Archived Information

GETTING READY PAYS OFF

A Report for National College Week October 16-20, 2000

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This crush of new students comes at a time when many of our nation's colleges and universities are already full and becoming more selective in their admissions process. This will mean increasing pressure for high school seniors to get into the college of their choice. This is why I continue to encourage America's higher education community to enter into a sustained dialogue with education reformers at the middle and secondary school levels. The old paradigm of two distinct systems of education going their own way does not fit our modern times.

> **Richard W. Riley** U.S. Secretary of Education *Seventh Annual State of American Education Address* Durham, North Carolina February 22, 2000

HIGHLIGHTS

More Americans Are in College Now Than Ever Before: Enrollment Continues to Surge

- Total college enrollment is expected to reach a record 15.1 million students in 2000. Between 2000 and 2010, full-time enrollment is projected to increase by 19 percent, and part-time enrollment is projected to increase by 11 percent.
- Undergraduate enrollment is expected to rise from 13.1 million to 15.2 million between 2000 and 2010, an increase of 16 percent.
- The number of public high school graduates is expected to reach 2.8 million by the year 2010, an increase of 9 percent compared to 2000. About 63 percent of all 1999 high school graduates went directly on to college in fall 1999.
- About 36 percent of all 18- to 24-year olds enrolled in a 2- or 4-year college or university in 1999.
- About 1.2 million bachelor's degrees are expected to be awarded in 2000-01, up 9 percent from 1990-91.

Students Taking the Tough Courses Are Showing Results

- The percentage of students taking chemistry rose from 40 percent in 1986 to 57 percent in 1999, an increase of 17 percentage points
- The percentage of 17-year-olds who completed higher-level math courses—algebra II and precalculus or calculus —rose 14 percentage points from 1978 to 1999.
- Black and Hispanic students who had high school curricula of rigorous intensity and high quality and completed a high-level math course were more likely to complete a bachelor's degree program than their peers who pursued a less rigorous curriculum.
- Between 1984 and 1999, the number of students who took AP exams increased markedly, rising from 50 to 152 per 1,000 12th-graders.

College Students Are More Diverse

- Women have outnumbered men on college campuses since 1979. In 2000, about 57 percent of college students are women.
- In 2000-01, it is expected that women will receive 57 percent of all bachelor's degrees and 58 percent of all master's degrees.
- About 1 million persons in postsecondary institutions are disabled. About 5 percent of undergraduates and 3 percent of graduate students are disabled.
- In 1995-96, about one-third of freshmen at all 4-year colleges and more than one-half of freshmen at public 2-year colleges were first-generation college students. The first-generation students tended to be older than college students on average, with 46 percent 20 years or older, compared to 33 percent overall.

College Is Affordable

- In 1999-2000, more than half of the students attending 4-year institutions paid less than \$4,000 in tuition and fees, and almost three-quarters paid less than \$8,000. The average cost in tuition and fees, room and board for a 4-year public institution in 1999-2000 was \$8,265.
- In the 1990s, average aid per full-time equivalent student increased from \$3,614 in 1989-90 to \$6,085 in 1998-99, a 68 percent increase. In part, this increase reflects larger Pell Grant awards for needy students. Since 1993, the maximum award has increased 36 percent to \$3,125, and now covers about 92 percent of the tuition and fees at a public 4-year college.
- In 1999, approximately 13 million Americans were eligible for the Hope and Lifetime Learning tax credits for postsecondary training and education, totaling \$7 billion in aid.

College Pays Off

- People with college degrees earn more money than those with high school diplomas or equivalent credentials. In 1999, 25- to 34-year-olds with a bachelor's or higher degree earned nearly \$15,000 more (\$40,000 compared to \$25,122) than high school graduates, on average. The bachelor's degree recipients earned more than twice as much as high school dropouts who earned an average of less than \$18,000. A large difference remains between the earnings of 25- to 34-year-old men and women despite some closure of the gap over the past three decades.
- For the first time in many years, a Bureau of Labor Statistics (BLS) analysis found that total college-level job openings between 1998 and 2008 will nearly equal the number of college-educated entrants to the labor force. This contrasts with recent years when the number of openings was somewhat lower than the number of graduates.
- BLS expects that the number of college-level jobs between 1998 and 2008 will grow faster than the number of jobs for workers with less education.
- "Computer engineer" is expected to be the fastest-growing occupation over the next decade. Other rapidly growing occupations include: computer systems analysts, database administrators, physician assistants, residential counselors, engineering and information systems managers, and financial services sales agents.

GETTING READY PAYS OFF A Report for National College Week October 16-20,2000

A Message from U.S. Secretary of Education Richard W. Riley

Going to college has always been part of the American Dream, and now, more than ever before, Americans from all walks of life are fulfilling that dream by attending the college of their choice. For the third year in a row, this nation has set a new enrollment record: 15.1 million Americans are in college. This surge will continue all through the coming decade, with enrollment expected to increase by 2.4 million between 2000 and 2010, and full-time enrollment projected to increase by 19 percent.

Our colleges and universities are also developing a more diverse student population. About one million disabled Americans attend college. About one-third of freshmen at 4-year colleges and more than one-half of freshmen at public 2-year colleges are first-generation college students. Helping young people who hope to become the first in their family to attend college is one of the purposes of National College Week. We want these young people to know that taking tough academic courses in high school is the best way to get ready for college, and that new pathways to college, like an exciting new program we call GEAR UP, are available to help them reach their goals.

GEAR UP seeks to significantly increase the number of low-income students who are prepared to enter college and succeed in their dream of getting a college degree. Currently, 710,000 low-income students receive the mentoring, tutoring, and day-to-day support they need to get ready to do college-level work. I am particularly pleased that 164 GEAR UP partnerships have developed across the country, involving over 1,000 organizations and including some of our nation's finest colleges and universities.

A second purpose of National College Week is to let young people know that college is affordable. Misunderstandings about the true cost of college have led many promising students from low-income families to give up their dream of going to college, according to a 1998 report entitled *Factors Related to College Enrollment*. Despite the fact that many parents and students worry about how to pay for college and have little in the ways of savings, it is important to know that federal financial aid is readily available. Indeed, federal financial aid increased by almost 70 percent in the 1990s. I am particularly pleased that approximately 13 million Americans are already taking advantage of the Hope and Lifetime Learning Tax credits.

The third purpose of National College Week is to make sure that young people know that all the hard work they do to get ready for college education pays off in the long run. As this report notes, an American with a bachelor's or higher degree earns nearly \$15,000 more than high school graduates on average (\$40,000 compared to \$25,122). One of the most important facts noted in this report is that the most promising jobs in the future will require employees with a college degree.

Figure 1. Enrollment in public and private colleges, by attendance status and type of college: 1986 to 2010



(In millions)

Total college enrollment reached a record 15.1 million students in fall 2000. From 1990 to 2000, full-time enrollment increased at a slightly faster rate (11 percent) than part-time enrollment (8 percent). The difference in the growth rate is projected to increase as large numbers of high school graduates enter college during the early 2000s. Younger students are more likely to attend college full-time than older students. Between 2000 and 2010, full-time enrollment is projected to increase by 19 percent, and part-time enrollment is projected to increase by 11 percent.

Both 2-year and 4-year institutions are expected to experience increases in enrollment in the next 10 years. Four-year institutions are expected to see a 16 percent increase in enrollment from 2000 to 2010, while 2-year institutions are expected to see a 14 percent increase during the same time span.

In fall 2000, more than 75 percent of students going to college attend public colleges. Of the 15.1 million enrolled, 6.2 million attend public 4-year colleges and universities, 5.6 million attend public 2-year colleges, 3.1 million attend private 4-year colleges and universities, and 0.2 million attend private 2-year colleges.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey; and *Projections of Education Statistics to 2010*, 2000.





Total college enrollment has been increasing in recent years, hitting a record 15.1 million in fall 2000. Further increases are expected at all levels of higher education. **Undergraduate enrollment is expected to rise from 13.1 million to 15.2 million between 2000 and 2010, an increase of 16 percent.** Graduate enrollment is expected to rise by about 11 percent to 2.0 million in 2010, and first-professional enrollment is expected to rise 13 percent to about .3 million.

About 1 million persons in postsecondary institutions are disabled. About 5 percent of undergraduates and 3 percent of graduate students are disabled. Disabled students are more likely to be older and independent compared to other students. In 1995-96, 40 percent of disabled undergraduates were 30 or older, compared to 26 percent of nondisabled students. About 59 percent of the disabled undergraduates were financially independent compared to 50 percent of the nondisabled students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, 1999; Projections of Education Statistics to 2010, 2000.

	Enrollment, in thousands				Percent full-time			Percent female		
Year	Total	Under-	Graduate	First-	Under-	Graduate	First-	Under-	Graduate	First-
		graduate		professional	graduate		professional	graduate		professional
1970	8,580	7,376	1,031	173	71.6	36.8	90.8	42.3	38.8	8.5
1971	8,948	7,743	1,012	193	71.2	38.3	91.5	42.9	38.9	9.7
1972	9,214	7,941	1,066	207	69.1	37.0	92.0	44.2	41.2	11.2
1973	9,603	8,261	1,123	219	67.5	36.5	92.1	45.1	42.5	14.9
1974	10,223	8,798	1,190	235	65.1	35.9	91.9	45.8	44.2	17.6
1975	11,184	9,679	1,263	242	63.7	35.9	90.8	45.7	44.6	20.7
1976	11,006	9,429	1,333	244	64.0	34.7	90.1	48.0	46.4	22.3
1977	11,287	9,717	1,319	251	62.7	35.8	90.0	49.6	46.8	23.8
1978	11,260	9,691	1,312	257	61.6	35.7	90.5	50.8	48.0	25.2
1979	11,570	9,998	1,309	263	60.8	36.4	90.7	51.8	48.9	26.6
1980	12,095	10,475	1,343	278	60.7	36.1	90.5	52.3	49.9	28.2
1981	12,372	10,755	1,343	275	60.0	36.0	90.4	52.5	49.8	29.7
1982	12,426	10,825	1,322	278	59.9	36.7	90.5	52.2	49.4	31.3
1983	12,465	10,846	1,340	279	60.1	37.1	89.6	52.4	49.5	32.5
1984	12,242	10,618	1,345	279	59.8	37.2	89.6	52.8	50.1	33.6
1985	12,247	10,597	1,376	274	59.6	37.0	89.9	53.2	50.8	34.4
1986	12,504	10,798	1,435	270	58.8	36.4	90.8	53.5	51.7	35.7
1987	12,767	11,046	1,452	268	58.5	36.3	90.1	54.1	52.2	36.6
1988	13,055	11,317	1,472	267	58.7	37.6	90.3	54.6	52.6	37.5
1989	13,539	11,743	1,522	274	58.3	37.6	90.3	54.8	53.3	38.5
1990	13,819	11,959	1,586	273	58.3	37.8	89.9	55.0	53.5	39.0
1991	14,359	12,439	1,639	281	58.1	39.2	89.8	55.2	53.6	39.4
1992	14,487	12,538	1,669	281	57.8	39.9	89.8	55.5	53.7	40.0
1993	14,305	12,324	1,688	292	58.3	40.8	88.8	55.5	54.3	40.9
1994	14,279	12,263	1,721	295	58.5	41.0	89.3	55.8	54.9	41.0
1995	14,261	12,232	1,731	298	58.4	41.4	89.5	55.8	55.7	41.6
1996	14,300	12,259	1,743	298	58.8	42.2	89.6	55.9	56.3	41.9
1997	14,346	12,298	1,751	297	59.4	42.9	89.6	56.0	56.8	43.1
	Projected									
1998	14,632	12,604	1,741	288	59.4	40.5	89.2	57.0	57.8	43.4
1999	14,861	12,818	1,760	283	59.0	39.1	88.3	57.1	58.3	43.8
2000	15,135	13,079	1,775	281	59.1	38.5	88.3	57.3	58.6	44.1
2001	15,361	13,294	1,786	281	59.3	38.4	88.3	57.3	58.7	44.1
2002	15,500	13,419	1,799	283	59.2	38.2	88.0	57.4	58.8	44.2
2003	15,683	13,584	1,813	285	59.3	38.3	88.4	57.5	58.9	44.6
2004	15,874	13,753	1,832	289	59.4	38.5	88.2	57.5	59.0	45.0
2005	16,073	13,927	1,853	292	59.4	38.6	88.4	57.7	59.1	45.2
2006	16,336	14,162	1,877	297	59.6	38.6	88.2	57.8	59.2	45.5
2007	16,643	14,435	1,905	303	59.9	39.0	88.4	58.0	59.4	45.5
2008	16,975	14,738	1,929	308	60.3	39.3	88.6	58.1	59.5	45.8
2009	17,261	15,002	1,946	313	60.6	39.6	88.8	58.2	59.5	46.0
2010	17,490	15,209	1,963	317	60.8	39.9	89.0	58.2	59.6	46.1

Table 1. Total enrollment in public and private colleges, by student level, attendance status, and gender: Fall 1970 to fall 2010

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1999; and Projections of Education Statistics to 2010.

Figure 3. Projected enrollment in California's public colleges and universities, by type of institution: 1998 to 2010

(In millions)



Enrollment

CSU=California State University UC=University of California

Total enrollment in California's public colleges and universities was 2.0 million in 1998. This total was more than for any other state, and represents nearly 1 in 7 students in the nation. College enrollment in California is expected to increase by an additional .7 million students by 2010, for a total of 2.7 million, a 36 percent rise from 1998. It is expected that population growth will account for most (72 percent) of the increase in student enrollment.

The majority of students will be enrolled in California's community colleges, increasing from 1.5 million in 1999 to 2.0 million in 2010. The increase at the community colleges accounts for approximately 74 percent of the new student enrollment. California State University (CSU) will experience a 37 percent increase in the current decade, and the University of California (UC) will see a 32 percent increase. Warren Fox, executive director of the California Postsecondary Education Commission, stated, "This will be the largest number of students, anywhere, at any time, in any state, seeking public college enrollment."



Figure 4. Number of high school diplomas or equivalent credentials awarded, by control of institution: 1984 to 2000

(In millions)

The annual number of graduates is expected to increase for the next 10 years because of rising enrollments in high schools. The number of public high school graduates grew from 2.3 million in 1990 to 2.6 million in 2000, an increase of 10 percent. The number of graduates is expected to reach 2.8 million by the year 2010, an increase of 9 percent over the number in 2000.

The number of graduates from private high schools has increased at a rate similar to that of public schools. In 2000, about 294,000 students graduated from private schools, and this figure is expected to reach about 324,000 graduates in 2010.

The number of students receiving General Educational Development (GED) credentials was 516,000 in 1999, about the same as in 1994. However, the proportion of GED test-takers who were age 19 or under rose from 34 percent in 1994 to 43 percent in 1999.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1999*; American Council on Education, General Educational Development Testing Service, *Who took the GED? Statistical Report*, various years.



Figure 5. Percentage of 18- to 24-year-olds enrolled in public and private colleges, by gender and race/ethnicity: 1999

About 36 percent of all 18- to 24-year-olds were enrolled in a 2- or 4-year college or university in 1999. Females were more likely to be enrolled than males. The enrollment rate for white 18- to 24-year-olds was higher than the rate for black or Hispanic 18- to 24-year-olds. About 39 percent of white 18- to 24-year-olds were enrolled, compared to 30 percent for black persons and 19 percent of Hispanic persons.

Young people at the traditional college ages—18- to 24-years-old—remained more likely to be enrolled in college than older persons. However, large numbers of older persons attended college in 1999. About 11 percent of 25- to 29-year-olds, 6 percent of 30- to 34-year-olds, and 4 percent of 35- to 39-year-olds attended. Altogether, about two-fifths of all college students were over age 24.

As an alternative or addition to further education, many young people enter the labor force after high school. The challenges in entering the job market for high school dropouts, and youth in general, are highlighted by their labor force and unemployment experiences. About 57 percent of the 1998-99 high school dropouts were in the labor force (employed or looking for work) in 1999, and about 26 percent of those were unemployed. Of the 1999 high school graduates who were not in college, 84 percent were in the labor force, and 18 percent of those in the labor force were unemployed.

High school graduates enrolled in college were employed at rates similar to those for high school dropouts. About 43 percent of the 1999 high school graduates attending college also were employed, compared to 42 percent of the dropouts

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data; and U.S. Department of Labor, Bureau of Labor Statistics, "College Enrollment and Work Activity of High School Graduates."





(In millions)

More people are completing college. The number of associate degrees conferred in 2000-01 is expected to be about .6 million, representing an increase of 18 percent over 1990-91. About 1.2 million degrees are expected to be awarded at the bachelor's degree level in 2000-01, up 9 percent from 1990-91. The number of degrees conferred at the postbaccalaureate level has also increased. The number of master's degrees was expected to be about 396,000 in 2000-01, an increase of 17 percent since 1990-91. The number of doctor's degrees is estimated at 45,000 for 2000-01, a rise of 15 percent compared to 10 years ago. About 77,000 degrees are expected at the first-professional level this year, including such fields as dentistry, law, and medicine, reflecting an increase of about 6 percent over 1990-91.

Many students who embark on college programs do not receive degrees. About half (53 percent) of the students who enrolled in a 4-year college in 1989-90 had completed their degree by spring 1994. About 7 percent of the students had completed an associate degree or other certificate below the bachelor's degree, 15 percent of the students were still enrolled in a bachelor's degree program, and 24 percent had left college.

NOTE: Data for 1998-99 to 2009-10 are projections.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 2010*; Higher Education General Information (HEGIS) survey, Fall Enrollment in Colleges and Universities surveys; Integrated Postsecondary Education Data System (IPEDS), Completions surveys, various years; and *Digest of Education Statistics 1999*.



Figure 7. Percentage of 17-year-olds who completed or were taking science courses in high school: 1986 and 1999

In 1999, a greater proportion of 17-year-olds had completed or were taking general science, biology, chemistry, and physics courses compared to their peers in 1986. The percentage of these students taking chemistry rose from 40 percent of students in 1986 to 57 percent in 1999, an increase of 17 percentage points. Almost all students took biology (93 percent), while a much smaller percentage took physics (17 percent) in 1999.

Over the 13-year span, the percentage of both males and females taking science courses increased. However, the proportion of females taking the four science courses rose at a more rapid rate than the proportion of males taking them. The percentage of females taking chemistry increased by 21 percentage points (39 to 60 percent), while the percentage of males showed a 13-point increase (42 to 55 percent).

The proportion of students in minority groups taking science courses rose between 1986 and 1999. The increase was most notable for students taking chemistry, with both Hispanic and black students showing sizeable increases. The proportion of Hispanic students taking chemistry rose 18 percentage points (24 to 42 percent of students) and the proportion of black students taking it rose 23 percentage points (29 to 52 percent).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1999 Trends in Academic Progress, 2000.





NOTE: Detail may not add to 100 percent due to rounding.

The percentage of 17-year-olds who completed higher-level math courses—algebra II and precalculus or calculus—rose from 1978 to 1999. In 1999, 51 percent of all students completed algebra II, an increase of 14 percentage points from 1978. In 1999, 13 percent of students completed precalculus or calculus, nearly double the percentage in 1978. In 1999, more students completed their high school math program at the more advanced levels of geometry, algebra II, precalculus or calculus, than at the prealgebra/general or algebra I levels.

The proportion of both males and females taking higher-level math courses increased over the 21year span. The percentage of females completing algebra II increased by 15 points (37 to 52 percent of students), and the percentage of males completing algebra II increased by 12 points (38 to 50 percent).

The proportion of minority students taking higher-level math courses also rose from 1978 to 1999. The percentage of Hispanic students completing algebra II increased by 14 points, from 23 to 37 percent. The percentage of black students completing algebra II rose 24 points, from 28 to 52 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1999 Trends in Academic Progress, 2000.

Figure 9. High school courses recommended for college

English-4 years

Types of classes:

composition American literature English literature world literature

Mathematics - 3 to 4 years

Types of classes: algebra I geometry algebra II trigonometry precalculus calculus

History and Geography-2 to 3 years

Types of classes:

geography U.S. history U.S. government world history world cultures civics

Laboratory Science-2 to 3 years Types of classes:

ses: biology earth science chemistry physics

Visual and Performing Arts-1 year

Types of classes:

art dance drama music

Challenging Electives-1 to 3 years

Types of classes:

economics psychology computer science statistics communications

Foreign Language-2 to 3 years

The number of courses completed by public high school graduates has increased substantially. As a result of the increased academic course load, the proportion of students completing the recommendations of the National Commission on Excellence in Education (4 years of English, and 3 years each in social studies, science, and mathematics) rose from 14 percent in 1982 to 55 percent in 1998.

About 84 percent of 4-year colleges and universities use admissions tests as selection criteria for admitting students. Between 1989-90 and 1999-2000, the average Scholastic Assessment Test (SAT)-Verbal score rose by 5 points, and the SAT-Mathematics rose by 13 points. During the same time period, the average American College Testing (ACT) composite score rose from 20.6 to 21.0.

SOURCE: U.S. Department of Education, *Getting Ready for College Early, 1999; Digest of Education Statistics, 1999; American College Testing Program, High School Profile Report; and College Entrance Examination Board, National Report on College-Bound Seniors.*

Figure 10. Bachelor's degree completion rates for students who entered 4-year colleges directly from on-time high school graduation in 1982, by high school mathematics course-taking and race/ethnicity: 1993



Students who completed a high-level mathematics course (beyond algebra II) and who ranked in the top 40 percent of academic curricula* have a higher college completion rate than other students who also completed high school on time and directly entered a 4-year college. In particular, **black and Hispanic students who had high school curricula of rigorous intensity and high quality and completed a high-level math course were more likely to complete a bachelor's degree program than their peers who pursued a less rigorous curriculum.** For example, 45 percent of all black students who finished high school on time and went directly to college graduated with a bachelor's degree. However, this percentage was 73 percent for those black students who completed a high-level mathematics course and a rigorous curriculum.

*Academic curricula refers to a constructed variable consisting of a measure of academic intensity and quality.

SOURCE: U.S. Department of Education, Office of Educational Research and Improvement, Answers in the Tool Box, 1999.

Figure 11. Number of students who took Advanced Placement (AP) examinations per 1,000 12th-graders, by gender: 1984 to 1999





Between 1984 and 1999, the number of students who took AP exams increased markedly, rising from 50 to 152 per 1,000 12th-graders. While the number increased for both males and females, the number of females who took examinations rose at a faster rate than did the number of males who took examinations. In 1999, 171 females compared to 134 males per 1,000 12th-graders took AP examinations.

Most institutions of higher education will give students credit for an AP examination score of three or higher. In 2000, about 64 percent of the AP examinations taken yielded a score of 3 or higher.

SOURCE: College Board, Advanced Placement Program, *National Summary Reports*, various years; U.S. Department of Education, National Center for Education Statistics, *The Condition of Education*, 1998; and U.S. Department of Commerce, Bureau of the Census, Current Population Survey.



Figure 12. Percentage of female college students, by level: 1970 to 2010

NOTE: Data for 1998 and later years are projections.

The proportion of women enrolled in higher education has increased steadily over the past 30 years. In 1970, there were 3.5 million women in college representing about 41 percent of total college enrollment. By 2000, the total number of women had increased to an estimated 8.7 million, making up 57 percent of total college enrollment.

The numbers of women enrolling have increased at all levels of higher education. At the undergraduate level, the number of women rose by 140 percent between 1970 and 2000, from 3.1 million to 7.5 million. In contrast, the total number of men enrolled rose from 4.3 million in 1970 to 5.6 million in 2000, a 31 percent increase.

The growth in the enrollment of women at the graduate level has reflected the large increases at the undergraduate level. The enrollment of women in graduate programs rose by 160 percent between 1970 and 2000. In 2000, women made up 59 percent of all graduate students. A greater number of women attend graduate school part time. In 2000, about 65 percent of female graduate school students attend part time compared to 56 percent of male graduate school students.

The greatest change occurred in the number of women attending first-professional programs such as those at medical, dental, and law schools. The total number of women enrolled in first-professional programs rose from 15,000 in 1970 to 124,000 in 2000, resulting in a rise in the proportion of women among first-professional students from 9 percent to 44 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1999; and Projections of Education Statistics to 2010.



Figure 13. Percentage of degrees awarded to women, by level of degree: 1970-71 to 2000-01

The proportion of women in undergraduate and graduate programs increased steadily during the 1970s, 1980s, and 1990s. This enrollment growth has been reflected in increasing numbers and proportions of women earning associate, bachelor's, master's, doctor's, and first-professional degrees. In 1970-71, women received 43 percent of bachelor's degrees and 40 percent of all master's degrees. Today, women comprise the majority of college degree recipients. For the class of 2001, it is expected that women will receive about 57 percent of all bachelor's degrees and 58 percent of all master's degrees. The proportion of women among recipients of first-professional degrees, including degrees in law, medicine, and dentistry, rose from 6 percent in 1970-71 to a projected 44 percent in 2000-01.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics 1999; and Projections of Education Statistics to 2010.



Figure 14. Comparison of first-year first-generation college students with all first-year undergraduate students: 1995-96

In 1995-96, about one-third of freshmen at all 4-year colleges and more than one-half of freshmen at public 2-year colleges were first-generation college students. These students were different in a number of respects from their peers whose parents had attended college. The first-generation students tended to be older than college students on average, with 46 percent 20 years or older, compared to 33 percent overall. First-generation students were more like to be minority students, with 37 percent of them minority, compared to 30 percent of all college students. First-generation students were less likely to attend 4-year colleges than others, and more likely to attend 2-year colleges or other postsecondary institutions.

First-generation freshmen in 1995-96 were less like to be financially dependent than all other first-year students. Of those who were dependent, first-generation freshmen tended to come from families with lower incomes. Twenty-five percent of all dependent first-year students came from families with incomes of \$70,000 or more compared to 10 percent of first-year first-generation students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Descriptive Summary of 1995-96 Beginning Postsecondary Students.



Figure 15. Percentage distribution of full-time undergraduates at all 4-year institutions, by amount of tuition and fees charged: 1999-2000

In 1999-2000, more than half of the students attending all 4-year institutions paid less than \$4,000 in tuition and fees, and almost three-quarters paid less than \$8,000. Only 8 percent of students attended colleges at which tuition and fees exceeded \$20,000.

The average charges, including room and board, for a public 4-year institution were \$8,265 in 1999-2000. The same charges for a private institution were \$20,805. These charges reflect less than a 5 percent increase in tuition, fees, room and board over the previous year (\$8,024 for public 4-year institutions; \$19,866 for private 4-year institutions).

SOURCE: The College Board, *Trends in College Pricing*, 1999; and U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics*.



Figure 16. Average tuition, fees, room and board costs, by control of institution: 1999-2000

* Room and board cost is estimated. NOTE: Average aid includes grant and loan aid.

The average cost in tuition, fees, room and board at 4-year public institutions in 1999-2000 was \$8,265. At private 2-year and 4-year institutions, the average was \$13,768 and \$20,805, respectively.

The average cost for tuition and fees only at 2-year public institutions of higher education was \$1,336; for a 2-year private school, it was \$8,107. The average cost at 4-year public institutions was \$3,351, while it was \$14,690 at private 4-year institutions.

SOURCE: The College Board, *Trends in College Pricing*, 1999; and U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics*.

Figure 17. Average federal aid per full-time equivalent student, by type of aid: 1980-81 to 1998-99



(In constant 1998-99 dollars)

In the 1990s, average aid (grants and loans combined) per full-time equivalent student increased from \$3,614 in 1989-90 to \$6,085 in 1998-99, a 68 percent increase. In 1998-99, the total amount of aid topped \$64 billion, translating into more than \$6,000 on average for a full-time equivalent student. Over the six years from 1992-93 to 1998-99, average loan aid almost doubled, from \$1,793 to \$3,535. Grant aid also increased during this period, from \$1,949 to \$2,455, more than a 25 percent increase.

SOURCE: The College Board, Trends in College Pricing, 1999.



Figure 18. Median annual earnings for 25- to 34-year-olds with full-time yearround employment, by highest educational attainment: 1999

Type of degree

People with college degrees earn more money than those with high school diplomas or the equivalent. The average annual earnings for those 25- to 34-years of age increase as the level of education increases. In 1999, those with just a bachelor's degree earned about \$12,000 more than high school graduates, on average. Master's degree holders earned an average of about \$46,000, about \$8,000 more than those with a bachelor's degree and \$21,000 more than those with a high school diploma. People who worked full-time year-round, but lacked a high school diploma or GED, earned about \$18,000 on average.

For the first time in many years, a Bureau of Labor Statistics (BLS) analysis found that total collegelevel job openings between 1998 and 2008 will nearly equal the number of college-educated entrants to the labor force. BLS expects that the number of college-level jobs between 1998 and 2008 will grow faster than the number of jobs for workers with less education. "Computer engineer" is expected to be the fastest growing occupation over the next decade. Other rapidly growing occupations include: computer systems analysts, database administrators, physician assistants, residential counselors, engineering and information systems managers, and financial services sales agents.

SOURCE: U.S. Department of Commerce, Bureau of the Census and Bureau of Labor Statistics, Current Population Survey, 2000; and U.S. Department of Labor, Bureau of Labor Statistics, *The Outlook for College Graduates*, 1998-2008, 2000.



Figure 19. Median annual earnings for 25- to 34-year-olds with full-time yearround employment, by gender and educational attainment: 1970 to 1999

Workers who have completed a bachelor's degree generally earn more money than workers with a high school diploma. In 1999, the average annual earnings for 25- to 34-year-olds with a high school diploma or equivalent credential was \$25,122, while the average for persons with a bachelor's or higher degree was \$40,000, a difference of nearly \$15,000 or about 59 percent.

There is a large differential between the earnings of male and female 25- to 34-year-olds. During the 1970s and early 1980s, males with high school diplomas had higher average earnings than females with bachelor's degrees. On average, males with bachelor's degrees earned more than females with bachelor's degrees during the entire period from 1970 to 1999. In 1999, it was more than an \$8,000 difference. Although the difference between the earnings of males and females is lower now than in 1970 or 1980, the gap has not closed consistently over the past 10 years. From 1994 to 1999, the average annual income for males with a bachelor's degree rose 8 percent to \$43,763 in 1999, while the average income for females with a bachelor's degree rose 7 percent, to \$35,604.

The earnings of female 25- to 34-year-olds, completing only high school have not maintained pace with the increase in earnings for females with higher levels of education. The earnings of women with high school credentials fell from \$23,671 in 1970 to \$20,266 in 1999, a decrease of 14 percent, compared to an increase of 4 percent for women with bachelor's degrees. The gap in the earnings between females and males with only high school credentials narrowed somewhat between 1970 and 1999 because the average annual earnings for males with a high school diploma or equivalent dropped 27 percent from \$37,204 to \$27,708.

SOURCE: U.S. Department of Commerce, Bureau of the Census and Bureau of Labor Statistics, Current Population Surveys, various years.

Additional Information about U.S. Colleges-Web Sites

Carnegie Classification Definitions.

http://www.educause.edu/memdir/carnegie/carnegie-def.html#TEACH

College and University Rankings. Comprehensive site on university rankings and controversies. <u>http://www.library.uiuc.edu/edx/rankings.htm</u>

College Prep 101. Free course on college preparation, sponsored by Oklahoma State University. <u>http://collegeprep.okstate.edu/</u>

CollegeNet. Online college applications and financial aid search. <u>http://www.collegenet.com/</u>

EASI U.S. Department of Education information about financial aid. <u>http://easi.ed.gov/</u>

Gradschools.com. Guide to graduate programs in American and foreign universities. <u>http://www.gradschools.com/</u>

Graduate School Survival Links. For Ph.D. students. <u>http://www.phds.org/Links/index.cfm?setTopic=42</u>

Job Outlook. http://stats.bls.gov/ocohome.htm

National Center for Education Statistics. College Opportunities On-Line (COOL). <u>http://nces.ed.gov/ipeds/cool/</u>

Police Corps Scholarships. http://www.ojp.usdoj.gov/opclee/about.htm

Princeton Review. Guide to colleges and universities. <u>http://www.review.com/</u>

Tours of Colleges. http://www.campustours.com http://www.collegiatechoice.com

Telecampus. Directory of college courses available on the Internet. <u>http://telecampus.edu/</u>

U.S. and Foreign Colleges and Universities Listed Alphabetically. http://www.mit.edu:8001/people/cdemello/univ-full.html or http://www.clas.ufl.edu/CLAS/american-universities.html

U.S. Two-year Colleges. http://cset.sp.utoledo.edu/twoyrcol.html

University Pages. U.S. colleges and universities by state. <u>http://isl-garnet.uah.edu/Universities_g/</u>

Women's College Links Page. <u>http://tln.lib.mi.us/~lpotter/</u>

Yahoo Links to Financial Aid Information. http://www.yahoo.com/Education/Financial Aid/

Black Colleges and Universities. By geographic region, state, or alphabetical order. <u>http://www.edonline.com/cq/hbcu/</u>

Native American Schools and Tribal Colleges. Student groups and related programs on the Internet.

http://www.ncsu.edu/stud_orgs/native_american/usindcolorgs.html