65.3	60.7	66.7	55.7	64.8	62.2
Working in intellectually challenging environment	69.8	66.8	68.5	70.9	72.0	69.7	69.9	69.5	73.8	62.0	70.4	73.2
Opportunity to advance knowledge in field	56.3	54.4	56.8	54.3	59.5	58.2	52.7	53.6	72.8	56.5	51.0	59.3
Having institutional support for scholarly inquiry	61.9	63.3	66.1	58.8	57.6	58.8	67.7	59.8	74.9	59.8	65.6	60.8
Opportunity for professional recognition	27.4	24.6	27.5	24.4	34.3	28.5	25.3	25.4	39.9	25.0	25.8	29.6
Opportunity to work independently	62.5	57.1	66.3	62.5	62.2	64.7	58.3	62.7	63.4	60.9	65.1	61.7
Flexible work schedule	59.7	62.3	61.1	59.0	56.3	55.5	67.6	58.8	66.9	58.2	61.5	59.4
Time for family	76.5	78.9	80.1	74.7	70.2	75.7	77.9	75.8	83.6	80.9	77.3	73.8
Attractive salary and benefits package	52.5	46.4	53.0	53.6	53.3	49.7	57.8	49.8	71.4	65.4	45.3	50.5

Table A2: The Distribution of "Very Important" Work and Career Factors (continued)

				Age		G	ender	Race/	Ethnicity		Institution 7	Гуре
	<u>Total</u>	<u>&lt; 40</u>	40-49	<u>50–59</u>	<u>60+</u>	Male	<u>Female</u>	White	Non- White	2 yr. Public	4 yr. Private	4 yr. Public
Job security	58.1	54.4	60.0	58.7	56.6	56.3	61.5	56.7	67.6	70.9	57.4	52.3
Physical working conditions	31.6	29.3	36.9	28.8	28.9	30.9	32.8	28.5	52.7	38.3	31.2	28.6
Reputation of department	40.9	36.8	40.3	40.7	44.2	38.5	45.5	39.3	56.0	59.7	33.1	36.5
Reputation of institution	40.9	39.1	41.7	40.2	40.7	37.9	46.7	38.8	57.7	55.9	35.8	36.7

Table A2: The Distribution of "Very Important" Work and Career Factors (continued)

		Acad	lemic Rank		_			Discipline					Tenu	re Status	
	Lect/ Inst	Asst Prof	Assoc Prof	Prof	Humanities	Soc. Sci	Sci/ Eng	Edu	Bus	Hlth/ Med	Other	Tenured	On Tenure Track	Neither	No tenure sys. at inst.
Opportunity to educate students	91.5%	79.2%	88.2%	85.5 %	90.0%	80.7%	83.6%	95.1%	80.8%	90.1%	85.3%	86.5%	77.7%	90.1%	95.0%
Teaching load	53.6	62.9	59.4	51.6	59.0	60.4	52.0	51.9	49.1	68.4	56.7	55.0	60.5	55.4	61.5
Teaching courses that interest you	73.0	74.7	77.7	80.0	81.6	82.9	71.3	81.8	71.1	78.3	79.3	79.6	70.7	75.8	77.4
Quality of students	42.1	38.8	48.4	49.4	46.3	44.4	43.6	40.3	41.3	60.6	46.7	48.7	36.1	48.9	43.5
Working in collegial environment	57.5	66.4	60.4	61.5	67.8	63.2	57.9	60.1	46.3	69.4	58.6	59.9	65.2	73.6	52.1
Working in intellectually challenging environment	65.4	67.3	71.4	71.8	74.8	75.1	65.2	68.2	54.1	73.1	73.2	71.7	65.9	74.7	60.2
Opportunity to advance knowledge in field	58.0	56.6	52.8	57.8	53.7	53.1	59.6	58.3	44.8	65.5	54.4	56.3	55.6	57.5	56.6
Having institutional support for scholarly inquiry	60.4	62.6	67.2	57.9	68.4	61.5	57.2	61.3	55.6	64.5	64.5	61.9	65.4	56.0	61.1
Opportunity for professional recognition	28.5	25.0	27.8	28.4	31.1	24.8	30.1	20.5	21.8	25.2	21.2	28.9	20.7	32.3	26.7
Opportunity to work independently	58.2	53.0	65.5	68.1	66.5	68.0	59.3	60.0	66.3	58.2	56.9	68.1	51.1	46.0	65.0
Flexible work schedule	55.8	55.1	64.0	60.8	60.7	65.3	54.7	69.0	72.0	54.2	57.7	63.0	56.3	47.3	56.1

Table A2: The Distribution of "Very Important" Work and Career Factors (continued)

		Academic Rank						Discipline					Tenu	re Status	
	Lect/ Inst	Asst Prof	Assoc Prof	Prof	Humanities	Soc. Sci	Sci/ Eng	Edu	Bus	Hlth/ Med	Other	Tenured	On Tenure Track	Neither	No tenure sys. at inst.
Time for family	83.0	73.9	80.1	71.8	76.1	71.5	74.5	76.7	76.0	86.6	82.6	74.5	75.5	82.0	86.2
Attractive salary and benefits package	58.7	50.5	50.9	51.5	54.5	52.6	46.7	44.7	50.2	75.1	52.2	52.0	48.0	59.6	58.5
Job security	64.0	52.4	61.3	56.2	67.2	61.7	53.9	46.4	47.7	63.5	54.5	60.1	51.2	56.4	60.2
Physical working conditions	34.0	22.4	35.2	33.1	36.3	24.8	35.5	34.5	17.7	30.9	23.9	34.5	21.0	27.8	37.9
Reputation of department	56.7	35.5	35.7	40.3	40.2	30.2	38.1	53.6	30.2	60.1	50.4	39.4	34.3	51.5	55.3
Reputation of institution	54.5	34.7	36.4	41.0	39.3	30.0	40.4	53.7	38.3	57.9	42.7	39.6	31.8	49.9	60.1

Table A3: The Distribution of "Very Satisfied" Work and Career Factors

		Age		G	ender	Race/I	Ethnicity		Institution Typ	e		
	Total	<40	40-49	5059	60+	Male	Female	White	Non- white	2 yr. Public	4 yr. Private	4 yr. Public
Opportunity to educate students	48.2%	42.1%	46.2%	50.9%	51.3%	47.4%	49.7%	50.8%	31.3%	50.1%	51.3%	45.4%
Teaching load	20.3	22.0	16.1	20.6	24.9	20.7	19.6	21.0	14.2	18.9	22.1	20.0
Teaching courses that interest you	51.0	42.4	47.2	55.0	58.1	51.2	50.5	52.3	40.1	52.7	53.2	48.8
Quality of students	15.0	12.4	14.6	14.7	19.1	15.6	14.0	15.3	13.1	10.4	19.0	15.0
Working in collegial environment	29.1	31.5	29.4	27.5	29.3	28.5	30.1	30.4	19.5	35.0	30.9	25.1
Working in intellectually challenging environment	27.3	23.0	24.3	27.0	36.7	28.3	25.5	29.2	14.3	22.9	26.9	29.7
Opportunity to advance knowledge in field	23.3	15.7	22.4	22.8	32.5	26.3	17.7	24.4	15.7	22.9	19.1	26.0
Having institutional support for scholarly inquiry	11.9	16.7	11.3	8.9	14.3	11.5	12.5	11.8	11.0	14.3	12.3	10.4
Opportunity for professional recognition	14.6	14.6	9.7	14.8	22.4	17.3	9.4	14.9	12.4	11.5	14.6	16.0
Opportunity to work independently	45.8	43.1	43.0	51.2	42.9	47.6	42.3	47.4	33.5	44.7	44.7	46.9
Flexible work schedule	46.9	49.6	46.4	45.5	48.7	46.8	47.0	47.6	42.6	40.9	45.4	50.7
Time for family	29.9	27.8	26.7	30.3	36.8	33.2	23.7	30.6	26.7	34.1	28.9	28.4
Attractive salary and benefits package	13.5	12.1	12.8	13.5	15.7	14.1	12.3	14.1	9.6	18.2	12.1	12.1
Job security	44.7	28.7	44.3	51.1	49.1	45.1	43.9	46.9	30.7	44.9	43.9	45.0
Physical working conditions	21.8	21.6	19.6	23.5	22.3	22.4	20.7	22.4	17.5	19.8	23.6	21.7

Table A3: The Distribution of "Very Satisfied" Work and Career Factors (continued)

			A	.ge		C	Gender	Race/	Ethnicity		Institution Typ	oe
	Total	<40	40–49	5059	60+	Male	Female	White	Non- white	2 yr. Public	4 yr. Private	4 yr. Public
Reputation of department	23.7	21.6	21.1	25.5	26.6	22.6	25.6	25.1	14.8	35.1	22.3	18.9
Reputation of institution	20.1	20.8	19.1	20.4	19.9	19.6	21.1	20.6	16.1	27.1	21.4	16.0

Table A3: The Distribution of "Very Satisfied" Work and Career Factors (continued)

		Acade	emic Rank					Discipline					Tenur	e Status	
	Lect/	Asst Prof	Assoc Prof	Prof	Human-	Soc. Sci	Sci/ Eng	Edu	Bus	Hlth/ Med	Other	Tenured	On Tenure Track	Neither	No tenure sys. at inst.
Opportunity to educate students	49.0%	43.0%	46.7%	52.4%	46.9%	43.8%	45.7%	62.8%	41.2%	52.2%	60.4%	48.2%	47.8%	35.9%	62.5%
Teaching load	20.9	15.3	16.5	26.2	20.4	19.7	20.1	23.5	23.8	21.8	16.8	21.6	13.9	21.7	23.5
Teaching courses that interest you	50.8	44.3	51.8	54.2	49.1	50.1	45.0	62.2	52.3	61.6	61.3	52.5	41.9	54.8	57.0
Quality of students	14.3	17.6	7.5	19.7	15.8	13.1	11.6	26.8	10.5	24.0	16.6	13.3	13.8	26.2	17.5
Working in collegial environment	36.7	26.0	24.0	31.0	30.0	36.5	27.0	31.9	22.7	27.3	26.7	27.3	27.1	34.8	39.3
Working in intellectually challenging environment	27.3	24.5	23.4	33.2	27.4	27.9	25.5	24.8	19.7	41.3	27.1	28.4	20.6	38.6	21.4
Opportunity to advance knowledge in field	20.6	16.9	17.8	32.5	18.9	27.2	24.5	23.3	20.2	29.1	21.6	25.6	11.8	24.7	30.3
Having institutional support for scholarly inquiry	16.3	11.6	5.5	14.9	11.1	9.1	10.9	10.8	6.6	21.9	16.2	11.0	11.0	10.2	21.1
Opportunity for professional recognition	12.2	13.9	8.3	21.0	12.0	13.5	14.1	5.8	19.6	22.1	19.2	15.3	11.5	17.5	13.0
Opportunity to work independently	42.5	39.5	41.0	54.9	42.6	54.2	43.1	46.6	47.0	48.0	46.7	47.6	41.7	40.6	47.5
Flexible work schedule	45.3	43.9	47.5	47.9	45.8	47.1	44.5	54.1	52.7	54.6	42.6	46.7	46.9	52.4	41.9

Table A3: The Distribution of "Very Satisfied" Work and Career Factors (continued)

		Acade	emic Rank					Discipline					Tenui	re Status	
	Lect/ Inst	Asst Prof	Assoc Prof	Prof	Human- ities	Soc. Sci	Sci/ Eng	Edu	Bus	Hlth/ Med	Other	Tenured	On Tenure Track	Neither	No tenure sys. at inst.
Time for family	34.4	22.5	23.8	36.1	29.1	29.2	29.5	23.9	35.7	30.5	33.4	31.4	21.8	31.9	34.3
Attractive salary and benefits package	13.0	8.9	9.1	18.2	14.4	16.1	10.2	20.4	16.2	11.8	14.7	15.2	9.9	7.0	16.1
Job security	28.4	23.8	53.2	58.1	45.4	47.7	42.5	54.2	41.0	46.3	41.2	56.6	18.2	21.3	42.4
Physical working conditions	21.6	19.1	19.8	24.5	19.0	23.5	23.0	15.8	24.1	27.7	18.2	21.7	19.3	26.7	23.1
Reputation of department	34.2	17.8	17.6	25.8	24.4	18.3	21.4	27.0	26.1	28.7	29.5	22.3	16.7	35.2	35.5
Reputation of institution	32.0	18.5	13.9	20.7	20.4	18.4	15.6	29.5	18.4	31.4	23.6	16.9	19.2	35.0	28.2

Table A4: The Distribution of Factors that Interfered with Academic Work

		Age				Ge	nder	Race/I	Ethnicity		Institution Typ	oe .
	Total	< 40	40–49	50–59	60 +	Male	Female	White	Non- white	2 yr.	4 yr. Private	4 yr. Public
Family responsibilities	30.8%	38.6%	38.4%	27.4%	17.5%	29.0%	34.2%	30.3%	36.3%	22.8%	33.0%	33.4%
Physical or health problems	14.7	14.1	15.8	15.0	13.5	11.3	21.0	15.0	13.4	14.4	17.3	13.2
Work load	46.6	49.9	53.0	47.3	30.8	42.2	54.8	46.4	47.6	44.2	51.9	44.7
Lack of institutional support	41.1	35.2	44.8	44.7	32.3	39.8	43.5	40.6	47.4	34.0	37.3	46.8
Inability to obtain research grants	30.1	31.3	28.8	30.9	30.0	32.1	26.3	28.7	40.1	22.9	28.1	34.7
Personal finances	13.4	12.7	13.6	14.3	13.1	12.9	14.3	12.9	17.6	9.6	15.8	13.8
Student preparation and commitment	50.4	52.9	54.1	50.4	41.2	49.1	52.8	51.2	43.4	61.3	45.3	48.2
Intradepartmental strains	35.1	28.7	38.0	35.1	34.4	32.9	39.3	34.7	34.8	30.1	34.0	38.1
Interdepartmental strains	31.3	27.3	34.5	32.3	26.5	30.1	33.5	30.5	37.4	27.2	30.2	33.9

Table A4: The Distribution of Factors that Interfered with Academic Work (continued)

		Tenure S	tatus				Instit	cution Size		
	Tenured	On Tenure Track	Neither	No Tenure at Inst.	2,000	2,001– 4,000	4,001– 8,000	8,001– 12,000	12,001– 20,000	>20,000
Family responsibilities	29.4 %	39.6 %	27.4 %	24.4 %	28.5 %	26.2 %	31.5 %	27.7 %	31.3 %	37.6 %
Physical or health problems	15.6	16.0	7.6	13.0	14.4	15.9	18.4	17.8	10.2	11.1
Work load	43.6	57.6	40.7	50.3	55.8	50.4	41.7	48.4	39.0	47.2
Lack of institutional support	43.5	43.9	28.8	32.5	43.1	32.6	36.6	48.9	45.9	42.1
Inability to obtain research grants	29.1	37.4	29.0	23.4	36.4	25.9	26.6	30.3	32.4	29.3
Personal finances	11.4	18.0	22.3	7.5	19.0	14.9	12.2	11.4	13.2	10.8
Student preparation and commitment	50.1	52.0	41.7	59.2	53.5	52.4	48.5	49.1	51.7	48.0
Intradepartmental strains	38.0	31.0	26.2	33.3	29.6	30.7	35.4	40.8	41.1	32.9
Interdepartmental strains	31.8	30.3	28.4	33.7	28.6	30.9	29.3	31.7	38.5	27.9

Table A5: The Distribution of "Strongly Agree" Institutional Policies

		Ge	nder	Race/	Ethnicity		Institution Typ	oe
_	Total	Male	Female	White	Non-white	2 yr. Public	4 yr. Private	4 yr. Public
Teaching effectiveness prime promotional concern	32.0%	30.5%	34.6%	32.5%	27.0%	32.2%	42.8%	25.5%
Research is rewarded more than teaching	26.8	28.9	22.9	27.2	26.6	5.4	17.9	42.3
Post-tenure review has impacted faculty performance	5.6	6.6	3.8	5.1	9.8	7.7	4.8	5.1
Institute hiring more P/T vs. F/T faculty	36.1	32.4	43.1	36.3	37.1	57.1	25.0	32.5
Good performance is rewarded at institute	14.7	14.7	14.7	14.8	13.0	14.8	18.5	12.4
Affirmative action has made institute better	20.6	20.0	21.7	19.8	27.8	18.9	20.3	21.6
Quality of undergrads has improved	18.9	16.0	24.2	19.1	16.8	18.4	21.7	17.4
Quality of students has improved	10.3	10.0	10.8	10.3	9.9	4.4	15.6	9.9
There is pressure to increase faculty work load	37.4	36.4	39.5	37.1	41.7	35.6	29.1	43.2
Faculty members are treated fairly	36.9	40.4	30.4	39.7	19.0	46.4	35.6	33.0
Faculty specialization has hindered dialogue	9.7	11.4	6.6	9.1	13.7	7.0	7.7	12.2
Financial resources are sufficient for faculty needs	8.6	9.7	6.5	8.3	11.1	10.9	10.9	6.1
Technology meets needs of faculty	25.2	25.8	24.0	25.8	22.9	27.9	29.4	21.4
Non-conformist views are accepted	22.2	23.7	19.5	23.9	13.8	19.7	19.2	25.2
Intrusions on academic freedom are rare	45.4	44.8	46.4	47.5	33.3	46.7	46.5	44.0
Admin. actions are consistent with mission	23.7	23.8	23.6	24.6	20.2	26.7	29.7	18.8
Collegiality is what it should be	37.4	37.7	37.0	39.4	22.4	47.8	37.4	32.4
Faculty views are consistent with institution	21.1	20.2	22.6	22.0	16.0	24.6	23.5	17.9
Admin. views are consistent with institution	21.1	20.8	21.5	21.4	21.2	25.3	22.4	18.2
Admin. support for programs is balanced	18.3	20.5	14.2	18.8	14.8	14.2	20.4	19.1

**Table A6: The Distribution of Institutional Priority Rankings** 

			A	ge		Gen	der	Race/E	thnicity		Academ	ic Rank	
	Total	<40	40–49	50–59	60 +	Male	Female	White	Non- White	Lect/ Inst	Asst Prof	Assoc Prof	Prof
Allocating funds to undergraduate education													
Too High	4.6 %	3.8 %	3.4 %	4.1 %	8.2 %	6.0 %	2.0 %	4.5 %	6.0 %	2.7 %	6.8 %	2.3 %	5.7 %
Just Right	57.4	59.4	57.1	58.8	54.1	59.2	54.1	58.2	50.2	59.9	57.6	55.5	58.1
Too Low	26.4	21.5	28.3	27.3	28.6	24.8	29.6	26.5	27.7	21.7	21.1	33.6	26.9
Promote intellectual development of students													
Too High	2.5	4.1	2.3	1.8	2.2	2.4	2.8	2.2	5.0	3.8	2.3	1.8	2.8
Just Right	61.3	62.4	66.3	58.4	56.0	60.8	62.3	62.0	56.9	69.7	58.9	59.5	60.4
Too Low	35.8	32.9	31.4	39.0	41.8	36.4	34.7	35.4	37.9	25.7	38.8	38.7	36.1
Help students examine personal values													
Too High	6.2	9.1	6.8	5.2	4.5	5.7	7.2	6.7	2.7	3.2	5.5	6.8	7.5
Just Right	52.8	49.2	56.5	53.2	48.3	53.5	51.7	54.1	42.8	51.3	53.6	54.0	53.0
Too Low	34.8	35.3	30.2	37.8	38.9	34.3	35.9	32.7	50.8	36.3	34.4	36.1	32.4
Recruiting more minority students													
Too High	6.0	6.9	4.9	5.4	8.2	6.1	5.8	5.1	12.7	5.0	7.1	5.5	6.0
Just Right	57.9	53.2	55.7	62.0	58.2	61.2	51.9	59.0	50.0	57.1	46.9	56.8	66.8
Too Low	31.4	32.8	34.8	30.8	26.6	27.5	38.7	31.7	32.9	30.4	36.5	36.5	24.2
Developing sense of community													
Too High	5.2	10.1	4.7	4.0	3.6	5.9	3.8	4.8	5.8	2.9	7.1	4.9	4.8
Just Right	54.5	55.5	56.4	52.5	54.2	53.8	55.7	54.6	55.6	59.6	53.7	57.2	51.1
Too Low	38.9	30.1	38.9	41.6	42.1	39.1	38.6	39.2	36.0	36.8	36.5	37.1	42.6

<u>Table A6: The Distribution of Institutional Priority Rankings (continued)</u>

		Age				-	D /E						
			A	ge		Ger	nder	Race/E	thnicity Non-	Lect/	Academ Asst	Assoc	
	Total	<40	40-49	50-59	60 +	Male	Female	White	Non- White	Inst	Asst Prof	Assoc Prof	Prof
Maintaining atmosphere of open expression													
Too High	3.3	5.9	3.3	1.5	4.6	3.7	2.6	3.2	4.3	3.3	3.2	3.2	3.4
Just Right	67.6	69.4	63.4	69.3	69.7	67.7	67.6	69.2	58.6	62.2	67.5	66.9	71.2
Too Low	28.8	24.4	33.3	28.8	25.7	28.5	29.6	27.4	37.0	34.3	29.1	29.9	25.1
Hiring more women faculty													
Too High	6.0	7.2	4.4	6.1	8.0	8.0	2.3	5.6	8.4	5.9	4.7	5.1	6.7
Just Right	69.6	66.7	67.2	70.4	76.0	69.1	70.3	71.1	59.8	70.4	61.4	70.4	75.2
Too Low	20.7	18.1	27.0	20.8	13.1	19.8	22.6	20.0	28.1	18.7	25.2	22.9	16.6
Hiring more minority faculty													
Too High	6.4	8.9	5.9	4.4	9.3	7.5	4.5	5.4	13.1	5.2	7.7	7.6	5.2
Just Right	50.9	39.8	48.2	53.7	62.1	55.1	43.1	53.0	35.2	45.8	40.2	48.5	61.9
Too Low	39.2	42.6	44.1	39.2	27.9	34.6	47.7	38.4	48.5	45.0	43.7	41.9	31.5
Facilitate student involvement in community service													
Too High	6.7	7.3	8.0	6.1	5.4	7.4	5.3	6.6	7.6	4.4	6.7	7.6	7.0
Just Right	59.0	56.9	57.8	61.4	58.8	60.4	56.4	59.8	51.5	60.8	56.5	57.5	62.1
Too Low	30.4	29.4	31.2	30.4	31.3	29.1	33.0	29.6	38.2	31.2	32.6	30.9	26.9
Enhance institutions' competitive standing													
Too High	15.9	18.9	15.7	13.2	20.0	14.2	19.1	15.7	18.5	10.9	20.4	16.8	15.3
Just Right	57.0	54.0	57.9	58.2	55.6	58.7	53.8	57.0	55.4	61.6	53.8	58.7	56.0
Too Low	25.8	24.5	26.2	27.4	22.5	25.9	25.5	25.8	25.6	26.0	25.5	23.3	26.8

<u>Table A6: The Distribution of Institutional Priority Rankings (continued)</u>

			A	ge		Ger	nder	Race/E	thnicity		Academ	ic Rank	
	m	40	40.40	50.50	60			****	Non-	Lect/	Asst	Assoc	
-	Total	<40	40–49	50–59	60 +	Male	Female	White	White	Inst	Prof	Prof	Prof
Provide sufficient resources for faculty needs													
Too High	1.3	3.5	0.8	1.0	0.5	1.3	1.2	1.4	0.8	0.8	2.6	0.6	1.2
Just Right	34.4	35.2	35.9	32.5	33.9	35.7	32.0	34.2	32.7	41.8	36.7	29.9	32.4
Too Low	64.0	61.3	63.0	65.9	65.4	62.9	66.2	64.2	65.9	56.5	60.7	69.6	66.0
Increasing student enrollment													
Too High	29.4	38.6	30.6	25.0	27.1	29.1	29.9	29.2	33.3	27.0	30.0	32.6	27.9
Just Right	59.8	54.0	57.9	62.3	62.9	61.5	56.5	60.2	52.9	59.1	62.1	57.2	60.3
Too Low	9.1	5.5	9.8	10.3	9.3	8.0	11.2	8.7	12.6	13.1	5.4	9.5	9.3
Keeping up-to-date with technology													
Too High	10.3	9.0	13.1	10.0	6.2	9.2	12.4	10.2	10.7	12.0	10.2	11.7	8.9
Just Right	65.7	62.8	62.0	66.6	73.8	69.6	58.3	67.4	55.5	64.5	62.2	60.5	72.1
Too Low	23.9	28.3	24.9	23.4	19.6	21.1	29.3	22.3	33.8	23.5	27.6	27.8	18.8
Integrating technology													
Too High	9.8	10.2	11.8	9.1	6.7	9.8	9.8	10.0	8.8	8.6	10.0	9.9	10.1
Just Right	67.9	68.2	65.5	66.4	74.4	70.8	62.6	69.1	60.0	71.0	67.0	64.3	69.7
Too Low	22.0	21.4	22.6	24.0	18.9	19.4	27.0	20.7	31.2	19.5	23.0	25.8	20.0
December of students well for your													
Preparing students well for work Too High	8.8	12.0	9.1	7.2	8.5	9.8	7.0	8.5	11.0	8.6	10.8	5.8	10.2
Just Right	75.2	68.8	77.9	77.2	74.4	75.2	75.2	76.5	67.1	79.5	73.8	74.5	74.9
Too Low	15.5	18.2	13.1	15.4	16.7	14.7	16.8	14.4	21.9	11.1	15.0	18.8	14.7
100 L0W	13.3	10.2	13.1	13.4	10.7	14./	10.0	14.4	41.7	11.1	15.0	10.0	14./

<u>Table A6: The Distribution of Institutional Priority Rankings (continued)</u>

			Age		Gei	ıder	Race/E	thnicity		Academ	ic Rank		
	Total	<40	40–49	50-59	60 +	Male	Female	White	Non- White	Lect/ Inst	Asst Prof	Assoc Prof	Prof
Keeping tuition low													
Too High	10.3	11.7	9.6	10.2	9.5	10.8	9.5	10.1	11.9	7.1	9.5	9.2	13.2
Just Right	68.3	60.9	71.2	70.9	66.6	67.8	69.2	70.0	59.1	76.4	58.8	65.4	72.2
Too Low	16.4	20.4	13.8	15.2	20.1	16.3	16.4	14.9	26.1	9.7	21.7	21.4	12.7

**Table A6: The Distribution of Institutional Priority Rankings (continued)** 

				Discipline				Ir	stitution Typ	oe .			Instit	tution Size		
	Humanities	Soc. Sci	Sci/ Eng.	Edu	Bus	Hlth/ Med	Other	2 yr. Public	4 yr. Private	4 yr. Public	<2,000	2,001- 4,000	4,001- 8,000	8,001- 12,000	12,001– 20,000	>20,000
Allocate funds to Undergrad educa																
Too High	4.6%	6.7%	3.9%	3.0%	0.2%	11.4%	1.5%	4.6%	3.2%	5.4%	8.4%	2.8%	2.5%	4.6%	6.1%	3.8%
Just Right	53.1	55.9	57.9	66.0	66.5	57.9	57.4	53.6	64.2	55.3	51.5	67.8	63.1	49.0	57.0	52.7
Too Low	30.4	29.5	27.0	20.2	22.9	18.9	22.8	21.3	24.2	30.2	26.8	21.6	23.1	35.3	24.7	29.5
Promote intellect development of s																
Too High	2.7	2.5	2.5	6.3		2.6	2.0	4.5	2.0	1.9	3.1	3.2	3.8	1.5	1.3	2.2
Just Right	54.8	61.3	65.1	60.3	68.3	61.8	59.7	63.5	63.7	58.9	60.0	63.3	62.7	59.4	61.8	61.3
Too Low	41.9	36.2	32.1	33.4	30.5	35.7	38.3	31.5	34.1	38.9	36.9	33.5	33.1	38.5	36.3	36.0
Help students exa personal values	amine															
Too High	7.1	9.5	5.5	10.2	2.4	4.4	2.7	6.4	6.5	5.9	7.6	7.0	3.8	8.8	8.0	2.8
Just Right	50.8	52.7	52.1	50.9	59.5	52.1	58.2	51.6	66.5	45.4	58.6	57.9	52.3	51.5	49.1	48.5
Too Low	33.9	33.1	33.8	37.8	36.2	41.6	34.9	38.3	23.2	40.0	32.2	31.9	38.1	32.4	34.9	37.8
Recruiting more minority students	s															
Too High	4.6	5.2	7.1	8.4	5.8	4.3	7.5	8.2	4.5	5.8	9.6	4.5	8.4	7.6	5.3	1.2
Just Right	56.3	51.7	63.4	40.5	73.0	57.6	51.5	66.1	53.1	56.8	42.2	55.0	61.7	59.0	62.6	64.1
Too Low	34.1	40.2	24.8	50.3	17.2	24.9	39.9	22.6	38.7	31.4	42.0	37.9	27.1	27.7	27.0	28.4
Developing sense Community	e of															
Too High	3.6	6.2	4.9	8.3	5.8	2.3	8.2	4.9	7.9	3.7	8.2	4.7	5.5	5.8	5.9	1.2
Just Right	49.5	48.4	59.2	52.5	59.1	56.3	56.8	53.2	62.1	50.6	60.4	64.3	56.8	51.4	44.0	50.0
Too Low	46.0	45.4	33.7	39.1	35.1	34.8	35.0	41.4	30.0	42.9	31.4	31.0	36.5	42.4	47.4	44.5

**Table A6: The Distribution of Institutional Priority Rankings (continued)** 

•	Discipline								-4:44: · · · · · · · · · · · · · · · · · · ·				T	44! G!		
	-			Discipline				In	stitution Typ	oe			Insti	tution Size		
	Humanities	Soc. Sci	Sci/ Eng.	Edu	Bus	Hlth/ Med	Other	2 yr. Public	4 yr. Private	4 yr. Public	<2,000	2,001– 4,000	4,001– 8,000	8,001– 12,000	12,001– 20,000	>20,000
Maintaining atmos of open expression																
Too High	3.5	3.8	3.6	2.9	4.6	1.3	1.8	5.0	3.7	2.3	5.6	3.6	2.5	3.1	3.8	2.0
Just Right	57.1	65.9	75.0	65.2	71.7	75.4	63.4	65.8	64.7	70.3	60.2	67.6	65.7	70.2	69.3	73.9
Too Low	38.7	30.3	21.3	31.9	23.7	23.4	34.8	28.8	31.3	27.4	34.0	28.9	31.3	26.4	27.0	24.1
Hiring more women faculty																
Too High	6.8	2.8	8.5	5.6	4.5	0.9	5.0	7.9	5.2	5.5	8.7	4.2	6.8	5.2	7.1	4.1
Just Right	66.0	68.1	66.8	73.0	81.3	76.6	74.9	78.2	64.1	68.6	68.4	74.3	70.5	67.5	67.8	69.7
Too Low	24.4	28.5	20.1	15.6	13.4	11.2	18.6	10.1	28.3	21.4	19.9	19.1	20.4	23.3	18.6	22.1
Hiring more ninority faculty																
Too High	6.8	2.8	6.9	4.4	5.6	6.9	10.8	9.2	3.6	6.7	7.4	3.4	8.1	6.5	10.3	2.3
Just Right	42.6	45.6	56.2	37.0	72.7	56.9	48.3	56.9	40.9	53.9	41.3	48.4	52.4	53.0	51.1	58.6
Too Low	46.7	50.9	32.8	56.9	19.3	29.3	37.2	30.2	51.9	36.0	48.6	44.4	36.4	36.5	33.1	36.6
Facilitate student in community serv																
Too High	6.9	6.9	7.3	10.6	6.4	3.1	4.4	4.7	8.9	6.3	10.3	7.1	7.5	7.7	5.6	2.8
Just Right	58.0	58.8	61.1	49.0	57.1	55.6	64.6	52.4	67.6	57.1	53.0	64.4	63.3	55.3	56.7	59.2
Too Low	30.8	31.1	27.2	35.3	30.7	38.3	29.6	38.7	21.0	32.0	35.3	27.6	26.4	31.5	30.3	32.7
Enhance institution competitive standi																
Too High	18.9	23.3	12.7	23.9	7.6	12.8	12.2	10.8	19.0	16.6	16.7	15.9	14.9	13.8	15.0	18.6
Just Right	54.4	54.1	60.3	52.9	52.3	59.7	59.3	55.5	60.4	55.8	56.3	59.9	60.1	54.5	54.6	55.1
Too Low	24.8	22.2	24.8	23.2	39.0	27.1	28.5	31.2	19.4	26.8	26.4	23.4	24.6	27.2	29.9	24.3

<u>Table A6: The Distribution of Institutional Priority Rankings (continued)</u>

_				Discipline				In	stitution Typ	oe .			Insti	tution Size		
Hı	umanities	Soc. Sci	Sci/ Eng.	Edu	Bus	Hlth/ Med	Other	2 yr. Public	4 yr. Private	4 yr. Public	<2,000	2,001– 4,000	4,001- 8,000	8,001- 12,000	12,001- 20,000	>20,000
Provide sufficient res for faculty needs	sources															
Too High	0.8	1.0	1.7	0.9		3.4	0.6	2.9	0.6	0.9	1.3	1.2	1.2	0.3	3.4	
Just Right	34.8	34.5	32.9	30.3	44.2	37.7	30.4	38.4	36.9	31.0	32.1	37.0	34.6	27.7	30.9	43.3
Too Low	64.0	64.5	65.2	68.3	55.8	57.9	68.9	58.3	62.1	67.9	66.5	61.2	63.9	71.4	65.6	56.5
Increasing student en	rollment															
Too High	31.6	39.4	26.2	29.8	24.4	18.2	32.8	25.0	26.5	33.2	23.4	27.6	28.5	29.2	34.7	31.7
Just Right	57.4	55.1	63.0	57.7	59.0	62.0	61.2	59.4	64.2	57.4	66.3	58.1	60.2	60.2	55.1	59.3
Too Low	7.8	4.3	8.8	12.5	15.4	19.5	5.2	14.7	7.2	7.5	9.4	12.4	10.0	9.0	8.9	5.1
Keeping up-to- date with technology	,															
Too High	19.0	10.3	7.0	7.4	4.8	3.2	11.3	12.8	8.1	10.4	10.0	9.3	9.2	10.2	14.6	8.7
Just Right	60.7	65.6	66.4	66.2	62.1	76.3	68.7	60.0	70.2	65.8	64.6	67.1	69.8	56.9	61.4	73.3
Too Low	20.3	24.1	26.5	26.4	33.1	20.5	20.0	27.2	21.7	23.7	25.3	23.6	21.1	32.4	24.0	17.9
Integrating Technolo	gy															
Too High	13.8	8.3	9.6	8.9	6.0	4.7	10.5	11.9	9.1	9.2	8.5	11.8	10.5	6.1	12.4	8.9
Just Right	67.9	69.0	66.7	61.9	65.7	72.8	71.3	65.4	67.5	69.4	65.2	69.5	64.2	70.9	66.4	73.2
Too Low	17.5	22.7	23.6	29.2	28.3	22.5	18.2	22.4	23.1	21.2	26.3	18.7	24.8	23.0	21.2	17.2
Preparing students well for work																
Too High	12.5	9.4	7.5	9.9	3.9	1.4	12.9	8.4	9.8	8.4	9.9	7.9	7.9	8.4	12.2	5.2
Just Right	70.3	68.9	77.7	74.1	74.7	87.3	78.5	79.3	77.7	71.8	77.0	79.5	75.2	69.8	69.7	80.2
Too Low	15.4	21.7	14.5	16.0	21.4	11.3	8.6	11.9	12.0	19.2	12.7	12.6	16.3	21.8	16.2	14.6

**Table A6: The Distribution of Institutional Priority Rankings (continued)** 

				Discipline				I	nstitution Typ	oe .			Insti	tution Size		
	Humanities	Soc. Sci	Sci/ Eng.	Edu	Bus	Hlth/ Med	Other	2 yr. Public	4 yr. Private	4 yr. Public	<2,000	2,001– 4,000	4,001- 8,000	8,001– 12,000	12,001- 20,000	>20,000
Keeping tuition low																
Too High	6.7	18.8	12.8	9.7	8.3	3.9	6.1	10.3	7.6	12.0	8.2	7.5	11.0	6.0	12.8	15.6
Just Right	66.7	59.7	68.5	72.3	80.4	64.6	77.9	80.1	61.6	66.6	66.7	71.5	69.3	73.7	60.2	71.8
Too Low	19.5	19.3	14.6	18.0	10.1	19.8	9.8	6.2	27.8	14.6	18.0	19.0	17.4	16.9	19.5	5.2

**Table A7: The Distribution of Opinions Concerning Tuition and Fees** 

	Tuiti	on and Fees in Ge	neral	Tuition a	and Fees at Own I	nstitution
	Too High	About Right	Too Low	Too High	About Right	Too Low
<u> Fotal</u>	52.8 %	39.8 %	3.3 %	23.9 %	59.3 %	15.4 %
Age						
<40	53.7	37.4	5.5	25.6	53.7	16.4
40–49	51.2	44.0	2.4	21.4	62.2	15.7
50–59	52.0	42.1	2.4	21.4	62.7	15.2
>60	57.0	32.0	5.1	333	53.2	13.5
<u>Gender</u>						
Male	52.2	40.5	3.8	25.7	57.4	15.9
Female	53.9	38.5	2.5	20.4	62.9	14.4
Race						
White	51.6	40.7	3.6	23.0	59.6	16.2
Non-white	62.4	33.4	1.4	28.0	60.3	10.5
Rank						
Lect/Inst	56.0	39.6	3.0	18.9	67.4	12.7
Asst. Prof	57.4	34.3	4.4	30.8	52.9	12.6
Assoc. Prof	53.2	41.1	2.5	26.9	58.4	13.2
Prof.	48.3	42.3	3.6	20.1	59.6	19.9
<u>Discipline</u>						
Humanities	63.3	29.0	2.4	28.9	54.8	14.9
Soc. Sci.	52.8	42.5	1.7	27.4	59.5	12.3
Sci./Eng.	49.8	41.9	4.4	21.7	55.6	20.7
Education	48.3	46.9	0.7	23.4	69.2	7.4
Business	33.3	58.5	6.2	7.7	74.9	17.4
Hlth/Med	50.3	42.6	1.4	27.3	60.9	8.1
Other	54.3	36.4	5.9	20.9	66.1	12.6
Institution Type						
2 yr. Public	54.7	40.4	2.6	9.2	75.4	15.1
4 yr. Private	56.0	37.7	1.9	42.7	49.7	6.1
4 yr. Public	50.1	40.7	4.5	19.9	57.2	20.9
<u> Tenure Status</u>						
Tenured	51.1	42.2	2.4	23.2	59.4	17.0
On tenure track	54.6	32.9	7.4	26.2	55.3	14.3
Neither	64.8	30.1	2.6	36.9	48.7	11.4
No tenure system at institution	48.3	47.4	1.9	10.1	78.7	10.5

# **APPENDIX IV: Methodology Report**

# A. SAMPLE DESIGN AND SELECTION

NORC utilized a stratified, two-stage, cluster sample design with the first-stage selection probability proportional to estimated size. TIAA-CREF specified 12 strata of particular interest (4 regions; North, South, East, and West, crossed by three institution types; four-year private colleges and universities, four-year public colleges and universities, and two-year colleges), with 125 completed cases in each of the strata. To meet the specifications of the study, NORC selected 25 institutions at the first stage from each of the 12 strata, yielding 300 institutions in all. At the second stage, faculty members were drawn from each selected institution to yield a total of 1,511 completed cases. At the second stage, 10 faculty members were drawn from each selected institution to yield five completed cases after allowing for non-response. Based on findings from the Poll of American Faculty pre-test, in which a 70 percent response rate was achieved, we anticipated a non-response for the main study to range from 30 percent to 50 percent, and we designed our sampling plan on the latter conservative rate of non-response. The sample design layout is shown below:

### Sample Design Layout

	4-year Private	4-Year Public	2-Year Public	Total
North	25 institutions	25 institutions	25 institutions	75 Institutions
	125 faculty	125 faculty	125 faculty	375 Faculty
South	25 institutions	25 institutions	25 institutions	75 Institutions
	125 faculty	125 faculty	125 faculty	375 Faculty
East	25 institutions	25 institutions	25 institutions	75 Institutions
	125 faculty	125 faculty	125 faculty	375 Faculty
West	25 institutions	25 institutions	25 institutions	75 Institutions
	125 faculty	125 faculty	125 faculty	375 Faculty
Total	100 Institutions	100 Institutions	100 Institutions	300 Institutions
	500 Faculty	500 Faculty	500 Faculty	1,500 Faculty

First-stage Frame and Selection. The institutions eligible for sampling included all accredited, nonproprietary U.S. post-secondary institutions that grant a two-year or higher degree and whose accreditation at the college level is recognized by the U.S. Department of Education. The first-stage frame consisted of the latest file of the IPEDS (Integrated Post-Secondary Education Data System). The IPEDS file contained valuable descriptive information, including the number of faculty which was used as the measure of size in selection. NORC also obtained from the Carnegie Foundation for the Advancement of Teaching updated classifications of institutions by type according to the Carnegie classification system. The Carnegie classifications were merged with the IPEDS data in the frame.

First-stage selection of institutions was independent within each of the 12 region/type strata defined above. Before selection, the institutions in each stratum were ordered by the Carnegie classification, and within each classification, further ordered by size. The ranking by size was in a serpentine pattern, thus if a classification was ranked in ascending order, the classification immediately following was in descending order, and so on. The cumulative size in number of faculty for each stratum was divided by 25 to obtain an interval for systematic selection, which was executed with a random start. In this manner, the sample of institutions from each stratum received the benefits of implicit stratification resulting from the ordering by classification and size. The first-stage selection probability for a institution was proportional to its measure of faculty size in the frame.

Replacement Procedures. NORC selected a second replicate sample of 15 institutions by the same method from each stratum (with an independent random start). The original sample of 25 institutions (per stratum) was designated "primary" and subsequently contacted by project staff to obtain second-stage frames (lists) of full-time faculty. However, because not all selected institutions cooperated in a timely manner, it was necessary to replace some of the original selections using the second replicate. If, after a reasonable period of time, all attempts to elicit cooperation from a particular institution failed, a substitute from the backup replicate was selected.

Some institutions that agreed to participate and repeatedly stated they would send their directory failed to do so by the deadline of the field period. As a result, 5 of the 12 strata were finalized with fewer than 25 institutions during the First Stage Sample Selection to yield a total of 294 institutions. The final sample distribution for the First Stage Selection is shown below:

Final Sample Distribution for First-Stage Selection

	4-year Private	4-Year Public	2-Year Public	Total
North	25 institutions	24 institutions	25 institutions	74 Institutions
South	25 institutions	25 institutions	23 institutions	73 Institutions
East	24 institutions	24 institutions	25 institutions	73 Institutions
West	25 institutions	24 institutions	25 institutions	75 Institutions
Total	99 Institutions	97 Institutions	98 Institutions	294 Institutions

Second-stage Frame and Selection. Each cooperating institution selected in the first stage was contacted and asked to supply a list of its full-time faculty to serve as a frame for second stage selection. As an expedient, NORC accepted lists—a campus telephone directory, for example—that contained names of staff members in addition to the targeted faculty members. In order to screen properly for full-time faculty members during selection, however, it was necessary to obtain a good estimate of the number of full-time faculty contained in the list and, correspondingly, a good estimate of the ratio of full-time faculty to total persons therein. The first estimate was acquired from the latest file of IPEDS and the latter from hand counts of the directories themselves. Based on the anticipated rate of response, NORC determined a constant target subsample size. (For example, we assumed a faculty cooperation rate of 50 percent, therefore the target subsample was 5/0.50, or 10.) Because we were screening for faculty who taught at least some undergraduates, we assumed a 40 percent ineligibility rate, which made our target subsample 14 (10 + 4). This constant target subsample size was used, along with the estimated ratio of faculty to total listings, to calculate the second-stage selection rate (and the corresponding systematic interval) that was needed for each institution.

Applying systematic selection at that rate to the institution frame resulted in an overall selection probability for each of the region/type strata that was constant, and on average the required number of completed cases from each institution was obtained. Thus the sample design can be called "equal probability within region/type stratum."

# **B. QUESTIONNAIRE DEVELOPMENT**

The TIAA-CREF Poll of American Faculty is based on an approximately 20-minute interview of full-time faculty who teach at least some undergraduates in two-year colleges and four-year colleges and universities. The study seeks to assess the opinions, needs, and concerns of faculty members in higher education, with items ranging over four broad content areas: level of satisfaction with work and career, interfering factors, opinions about institutional policies and priorities, and socio-demographic data of the respondents.

NORC worked with TIAA-CREF and its expert advisory panel to achieve a questionnaire of appropriate content, worded and formatted in such a manner as to be engaging and clear. See Appendix I. NORC provided substantive expertise on faculty issues as well as assisted TIAA-CREF to identify, prioritize, and articulate the optimal content strands to maximize the utility of the information gathered. NORC's substantive and methodological experts ensured that the final instrument achieved the highest level of logic, flow, and clarity, and validly and reliably measured the intended constructs.

# C. PRE-FIELD PREPARATION

**CATI development.** The data capture system for the American Faculty Poll was developed through our fully automated Instrument Development System (NORCIDS), which is integrated with our computer-assisted telephone interviewing (CATI) system. The CATI instrument featured NORCIDS-defined range checks, skip patterns, and inter-item consistency checks that were built into the program. Therefore, most keying problems and inconsistencies in data elements were identified and resolved at point-of-entry.

**Development of Training Materials.** NORC also developed an interviewer manual for the American Faculty Poll to serve as a training and reference guide for the telephone interviewers. It contained information on the following:

- Description of the American Faculty Poll and its sponsor
- Purpose of the survey
- Sample design
- Respondent eligibility
- Contacting respondents (reaching the respondent through switchboards/assistants)
- Initial respondent contact procedures
- Gaining cooperation and respondent confidentiality

- Refusal aversion/conversion
- Commonly asked questions and answers
- Schedule and projections

Interviewer Training. All telephone interviewers were trained during a half-day session prior to interviewing. The training consisted of both lecture and hands-on experience, with emphasis on the latter. Supervisors gave interviewers an overview of the study and took them through several mock interviews as well as respondent contacting and introduction situations. Each interviewer was required to perform and pass a checkout procedure that included testing the interviewer's ability to gain cooperation and administer the American Faculty Poll questionnaire. The checkout was also designed to test the interviewer's overall knowledge of the material presented during training, particularly the purpose of the survey, reaching the appropriate sample member, assuring respondent confidentiality, and verifying that the interviewer understood how to use the CATI and case management software.

# D. DATA COLLECTION

**Schedule.** The American Faculty Poll employed a single-mode computer-assisted telephone interview (CATI) data collection design. We called sampled faculty were called during the day at their institutions and interviewed them over the telephone. CATI data collection began on April 1, 1999, and ended on May 10, 1999, with the completion of 1,511 interviews. Completion rates were monitored throughout the data collection period to ensure 125 completes per strata. The final sample distribution is shown below:

**Final Sample Distribution** 

	4-year Private	4-Year Public	2-Year Public	Total
North	125 faculty	125 faculty	129 faculty	379 Faculty
South	127 faculty	126 faculty	125 faculty	378 Faculty
East	126 faculty	125 faculty	127 faculty	378 Faculty
West	125 faculty	125 faculty	126 faculty	376 Faculty
Total	503 Faculty	501 Faculty	507 Faculty	1,511 Faculty

**Response Rates.** Throughout the data collection period, project supervisors monitored overall response rates and by the two stratification variables to ensure the projected rate of 50 percent or greater. Response rates were calculated using the following formula:

# Response Rate = (I+P)/(I+P)+e(R+NC+UO+O)+el(UH)

where

**I** = Completed interview

**P** = Partial interview

 $\mathbf{R}$  = Refusal

**NC** = Missed appointments

UO = R not available

**O** = Other NIR (non-interview report)

**UH** = Maximum calls

**e** = incidence rate

**el** = incidence rate and accuracy of sample

The overall response rate for the Poll of American Faculty was 66 percent.

$$66\% = (1511+0)/(1511+0) + .64(336+0+0+708) + .64(192)$$

Listed below are the final response rates by strata:

**Final Response Rates by Strata** 

	4-year Private	4-Year Public	2-Year Public	
North	59%	57%	58%	
South	67%	70%	63%	
East	78%	73%	76%	
West 69%		61%	66%	

# E. QUALITY CONTROL

Monitoring. NORC's telecommunication system allows aural monitoring, and SurveyCraft, the data collection software used by NORC, allows visual monitoring of all interviewer activity. Poll of American Faculty interviewers were monitored throughout the field period. This activity involves real-time on-line aural and visual monitoring and the capture of evaluation data of all data collection activity. In addition to evaluating the quality of the data collected, monitors also evaluated interviewers' skills in gaining cooperation and professionalism. Interviewers received feedback on the quality of their work immediately after the monitoring session. This feedback began with a discussion of the things the interviewer did well and then moved on to constructive criticism pointing out areas needing improvement.

Questionnaire Frequency Review. At three separate times during data collection, questionnaire frequencies were reviewed to ensure that the data collection instrument was performing according to specifications. The frequencies were again thoroughly reviewed at the end of data collection.

**Question Order.** To avoid order-bias effects, NORC developed four random starting points for the looped question series within the questionnaire. These included question numbers 5, 7, and 8. A random number between 0 and 3 was generated for each respondent, which dictated the starting point in the series for each of the above questions. This resulted in an equal distribution of the four starting points.

### F. SAMPLE MANAGEMENT

Telephone Number Management System (TNMS). NORC managed the Poll of American Faculty sample was managed by its Telephone Number Management System (TNMS). The TNMS is an automated call scheduler used to deliver cases to interviewers. The TNMS is a software package that enables the management of a set of telephone numbers. Respondent telephone numbers are used as case ID numbers in TNMS, which allows interviewers and supervisors to access respondent-specific data and to differentiate data collected for different respondents. The TNMS is used to do the following:

- Circulate cases to interviewers by specifying how frequently and in what order different categories of cases should be delivered
- Manage differences in time zones by only delivering cases for which the current local respondent time falls into the scheduled interviewing hours

- Take cases out of circulation for review. This is specified in TNMS by defining which
  outcome codes result in cases being removed from circulation and stored in an electronic
  queue where they can be reviewed. "Refer to Supervisor" and "Refusal" are examples of
  such outcome codes
- Keep respondent contact information in electronic form. These data are available to all who
  need to review and work on cases
- Manage the sample by using different locations in TNMS, for example, to segregate general interviewing cases from refusal cases
- Report production and case status

TNMS case records contain respondent-specific information, including respondent telephone number and call notes, and are used to manage cases before, during, and after the interview. All of this information informs interviewers about which action to take for a specific case. The TNMS is set up to make it easy for the interviewer to identify the next step for completing a case. For example, selecting a refusal conversion location will deliver only cases where the respondent has refused to participate.

**Case Metering**. Case metering is used at NORC to address the following problems:

- Staffing and work load variations caused by peaks and valleys in production
- Broken appointments with respondents, resulting in missed opportunities to gain respondent cooperation, and
- Inconsistency in production from week to week

Case metering was documented as effective in resolving these problems on several previous studies. Over the last several years NORC has collected data about case metering's effects on telephone data collection. We have discovered that it is most efficient to begin the interviewing effort with a relatively large number of cases released for work, and then to replace cases in small batches promptly after they are removed from circulation (i.e., determined to be complete or ineligible).

The sample was divided into 291 strata replicates of approximately 20 cases each. Within each strata replicate, a "batch number" was assigned to each case record. The Telephone Center Supervisor in charge of sample management was responsible for monitoring data collection outcomes and deciding how many cases would be released each day. In general, case metering

results in less fluctuation across the different weeks of data collection in hours per completed interview and enables control of the response rate. Case metering was also used to ensure our projected goal of 125 completes per strata.

# G. DATA PREPARATION

Coding "Other Specify" Responses. Four variables had "other specify" responses. At the close of data collection, "other specify" responses that were clearly codable within the current frame were identified and recoded. Those that did not fit within the current frame were left as "other specify" in the final data set.

Data Merge (Merging total number of undergraduate and graduate student data). At the request of TIAA-CREF, the total number of undergraduate and graduate/professional students was obtained and merged into the survey data set (at the respondent level) for each respondent's institution of employment. The data were acquired from the IPEDS 1997/1998 Fall Enrollment Survey database.

**Data Delivery**. Data were delivered to TIAA-CREF on a CD-ROM, which contained the following files:

# CONTENTS: —ASCII text file [readme.txt] MAIN DATA FILE: —SPSS system file [sps4883f.sav] —SPSS portable file [sps4883f.por] VERBATIM FILE: —ASCII bar delimited text file [4883verb.bsv] —Verbatim file layout - ASCII text file [4883verb.lay] DATA FREQUENCY FILE —SPSS viewer file [4883frqs.spo] WEIGHTED CROSS TABULATIONS

—WordPerfect file [banner1.wpd]

—WordPerfect file [banner2.wpd]

NORC also provided a hard copy set of data frequencies as well as weighted cross tabulations and sent them with the CD.

### H. WEIGHTING

The estimation of universe characteristics such as means and proportions as well as standard errors of those estimates required the weighting of individual faculty responses. Case weights were calculated for each respondent in the sample. The overall weight is the product of the effect of several factors — the probability of first-stage selection, non-response of selected institutions, second-stage selection probabilities (probabilities of selection within institutions), and faculty non-response.

**First-stage Factors.** The first-stage factors are incorporated into a single weight for each institution. Because a replacement strategy was used to deal with non-response of institutions in order to preserve the sample size, the inverse of the selection probabilities provides the appropriate weight to gross up to the population of institutions.

**Second-stage Factors.** There are three elements here: probabilities of selection, non-response, and post-stratification. The product of the three factors — inverse of the probability of selection of each faculty member within the institution, inverse of the within-institution response rate, and correction for random variation in subsample size—was used to produce the second-stage weight. Because we believe that total universe counts for faculty in various classes from the most recent IPEDS file are more accurate than the sample-based estimated totals, the product for each institution was approximated as the ratio of the IPEDS figure to the number of responding faculty.

**Overall Weights.** The weights from the two stages were combined to provide a single case weight for each case. Additional post-stratification adjustment was done on STRATUM level as well.

**Weighted Comparison to Population.** To ensure the accuracy of the weights, an additional check was performed by comparing the American Faculty Poll weighted totals to the 1996/1997 IPEDS Faculty Salaries Survey data on the population, using the following demographic variables:

- Total Sample
- Gender
- Tenure Status
- Academic Rank

Although the IPEDS totals were available filtered by full-time employment status, they were not available filtered by professors who teach undergraduates. Therefore the IPEDS totals do

contain a percentage of graduate-only professors. The American Faculty Poll weighted totals, however, are filtered for professors who are both employed full time and teach undergraduates.

Listed below are the comparison totals for the American Faculty Poll weighted data and the IPEDS data on the population:

Demographic Variable		American Faculty Poll Weighted Total		IPEDS Public Use Data Set Total	
		Total	%	Total	%
Total Sample		423,262	100%	452,414	100%
Gender:	Male Female	275,766 147,496	65.2% 34.8%	291,622 160,792	64.46% 35.54%
Tenure:	Tenured Non-tenured	265,390 157,872	62.7% 37.3%	262,392 190,022	58.00% 42.00%
Professorship:	Professor Assoc. Professor Assist. Professor Instructor Lecturer No Rank Other	147,802 110,281 93,824 48,736 14,914 N/A 7,620	34.9% 26.1% 22.2% 11.5% 3.5% N/A 1.8	139,927 109,328 100,327 24,165 9,583 69,084 N/A	30.93% 24.17% 22.18% 5.34% 2.12% 15.27% N/A

Note: IPEDS responding institutions without standard academic ranks were instructed to report full-time faculty as "No Rank." The American Faculty Poll had no such category. One can assume that the majority of institutions with no ranking system are 2-year colleges which, for the most part, employ lecturers and instructors rather than professors. The difference in totals between "Lecturer" and "Instructor" may exist due to this fact. Whereas many IPEDS institutions with no ranking system reported their full-time faculty as "No Rank," several American Faculty Poll respondents from these same institutions may have classified themselves as "Instructor," "Lecturer," or "Other" in the absence of an official ranking system.

# I. SAMPLING ERRORS

Sample survey estimates are subject to sampling error. The magnitude of the sampling error provides a basis for judging the precision of an estimate. A proper procedure is needed to calculate or approximate the correct variance for an estimate. The proper procedure should take into account the following two factors: stratification and clustering.