

## Section III. Quality of Education Environments (Postsecondary)

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## Remedial education in higher education institutions

*The role of remedial courses in higher education institutions has been the subject of ongoing debate among policymakers and educators. Some view remedial courses as a way to expand educational opportunities for unprepared students, while others feel that remedial courses should be discouraged because precollege-level courses have no place in the college curriculum. The percentage of institutions offering remedial courses and the percentage of freshmen who enroll in them provide a snapshot of the current availability of and demand for these courses at higher education institutions.*

- The percentage of freshmen enrolled in remedial courses and the percentage of institutions offering such courses were similar in 1989 and 1995.
- In 1995, freshmen were more likely to enroll in a remedial mathematics course than in a remedial reading or writing course. In fact, from 1989 to 1995, the percentage of freshmen who enrolled in remedial mathematics courses increased, while the percentage who enrolled in remedial reading or writing courses was similar.
- In 1995, freshmen in public 2-year colleges were far more likely to enroll in remedial courses than their peers in public 4-year institutions (41 versus 22 percent).
- In 1995, almost all public 2-year institutions offered remedial writing and mathematics courses, while about three-quarters of public 4-year institutions offered remedial courses in these subjects. Half of private 4-year institutions offered remedial writing and mathematics courses.
- In 1995, a larger percentage of institutions with high minority enrollment offered remedial reading, writing, and mathematics courses than institutions with low minority enrollment.

### Percentage of freshmen enrolled in remedial courses, by subject, control and type of institution, and minority enrollment: Fall 1989 and 1995

Subject	Fall 1989	Fall 1995						
		Total	Public		Private		Minority enrollment*	
			2-year	4-year	2-year	4-year	High	Low
Reading, writing, or mathematics	30	29	41	22	26	13	43	26
Reading	13	13	20	8	11	7	25	11
Writing	16	17	25	12	18	8	29	15
Mathematics	21	24	34	18	23	9	35	21

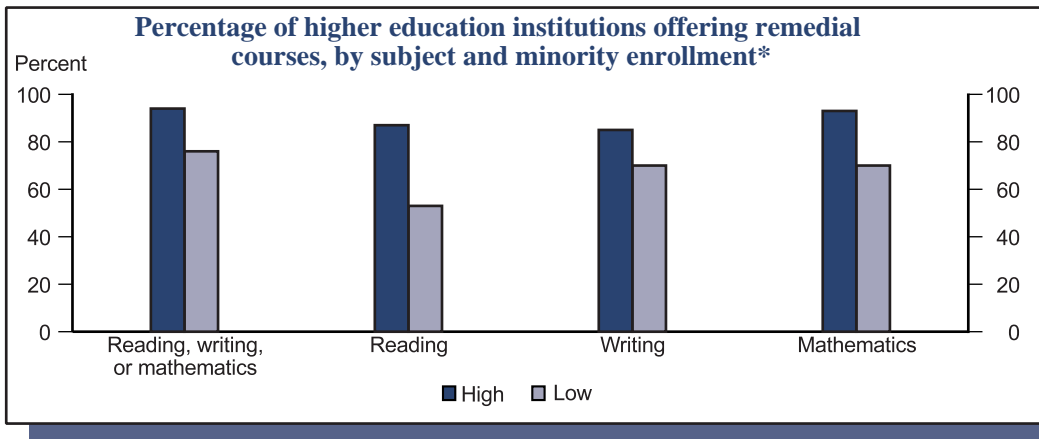
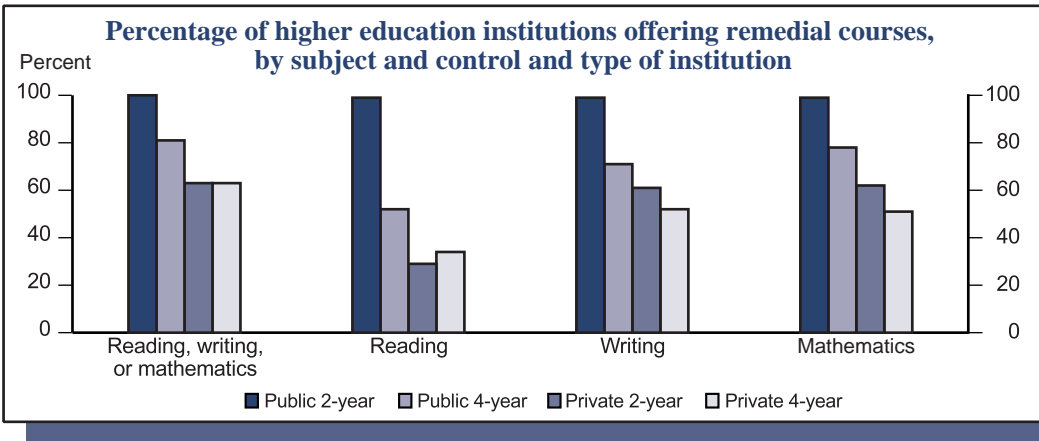
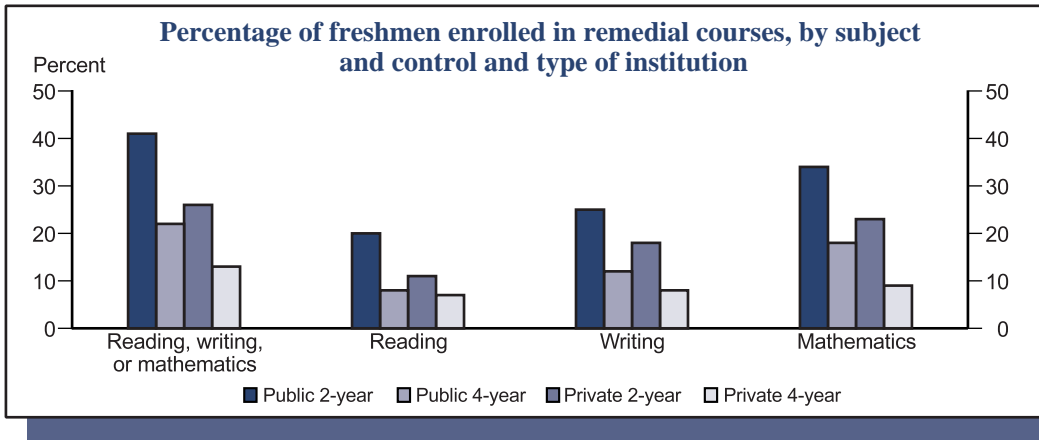
### Percentage of higher education institutions offering remedial courses, by subject, control and type of institution, and minority enrollment: Fall 1989 and 1995

Subject	Fall 1989	Fall 1995						
		Total	Public		Private		Minority enrollment*	
			2-year	4-year	2-year	4-year	High	Low
Reading, writing, or mathematics	74	78	100	81	63	63	94	76
Reading	58	57	99	52	29	34	87	53
Writing	65	71	99	71	61	52	85	70
Mathematics	68	72	99	78	62	51	93	70

\* Institutions with high minority enrollment are defined as those in which total student enrollment, excluding nonresident aliens, is less than 50 percent white.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, *Remedial Education at Higher Education Institutions in Fall 1995, 1996*.

### Remedial education in higher education: Fall 1995



\* Institutions with high minority enrollment are defined as those in which total student enrollment, excluding nonresident aliens, is less than 50 percent white.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, *Remedial Education at Higher Education Institutions in Fall 1995, 1996*.

## Instructional methods of postsecondary faculty

*Postsecondary instructional faculty and staff use a variety of methods to instruct students, make classroom assignments, grade students' work, and test students' competency. There has been much debate about which instructional methods are most effective in educating students. One factor in determining the type of instructional methods postsecondary faculty use may be the program area of the particular class.*

- In fall 1992, about one-third of all instructional faculty and staff used teaching tools such as computational tools/software and computer-aided instruction. Engineering faculty were more likely to use computational tools/software than faculty from other program areas.
- Sixty-three percent of postsecondary instructional faculty and staff assigned student presentations, and 53 percent assigned term or research papers in fall 1992. Compared with faculty in other program areas, natural sciences and engineering faculty were less likely to use student presentations as an instructional method.
- In fall 1992, postsecondary instructional faculty and staff generally were more likely to use competency-based grading than to grade on a curve on a consistent basis across most program areas. However, engineering and natural sciences faculty were more likely to grade on a curve than education and humanities faculty.
- Fifty-seven percent of postsecondary instructional faculty and staff used essay midterms/finals in fall 1992. Humanities and social sciences faculty were more likely to use essay midterms/finals than engineering and natural sciences faculty.

### Percentage of postsecondary instructional faculty and staff who used selected instructional methods\* for undergraduate classes during the semester, by program area: Fall 1992

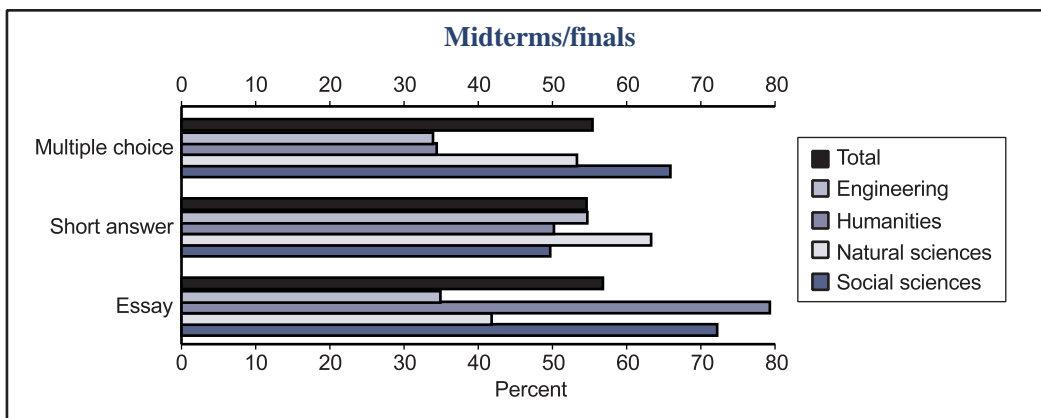
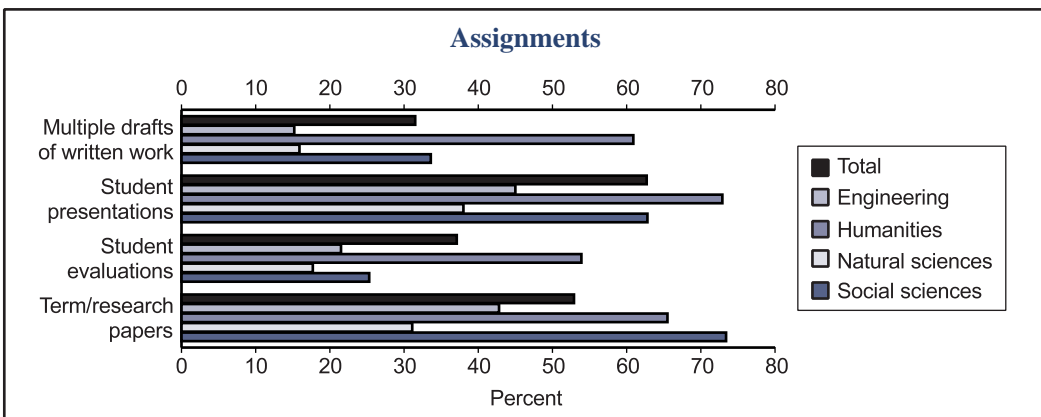
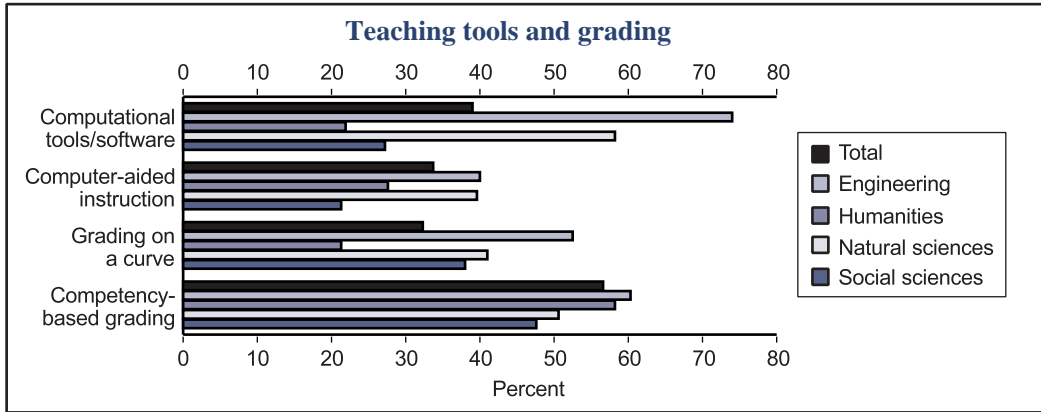
Instructional method	Total	Program area									
		Agriculture/ home economics	Business	Edu- cation	Engi- neering	Fine arts	Health sciences	Human- ities	Natural sciences	Social sciences	Other
Teaching tools											
Computational tools/software	39.0	38.1	54.6	35.5	74.0	21.3	40.4	21.9	58.2	27.2	34.0
Computer-aided instruction	33.7	31.7	36.8	37.4	40.0	32.0	41.5	27.6	39.6	21.3	34.7
Grading											
Grading on a curve	32.3	47.8	38.8	18.7	52.5	26.7	23.4	21.3	41.0	38.0	33.5
Competency-based grading	56.6	45.2	49.9	62.9	60.3	69.1	64.7	58.2	50.6	47.6	60.2
Assignments											
Multiple drafts of written work	31.5	27.7	22.1	39.0	15.2	23.7	25.2	60.9	15.9	33.6	28.3
Student presentations	62.7	69.5	61.0	79.7	45.0	78.4	67.8	72.9	38.0	62.8	70.4
Student evaluations	37.1	32.2	29.4	55.9	21.5	62.4	34.1	53.9	17.7	25.3	41.0
Term/research papers	52.9	59.0	55.6	61.0	42.8	45.1	50.6	65.5	31.1	73.4	53.0
Midterms/finals											
Multiple choice	55.4	65.9	74.6	57.5	33.9	38.1	80.6	34.4	53.3	65.9	64.9
Short answer	54.6	74.2	58.7	53.2	54.7	48.3	43.3	50.2	63.3	49.7	59.5
Essay	56.8	69.2	54.8	64.3	34.9	49.1	34.2	79.3	41.8	72.2	57.4

\* Includes those faculty who responded that they used the indicated instructional method "some" or "all" of the time.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993.

NOTE: See the supplemental note to this indicator for a definition of program areas.

**Percentage of postsecondary instructional faculty and staff who used selected instructional methods\* for undergraduate classes during the semester, by selected program areas: Fall 1992**



\* Includes those faculty who responded that they used the indicated instructional method "some" or "all" of the time.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993.

NOTE: See the supplemental note to this indicator for a definition of program areas.

## Distance education in higher education

*Advances in technology and widespread access to this technology allow many educational institutions to offer courses to students who would otherwise have difficulty participating in higher education (students who work, students who care for families, students who live in remote areas) without being present on campus. This type of education, commonly referred to as "distance education," is an increasingly important component of higher education. Examining the availability and use of distance education can help educators assess the need for these services.*

- In 1995, one-third of higher education institutions offered distance education courses; another 25 percent indicated plans to begin courses within 3 years; and 42 percent did not offer and did not plan to offer these courses in the next 3 years. Higher education institutions in the Northeast were less likely than institutions in other regions to offer distance education courses in 1995, and institutions with larger enrollments were more likely to offer distance education courses than schools with smaller enrollments.
- Public institutions were more likely to offer distance education courses than private institutions, and more students enrolled in these courses in 1995 were enrolled in public 2-year institutions than in other types of institutions (see supplemental table 31-1). Public 4-year institutions were, however, more likely than public 2-year institutions to offer and award degrees and certificates that could be earned by taking only distance education courses (see supplemental table 31-2).
- In 1995, two-way interactive video and one-way prerecorded video were the most frequently used methods of delivering distance education courses (57 and 52 percent, respectively). Furthermore, of higher education institutions who currently were offering or planning to offer distance education, about 80 percent were planning to start or increase the use of two-way interactive video, and about half were planning to start or increase the use of one-way prerecorded video in the next 3 years (see supplemental table 31-3).

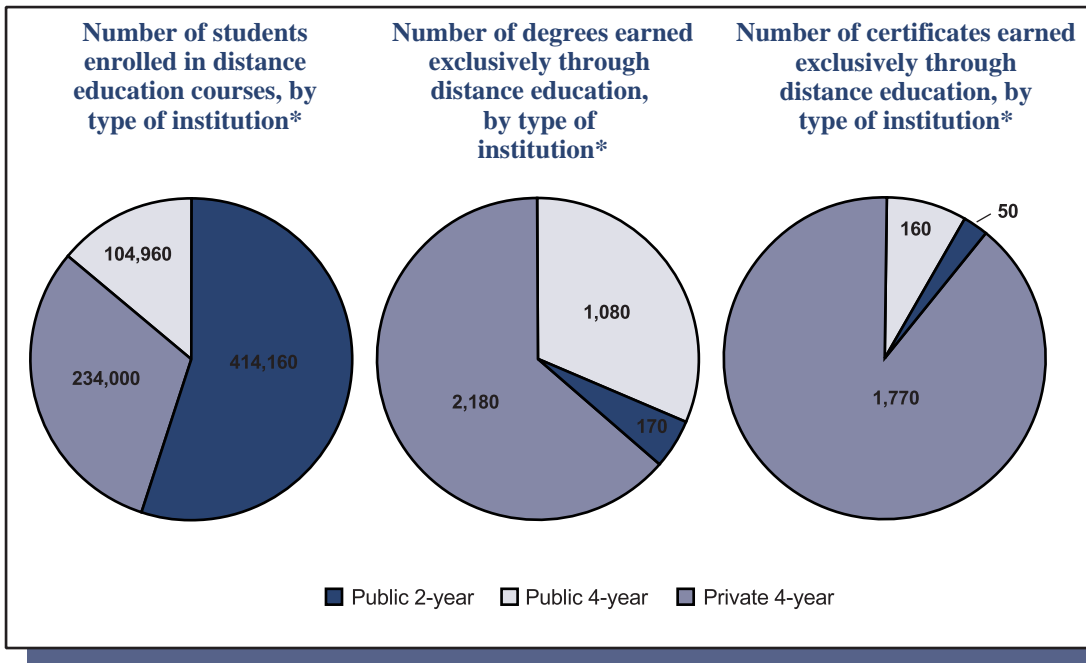
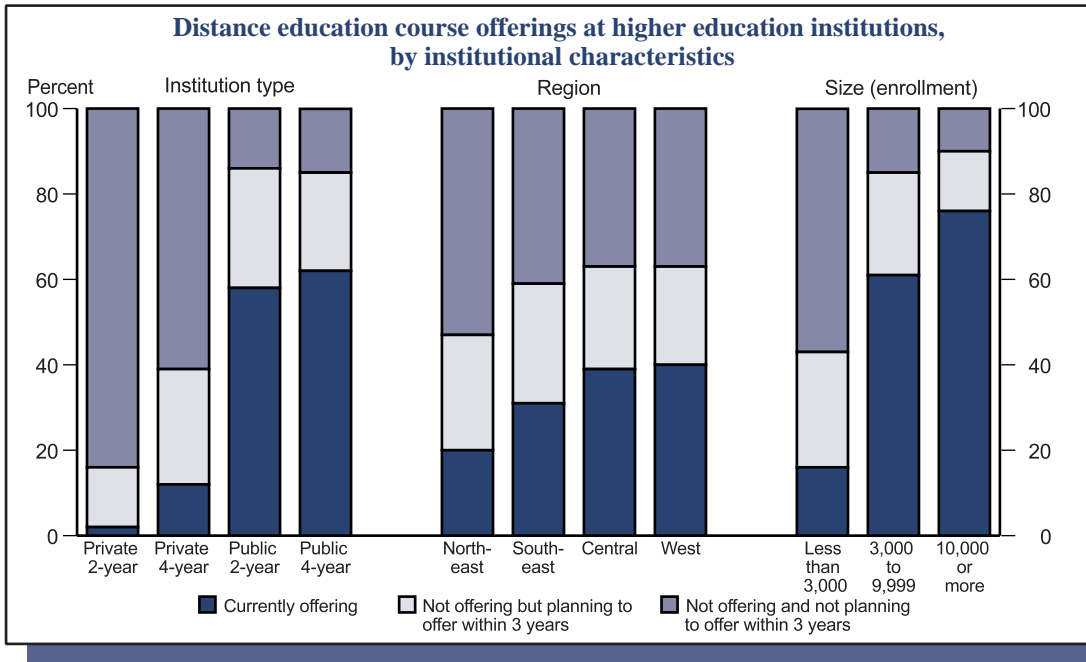
### Percentage distribution of higher education institutions according to status of offering distance education, by selected institutional characteristics: 1995

Selected institutional characteristics	Currently offering distance education courses	Not currently offering distance education courses	
		Planning to offer distance education courses in the next 3 years	Not planning to offer distance education courses in the next 3 years
<b>All institutions</b>	<b>33</b>	<b>25</b>	<b>42</b>
Institution type			
Private 2-year	2	14	84
Private 4-year	12	27	61
Public 2-year	58	28	14
Public 4-year	62	23	14
Region			
Northeast	20	27	53
Southeast	31	28	41
Central	39	24	37
West	40	23	37
Size of institution (enrollment)			
Less than 3,000	16	27	56
3,000–9,999	61	24	15
10,000 or more	76	14	10

NOTE: Details may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, *Distance Education in Higher Education Institutions*, 1997.

### Distance education in higher education: 1995



\* Data for private 2-year institutions are not included because too few of them offered distance education in fall 1995 for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, *Distance Education in Higher Education Institutions*, 1997.

## Part-time instructional faculty and staff at postsecondary institutions

*Part-time faculty provide postsecondary institutions with a flexible work force to respond to fluctuating student enrollments, to fill temporary vacancies, to teach specialized courses, and to reduce faculty costs. While many faculty work part time out of choice, these individuals face job uncertainty, often play no role in academic governance, and lack job benefits provided to full-time faculty. These issues, which are accentuated by an increasing use of part-time instructional faculty, may affect faculty morale and the quality of teaching at postsecondary institutions.*

- In fall 1992, 42 percent of postsecondary instructional faculty and staff worked part time.
- Instructors and lecturers were more likely to be employed part time than faculty with higher academic ranks in fall 1992.
- Postsecondary instructional faculty and staff at 2-year institutions were more likely to be employed part time in fall 1992 than faculty at all other types of postsecondary institutions.
- In fall 1992, females were more likely than males to work part time at both public and private institutions, and at each type of postsecondary institution, except 2-year and other institutions.

### Percentage of postsecondary instructional faculty and staff employed part time, by control and type of institution, sex, and academic rank: Fall 1992

Sex and academic rank	Total	Control of institution		Type of institution					
		Public	Private	Research	Doctoral	Compre- hensive	Liberal arts	2-year	Other
<b>Total<sup>1</sup></b>	<b>41.6</b>	<b>41.4</b>	<b>42.2</b>	<b>23.4</b>	<b>32.6</b>	<b>38.6</b>	<b>35.7</b>	<b>60.2</b>	<b>37.8</b>
Sex									
Male	37.2	37.0	37.7	19.0	27.4	33.3	29.8	60.8	35.0
Female	48.9	48.5	49.9	34.1	43.2	46.7	43.3	59.4	45.0
Academic rank									
Full professor	16.7	11.7	27.1	10.3	13.9	16.9	17.8	25.1	29.1
Associate professor	15.4	13.3	19.6	16.6	11.0	9.5	9.4	22.2	28.9
Assistant professor	16.3	13.2	21.3	14.8	13.0	11.2	17.0	24.5	27.2
Instructor	74.5	73.3	78.9	65.9	73.8	78.2	75.8	74.7	66.2
Lecturer	79.3	78.1	81.3	59.6	81.6	85.6	80.4	95.1	82.2
Average number of classes taught <sup>2</sup>									
Total	1.8	1.8	1.7	1.7	1.6	1.7	1.8	1.8	1.8
Undergraduate	1.8	1.8	1.7	1.7	1.6	1.7	1.8	1.8	1.8
Graduate	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.5	1.4

<sup>1</sup> Included in the total but not shown separately are other academic ranks and those with no academic rank.

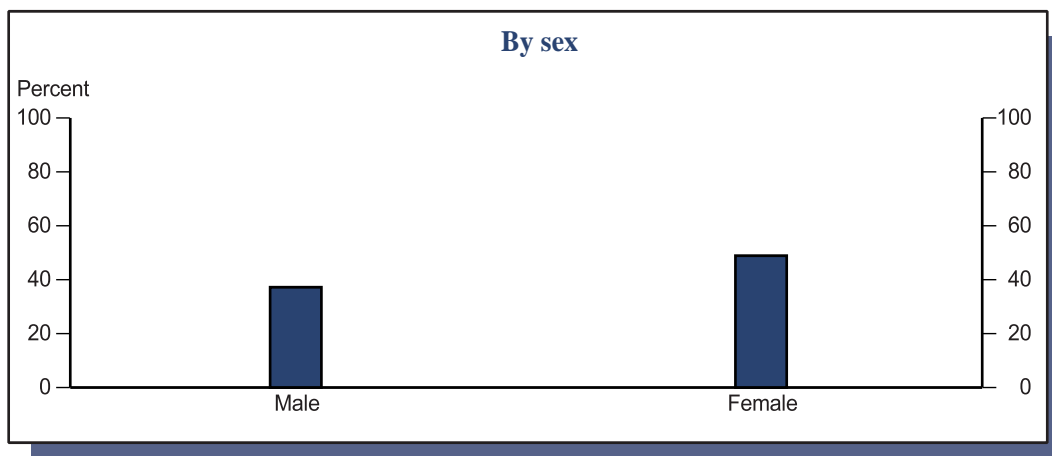
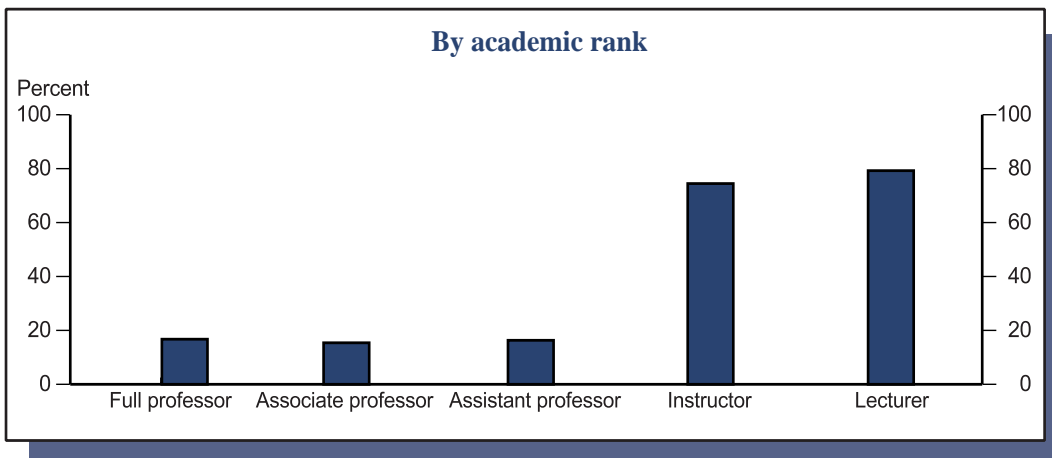
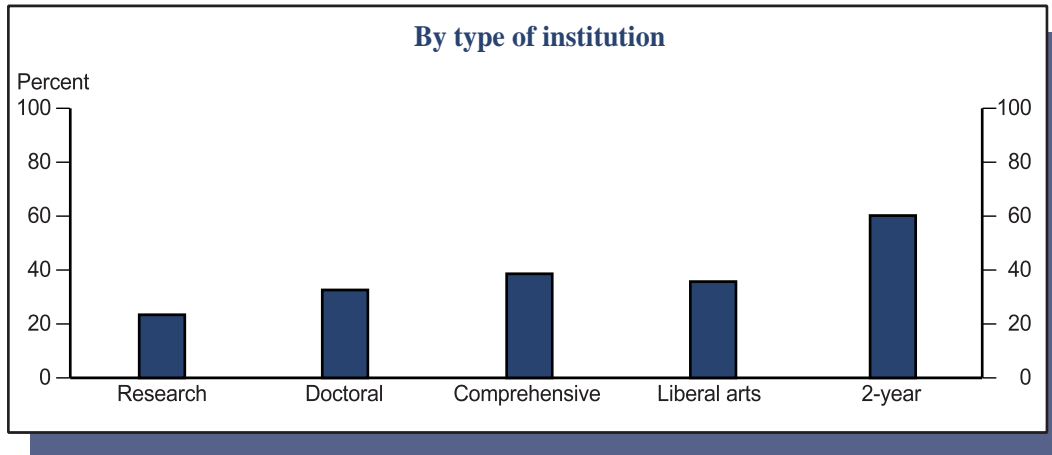
<sup>2</sup> Includes only classes taught for credit. Only teachers who reported teaching at least 1 class for credit regardless of class level (undergraduate or graduate) were included in the analysis.

NOTE: See the supplemental note to this indicator for a description of types of institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993.



**Percentage of postsecondary instructional faculty and staff employed part time:  
Fall 1992**



NOTE: See the supplemental note to this indicator for a description of types of institutions.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993.

## Teaching workload of full-time postsecondary faculty

*Teaching students is only one aspect of a postsecondary faculty member's job. Faculty also spend time on other activities such as research, freelance work, administrative tasks, and professional growth. Debates about tenure, instructional time, and the overall quality of a college education raise questions about the actual time postsecondary faculty spend teaching relative to the time they spend doing other activities.*

- In 1992, full-time faculty members spent 54 percent of their work hours performing teaching activities, 18 percent conducting research, and 13 percent performing administrative tasks.
- Between 1987 and 1992, the percentage of time full-time postsecondary faculty members spent on teaching activities decreased (from 57 to 54 percent); however, the number of classroom and student contact hours per week increased (see supplemental table 33-1).
- Full, associate, and assistant professors tended to spend a higher percentage of their time conducting research than did other faculty in 1992. Assistant professors, instructors, and lecturers spent a higher proportion of their time performing teaching activities than did full or associate professors.
- Full-time postsecondary faculty members at 2-year institutions had more student contact hours per week in 1992 than did faculty at other institutions (87 percent more than those at liberal arts institutions and 67 percent more than those at research institutions; see supplemental table 33-1).

### Percentage of time full-time postsecondary faculty spent on various activities, by academic rank and type of institution: Fall 1987 and fall 1992

Activity	Total <sup>1</sup>	Academic rank					Type of institution				
		Full professor	Associate professor	Assistant professor	Instructor	Lecturer	Research	Doc-tor's	Compre-hensive	Liberal arts	2-year
<b>Fall 1987</b>											
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Teaching activities <sup>2</sup>	57.1	51.3	54.2	57.4	70.1	69.3	43.3	54.1	63.5	67.1	73.1
Research/scholarship	17.3	21.1	20.3	19.0	5.9	9.5	30.3	21.9	12.0	10.2	4.2
Professional growth	4.6	3.7	4.5	4.2	7.0	5.5	4.1	4.1	4.4	4.3	5.2
Administration	13.2	16.4	13.3	10.3	9.9	8.9	13.7	13.5	13.2	13.8	11.0
Outside consulting/ freelance work	2.5	2.8	2.6	1.8	2.7	3.6	2.5	3.1	2.8	1.6	2.5
Service and other	5.4	4.8	5.1	7.4	4.4	3.2	6.4	3.3	4.2	3.0	4.0
<b>Fall 1992</b>											
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Teaching activities <sup>2</sup>	54.4	50.2	52.3	55.3	67.8	61.1	39.0	46.0	60.2	63.6	68.7
Research/scholarship	17.6	21.5	19.4	19.7	6.0	10.2	32.4	23.0	13.3	9.7	4.5
Professional growth	4.6	4.1	4.4	4.5	5.7	5.5	3.6	4.2	5.0	4.6	5.8
Administration	13.1	15.1	13.6	9.3	10.4	12.8	12.9	14.1	12.7	14.6	12.1
Outside consulting/ freelance work	2.7	3.0	2.9	2.1	2.6	2.3	2.6	2.6	2.8	2.3	2.7
Service and other	7.4	6.0	7.1	8.9	7.5	8.1	9.3	10.1	6.0	4.9	6.1

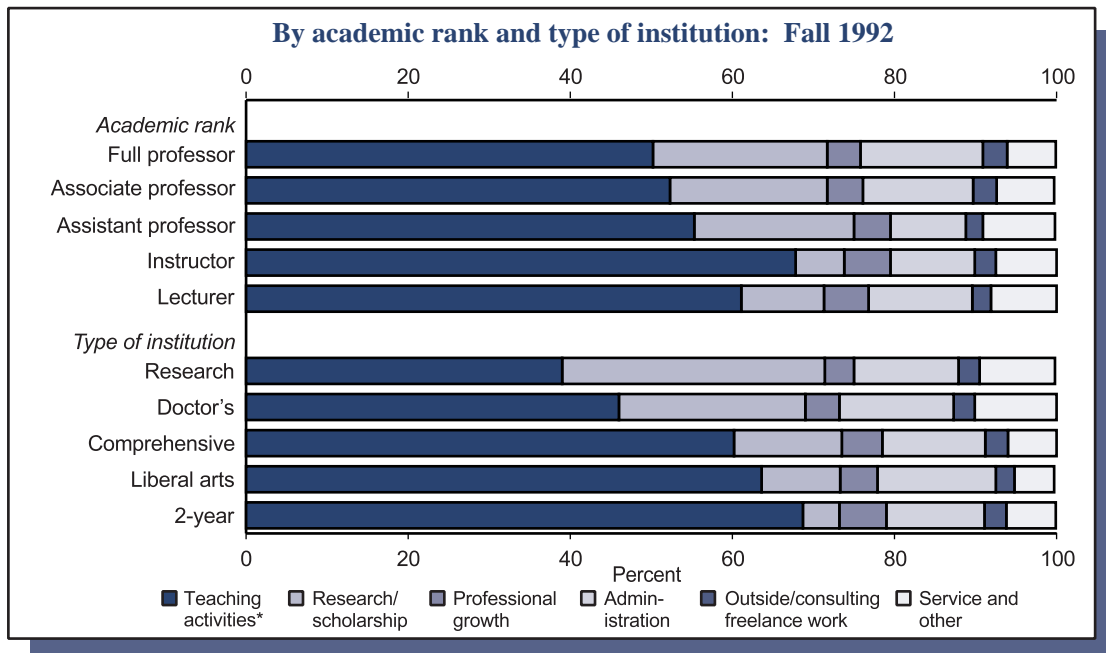
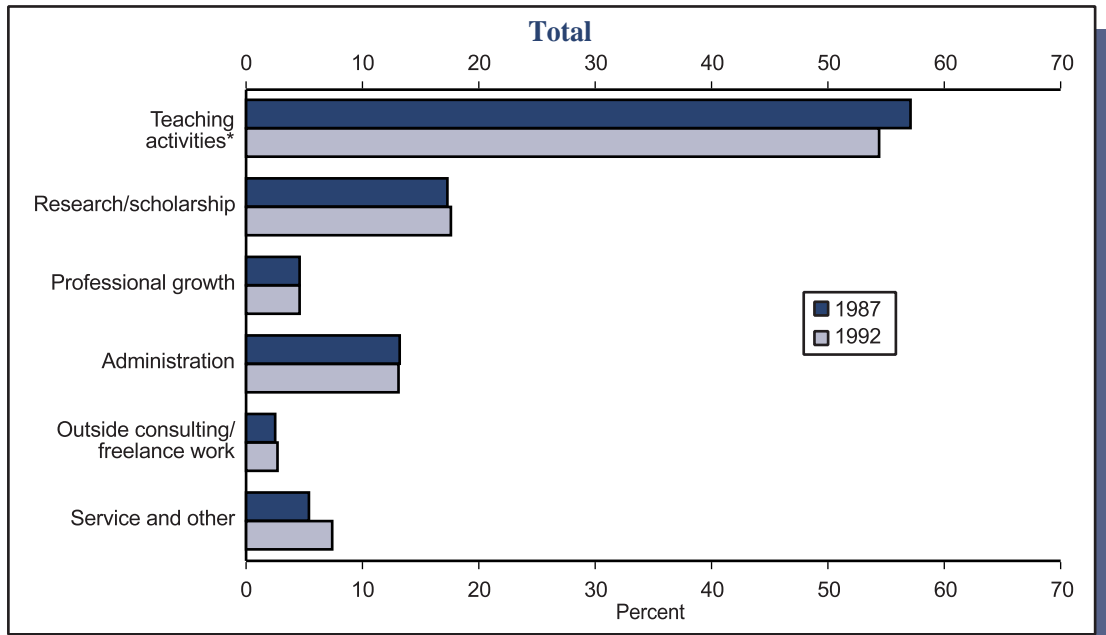
<sup>1</sup> Included in the total but not shown separately are other academic ranks and types of postsecondary institutions.

<sup>2</sup> Includes other activities in addition to teaching in the classroom such as grading papers, preparing for class, developing new curricula, advising or supervising students, or working with student organizations or intramural athletics.

NOTE: Details may not add to 100.0 due to rounding. See the supplemental note to this indicator for further definitions of time spent by faculty.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

### Percentage of time full-time postsecondary faculty spent on various activities: Fall 1987 and fall 1992



\* Includes other activities in addition to teaching in the classroom such as grading papers, preparing for class, developing new curricula, advising or supervising students, or working with student organizations or intramural athletics.

NOTE: See the supplemental note to this indicator for further definitions of time spent by faculty.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1988 and 1993.

