

## **Section 5**

# *Contexts of Postsecondary Education*





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## Section 5: Web Site Contents

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This List of Indicators includes all the indicators in Section 5 that appear on *The Condition of Education* web site (<http://nces.ed.gov/programs/coe>), drawn from the 2000–2004 print volumes. The list is organized by subject area. The indicator numbers and the years in which the indicators were published are not necessarily sequential.



## Introduction: Contexts of Postsecondary Education

The indicators in this section of *The Condition of Education* examine features of postsecondary education, many of which parallel those presented in the previous section on elementary and secondary education. There are 12 indicators in this section: 4, prepared for this year's volume, appear on the following pages, and all 12, including indicators from previous years, are on the web (see Web Site Contents on the facing page for a full list of the indicators).

Postsecondary education is characterized by diversity in both the types of institutions and characteristics of the students. Postsecondary institutions vary in terms of the types of degrees awarded, control (public or private), and whether they are operated on a not-for-profit or for-profit basis. Beyond these basic differences, postsecondary institutions have distinctly different missions and provide a wide range of learning environments. For example, some institutions are research universities with strong graduate programs, while others focus on undergraduate education; some have a strong religious affiliation, while others do not; and some have highly selective entrance policies, while others are open to almost anyone. The student bodies of postsecondary institutions are diverse in other ways as well. For example, many students are employees first and students second rather than primarily students; many delay entry into postsecondary education rather than enroll immediately after high school, and a sizable number come from foreign countries. Indicators in *The Condition of Education* measure these and other dimensions of diversity that are fundamental to the character of postsecondary education.

One important feature of postsecondary education is the courses and programs of study undertaken by students. College transcripts are used in a new indicator that traces the top 30

courses taken by college graduates over the past three decades to measure stability and change in college curricula. Another indicator shows trends in the distribution of postsecondary degrees across fields of study.

Distinct from curriculum but also important to monitor are opportunities to learn in postsecondary education. Indicators in *The Condition of Education* cover the provision of and participation in remedial education, the perceived impact of working while enrolled on postsecondary learning, and distance education.

Like elementary and secondary education, postsecondary institutions provide special support and accommodations for special populations of students. One indicator on the web measures the services and accommodations for students with disabilities in postsecondary education.

The faculty are a critical resource for colleges and universities. They teach students, conduct research, and serve their institutions and communities. Indicators in *The Condition of Education* on the web examine the status of women and minority faculty and measure changes in policies of hiring and tenure.

Finally, resource allocation issues are matters of concern to postsecondary institutions. One issue is how the faculty allocate their time between teaching, research, administration, and other functions. An indicator in *The Condition of Education* on the web shows how faculty of different ranks use their time in different types of institutions.

The indicators on the contexts of postsecondary education from previous editions of *The Condition of Education*, which are not included in this volume, are available at <http://nces.ed.gov/programs/coe/list/i5.asp>.



# Characteristics of Postsecondary Students

## Employees Who Study

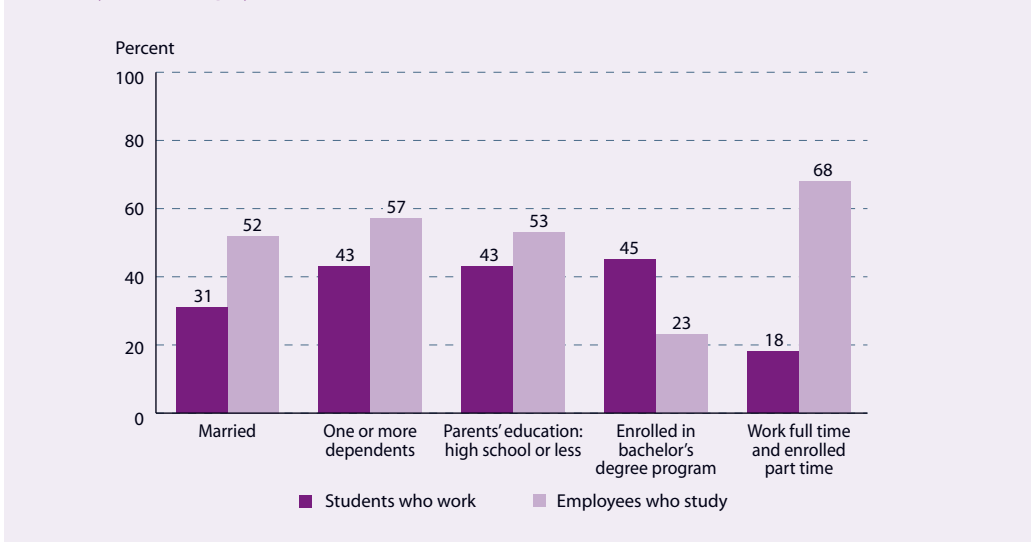
*Many older undergraduates are employees first and students second. They are less likely to complete their postsecondary programs than are older students who work to meet their educational expenses.*

Approximately one-third of undergraduates are older students who are combining school and work: 43 percent of 1999–2000 undergraduates were age 24 and above, and, of those students, 82 percent worked while enrolled (NCES 2002–168). Furthermore, about two-thirds of these older working students characterized themselves as primarily “employees who studied,” as opposed to “students who worked to meet their educational expenses” (NCES 2003–167).

As a group, older students who focus primarily on their jobs have different demographic, employment, and attendance profiles than their counterparts who work to help pay for their education. For example, in 1999–2000, employees who studied were more likely to be married, have dependents other than a spouse, and have parents who did not attend college. Reflecting their primary focus on their jobs, they were more likely to work full time and to be enrolled part time. In addition, employees who studied were less likely than students who worked to be enrolled in a bachelor’s degree program.

Part-time attendance and full-time employment are both independently associated with lower rates of persistence in college and degree attainment (NCES 96–155; NCES 97–578). This suggests that older working students who are primarily employees are less likely to complete their postsecondary programs than their peers who are primarily students. Indeed, among older working students who began their postsecondary education in 1995–96 and had a degree or certificate goal, those who characterized themselves as primarily employees were more likely than those who considered themselves as primarily students to have left postsecondary education without an award within 6 years (55 vs. 38 percent) (see supplemental table 29-1). Among older working students with bachelor’s degree goals, students who work were also more likely than employees who study to have completed a bachelor’s degree after 6 years (34 vs. 8 percent). Among students with certificate or associate’s degree goals, no difference was observed between employees who study and students who work in the attainment rates of their respective goals.

**CHARACTERISTICS OF OLDER UNDERGRADUATES: Percentage of undergraduates age 24 and above with various characteristics, by student/employee role: 1999–2000**



SOURCE: Berker, A., and Horn, L. (2003). *Work First, Study Second: Adult Undergraduates Who Combine Employment and Postsecondary Enrollment* (NCES 2003–167), tables 2, 4, 5, 8, and 10. Data from U.S. Department of Education, NCES, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

FOR MORE INFORMATION:  
Supplemental Note 3  
Supplemental Table 29-1  
NCES 96–155  
NCES 97–578  
NCES 2002–168





# Programs and Courses

## Top 30 Postsecondary Courses

*The college courses in which students earned the most credits have remained relatively stable over the past three decades.*

The list of the top 30 postsecondary courses—also referred to by Adelman (forthcoming) as the “empirical core curriculum”—reports the subjects that students study the most in college, as opposed to reporting what they “should” study, which might be expressed through graduation requirements or faculty surveys. Using the undergraduate transcripts of students from three high school cohorts who later completed bachelor’s degrees, Adelman identified the 30 courses in which students earned the most credits and examined the extent to which course-taking varied among the three groups.<sup>1</sup> Among bachelor’s degree recipients who graduated from high school in 1972, 1982, and 1992, each cohort earned about one-third of their credits from the top 30 postsecondary courses for the cohort (see supplemental table 30-1).

The empirical core curriculum has remained largely stable over the past three decades: 21 courses appeared in the top 30 for each cohort. Six courses each from the humanities and languages, science and mathematics, and social sciences and business were in the top 30 for all three cohorts, as were music performance, physical

education activities, and student teaching. There were some changes over time however. For example, the number of business courses in the top 30 list increased from four for the 1972 cohort to six for the 1982 cohort and then decreased again to four courses for the 1992 cohort.

The empirical core curriculum varied for graduates of “highly selective,” “selective,” and “nonselective” institutions. For the cohort of bachelor’s degree recipients who graduated from high school in 1992, 12 courses appeared on the top 30 lists for all three types of institutions (see supplemental table 30-2). The top 30 list for highly selective institutions included a concentration of engineering and humanities and courses with an international theme (e.g., international relations and non-Western religion). Business courses were relatively common in the lists for selective and nonselective institutions, and student teaching and physical education were on the top 30 list only among nonselective institutions. These differences in coursetaking by the selectivity of institutions may reflect variations in the degrees that are offered and granted at these institutions.

<sup>1</sup>To identify the top 30 courses, Adelman calculated “credit ratios” by summing all the credits earned in a course by each cohort and dividing that sum by the total number of credits earned by the cohort across all courses. Although courses may have different titles across institutions, “introduction to accounting,” for example, represents all introductory accounting courses. See *supplemental note 6* for more information about the data sets used for these analyses, including the definitions of courses and of “highly selective,” “selective,” and “nonselective” institutions.

<sup>2</sup>Courses in the top 30 for all three cohorts (i.e., bachelor’s degree recipients who graduated from high school in 1972, 1982, and 1992).

<sup>3</sup>Courses in the top 30 for the 1992 cohort, but not in the top 30 list for the 1972 and/or 1982 cohorts.

<sup>4</sup>Course also in the top 30 for the 1972 cohort.

<sup>5</sup>Course also in the top 30 for the 1982 cohort.

SOURCE: Adelman, C. (forthcoming). *The Empirical Curriculum: Changes in Postsecondary Course-Taking: 1972–2000*, table 2.1. Data from U.S. Department of Education, NCES, National Longitudinal Study of the High School Class of 1972, “Fifth Follow-Up” (NLS:72/86); High School and Beyond Longitudinal Study of 1980 Sophomores, “Postsecondary Education Transcript Study” (HS&B–So:PETS); and National Education Longitudinal Study of 1988 (NELS:88/2000), “Fourth Follow-up, Postsecondary Education Transcript Survey, 2000.”



FOR MORE INFORMATION:  
Supplemental Note 6  
Supplemental Tables 30-1,  
30-2

### EMPIRICAL CORE CURRICULUM: The top 30 postsecondary courses completed by bachelor’s degree recipients who graduated from high school in 1992

Top 30 status	Fields of study			
	Humanities and languages	Science and mathematics	Social sciences and business	Other
In top 30 for all three cohorts <sup>2</sup>	English composition French: introductory, intermediate Literature: introductory, general Spanish: introductory, intermediate U.S. history surveys World/western civilization	Calculus General biology General chemistry General physics Organic chemistry Statistics (mathematics)	Advanced accounting General psychology Introduction to accounting Introduction to economics Introduction to sociology U.S. government	Music performance Physical education activities Student teaching
Additional courses in the top 30 for the 1992 cohort <sup>3</sup>	American literature <sup>4</sup> Introduction to philosophy Oral communication	College algebra <sup>5</sup> Precalculus <sup>5</sup>	Corporate finance <sup>5</sup> Marketing management <sup>5</sup>	Bible studies Introduction to computing



# Learning Opportunities

## Remedial Coursetaking

Postsecondary institutions provided remedial coursework for 28 percent of entering freshmen in fall 2000; public 2-year colleges provided such coursework for 42 percent of their entering students.

Remedial education provides opportunities for students who lack the academic skills to succeed in postsecondary education. Recent studies have addressed which types of institutions provide remedial courses, how much remediation institutions allow students to take, and whether they offer credit for remedial coursework (NCES 2004–010).<sup>1</sup> According to these institutions, 28 percent of entering freshmen enrolled in any remedial coursework (reading, writing, or mathematics) in fall 2000. Twenty-two percent undertook remediation in mathematics, 14 percent in writing, and 11 percent in reading. Freshmen at public 2-year colleges were the most likely group to enroll in a remedial course (42 vs. 12 to 24 percent of freshmen at other types of institutions). At the 4-year level, freshmen at public institutions were more likely than those at private institutions to do so.

In addition to enrolling at higher rates, freshmen at public 2-year colleges spent more time, on average, in remediation than freshmen at 4-year institutions in fall 2000 (see supplemental table 31-2). Among institutions that offered remedial courses, 63 percent of public 2-year institutions

reported that their students averaged a year or more of remedial coursetaking, compared with 38 percent of public 4-year institutions (and 17 percent of private 4-year institutions).

Among institutions that offered remedial courses, about three-quarters gave institutional credit (which does not count toward a degree) for remedial courses in fall 2000 (78 percent in reading, 73 percent in writing, and 77 percent in mathematics) (see supplemental table 31-3).<sup>2</sup> In addition, 12 to 18 percent gave degree credit (depending on subject), while about 10 percent gave no credit. In each subject area, private 4-year institutions were less likely than other types of institutions to award institutional credit for remedial courses.

Twenty-eight percent of entering freshmen enrolled in remedial courses in both 1995 and 2000, but the average length of time spent in remediation increased during this period (see supplemental tables 31-1 and 31-2). The proportion of institutions reporting that students averaged a year or more in remediation increased from 33 to 40 percent between 1995 and 2000.

<sup>1</sup>Remedial education includes “courses in reading, writing, or mathematics for college students lacking those skills necessary to perform college-level work at the level required by the [sampled] institution.”

<sup>2</sup>In fall 1995 and 2000, institutions reported the most frequent type of credit they gave for remedial reading, writing, and mathematics courses from among the following options: degree credit that counts toward subject requirements; degree credit that counts toward elective requirements; institutional credit (e.g., counts toward financial aid, campus housing, or full-time student status, but does not count toward degree completion); or no credit.

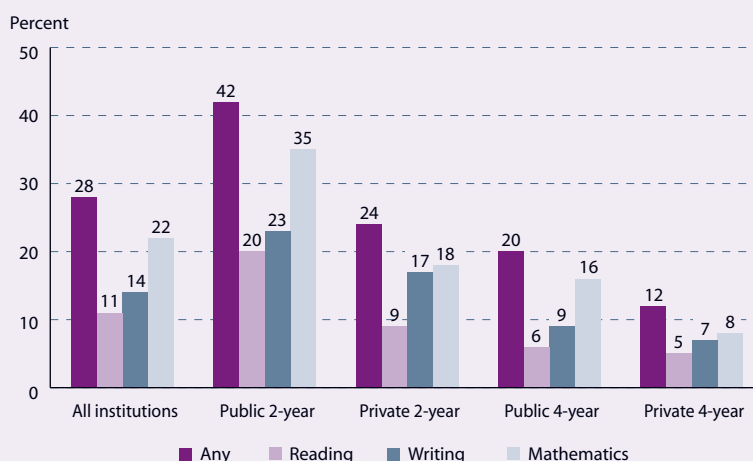
NOTE: Data reported for fall 2000 are based on Title IV degree-granting institutions that enrolled freshmen in 2000. The categories used for analyzing these data include public 2-year, private 2-year, public 4-year, and private 4-year institutions. Data from private not-for-profit and for-profit institutions are reported together because there are too few private for-profit institutions in the sample to report them separately. The estimates in this indicator differ from those in *indicator 18* because the populations differ. This indicator deals with entering freshmen of all ages in 2000 while *indicator 18* examines a cohort (1992 12th-graders who enrolled in postsecondary education).

SOURCE: Parsad, B., and Lewis, L. (2003). *Remedial Education at Degree-Granting Postsecondary Institutions in Fall 2000* (NCES 2004–010), table 4. Data from U.S. Department of Education, NCES, Postsecondary Education Quick Information System (PEQIS), “Survey on Remedial Education in Higher Education Institutions,” fall 2000.

FOR MORE INFORMATION:  
Supplemental Notes 3, 8  
Supplemental Tables 31-1,  
31-2, 31-3



**PARTICIPATION IN REMEDIAL EDUCATION: Percentage of entering freshmen at degree-granting institutions who enrolled in remedial courses, by type of institution and subject area: Fall 2000**







# Learning Opportunities

## Distance Education at Postsecondary Institutions

*The number of course enrollments in distance education nearly doubled between 1997–98 and 2000–01; by 2000–01, about half of these enrollments were at public 2-year institutions.*

Postsecondary institutions offer distance education to improve their ability to reach new audiences as well as to increase enrollments and students' access to learning (NCES 98–062). In 2000–01, 56 percent of all postsecondary institutions offered distance education courses (up from 34 percent 3 years earlier). Continued growth is expected, with additional institutions planning to offer these courses. The public sector is more likely than the private sector to offer distance education courses, with 90 percent of public 2-year and 89 percent of public 4-year institutions doing so in 2000–01, compared with 40 percent of private 4-year institutions. Nonetheless, growth is also occurring in the private sector: the percentage of private 4-year institutions offering distance education courses approximately doubled between 1997–98 and 2000–01 (19 to 40 percent).

Course enrollments in distance education have increased as well at both the undergraduate and graduate levels, increasing from 1.7 million to 3.1 million between 1997–98 and 2000–01 (see supplemental table 32-1).<sup>1</sup> The growth of course enrollments at public 2-year institutions

is particularly notable. In 1997–98, public 2- and 4-year institutions each had approximately 710,000 enrollments in distance education courses. In 2000–01, enrollments at public 2-year institutions rose to nearly 1.5 million, compared with 945,000 at public 4-year institutions. By 2000–01, about half of all course enrollments in distance education courses were at public 2-year colleges.

The extent to which colleges and universities offer certificates and degree programs designed to be completed solely through distance education offers an additional indication of the penetration of distance education at the postsecondary level. Among institutions offering any distance education courses, the proportion offering programs designed to be completed entirely by distance education increased between 1997–98 and 2000–01 for degree (22 to 30 percent) and certificate programs (7 to 16 percent) (see supplemental table 32-2). The increases occurred among public 2- and 4-year institutions, but the apparent differences were not statistically significant for private 4-year institutions.

<sup>1</sup>Some students enroll in more than one distance education course, so the total enrollment is greater than the number of students.

NOTE: Percentages for 1997–98 are based on the estimated 5,010 2- and 4-year postsecondary education institutions in the nation. Percentages for 2000–01 are based on the estimated 4,130 2- and 4-year Title IV-eligible, degree-granting institutions in the nation. Data for private 2-year institutions are not reported in a separate category because too few private 2-year institutions in the sample offered distance education courses to make reliable estimates. Data for private 2-year institutions are included in the totals and in analyses by other institutional characteristics.

SOURCE: Lewis, L., Snow, K., Farris, E., and Levin, D. (1999). *Distance Education at Postsecondary Education Institutions: 1997–98* (NCES 2000–013), tables 2 and 5; and Waits, T., and Lewis, L. (2003). *Distance Education at Degree-Granting Postsecondary Institutions: 2000–2001* (NCES 2003–017), tables 1 and 4. Data from U.S. Department of Education, NCES, Postsecondary Education Quick Information System (PEQIS), "Survey on Distance Education at Postsecondary Education Institutions," 1998–99 and "Survey on Distance Education at Higher Education Institutions," 2000–01.



FOR MORE INFORMATION:  
 Supplemental Notes 3, 8  
 Supplemental Tables 32-1,  
 32-2  
 NCES 98–062

**DISTANCE EDUCATION OFFERINGS AND ENROLLMENT: Percentage of 2-year and 4-year postsecondary institutions offering distance education courses or planning to offer them within the next 3 years of the survey and total course enrollments, by type of institution: 1997–98 and 2000–01**

