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Current Population Reports

Population Characteristics

Educational Attainment in the United States: March 1998 (Update)

By Jennifer C. Day and Andrea E. Curry

C E N S U S B U R E A U

P20-505
Issued October 1998

DATA HIGHLIGHTS

Detailed tabulations are now available which provide statistics on educational attainment of the noninstitutional population of the United States, based on the March 1998 Current Population Survey. In the highlights below, the numbers in *italics* are significantly different from the corresponding numbers in 1997; others are not significantly different. These tables provide information such as:

- About **82.8 percent** of all adults ages 25 and over have completed high school and **24.4 percent** have completed a Bachelor's degree or more.
- The high school completion level of young adults (ages 25 to 29) was 88.1 percent, while the college completion level was 27.3 percent.
- Among women 25 and over, **82.9 percent** have earned a high school diploma, and **22.4 percent** have completed a Bachelor's degree or more.
- College completion rates for young women exceeded those for young men, 29.0 versus 25.6 percent, respectively, for those aged 25 to 29.
- For Whites 25 and over, **83.7 percent** completed high school and 25.0 percent have a Bachelor's degree or more.
- Annual average earnings for those age 18 and over in 1997 who only completed high school was **\$22,895**; with only a Bachelor's degree – **\$40,478**.
- About 89.5 percent of the employed civilian labor force ages 25 and over had a high school degree.
- High school completion levels for those age 25 and over were highest for the Midwest, 85.8 percent, and lowest for the South, **80.1 percent**.

DETAILED TABULATIONS

The set of detailed tabulations consists of 16 tables from the 1998 March CPS (86 pages) and 3 historical tables. The electronic version of these tables is available on the Internet, at the Census Bureau's World Wide Web site (<http://www.census.gov>). Once on the site, click on "Subjects A-Z," then on "E", and finally on "Educational Attainment."

A paper version of these tables is available as PPL-99 for \$30.00. To receive a paper copy, send your request for "PPL-99, Educational Attainment in the United States: March 1998," along with a check or money order in the amount of \$30.00 payable to Commerce-Census-88-00-9010, to U.S. Department of Commerce, Bureau of the Census, P.O. Box 277943, Atlanta, GA 30384-7943, or call our Statistical Information Office on 301-457-2422. A copy of these tabulations will be made available to any existing CPR P20 subscriber without charge, provided that the request is made within 3 months of the issue date of this update. Contact our Statistical Information Office on 301-457-2422.

For additional information on these topics, contact Jennifer C. Day or Andrea E. Curry, Education and Social Stratification Branch, on 301-457-2464 or via Internet E-mail (jday@census.gov or acurry@census.gov).

The data in the detailed tables are estimates based on a sample survey (the Current Population Survey) and are subject to sampling variability since they are not based on a complete enumeration of the population. For information on the source of the data, the accuracy of the estimates, the use of standard errors, and the computation of standard errors, contact John Finamore, Demographic Statistical Methods Division (301-457-4183) or via Internet E-mail, (john.finamore@ccmail.census.gov).

NOTICE TO USERS

In order to keep you informed of the major findings from the Current Population Survey, short data updates will be made available in both printed and electronic forms for years when full reports are not produced. Additionally, the detailed tabulations that have been part of the printed reports will be updated annually in electronic form on the Internet. If you wish to obtain the new tabulations for March 1998, updating Educational Attainment in the United States: March 1997 (Current Population Reports, P20-505), please see the "Detailed Tabulations" section.

Our decision to modify the format of the P20 series is based on a variety of factors. Ultimately, we hope this decision will provide users with more timely data on a wider variety of topics. If you have comments about this change or the P20 series in general, please contact us on the Internet at: pop@census.gov, or write to: Chief, Population Division, U.S. Bureau of the Census, Washington, DC 20233.

ALL LEVELS: EDUCATIONAL ATTAINMENT 17

Table 8.—Years of school completed by persons age 25 and over and 25 to 29, by race/ethnicity and sex: 1910 to 1998

Age and year	Percent, by years of school completed											
	All races			White, non-Hispanic ¹			Black, non-Hispanic ¹			Hispanic		
	Less than 5 years of elementary school	High school completion or higher ²	4 or more years of college ³	Less than 5 years of elementary school	High school completion or higher ²	4 or more years of college ³	Less than 5 years of elementary school	High school completion or higher ²	4 or more years of college ³	Less than 5 years of elementary school	High school completion or higher ²	4 or more years of college ³
1	2	3	4	5	6	7	8	9	10	11	12	13
Males and females												
25 and over												
1910 ⁴	23.8	13.5	2.7	—	—	—	—	—	—	—	—	—
1920 ⁴	22.0	16.4	3.3	—	—	—	—	—	—	—	—	—
1930 ⁴	17.5	19.1	3.9	—	—	—	—	—	—	—	—	—
April 1940	13.7	24.5	4.6	10.9	26.1	4.9	41.8	7.7	1.3	—	—	—
April 1950	11.1	34.3	6.2	8.9	36.4	6.6	32.6	13.7	2.2	—	—	—
April 1960	8.3	41.1	7.7	6.7	43.2	8.1	23.5	21.7	3.5	—	—	—
March 1970	5.3	55.2	11.0	4.2	57.4	11.6	14.7	36.1	6.1	—	—	—
March 1980	3.4	68.6	17.0	1.9	71.9	18.4	9.1	51.4	7.9	15.8	44.5	7.6
March 1985	2.7	73.9	19.4	1.4	77.5	20.8	6.1	59.9	11.1	13.5	47.9	8.5
March 1986	2.7	74.7	19.4	1.4	78.2	20.1	5.3	62.5	10.9	12.9	48.5	8.4
March 1987	2.4	75.6	19.9	1.3	79.0	20.5	4.9	63.6	10.8	11.9	50.9	8.6
March 1988	2.5	76.2	20.3	1.2	79.8	21.8	4.8	63.5	11.2	12.2	51.0	10.0
March 1989	2.5	76.9	21.1	1.2	80.7	22.8	5.2	64.7	11.7	12.2	50.9	9.9
March 1990	2.5	77.6	21.3	1.1	81.4	23.1	5.1	66.2	11.3	12.3	50.8	9.2
March 1991	2.4	78.4	21.4	1.1	82.4	23.3	4.7	66.8	11.5	12.5	51.3	9.7
March 1992	2.1	79.4	21.4	0.9	83.4	23.2	3.9	67.7	11.9	11.8	52.6	9.3
March 1993	2.1	80.2	21.9	0.8	84.1	23.8	3.7	70.5	12.2	11.8	53.1	9.0
March 1994	1.9	80.9	22.2	0.8	84.9	24.3	2.7	73.0	12.9	10.8	53.3	9.1
March 1995	1.9	81.7	23.0	0.7	85.9	23.4	2.5	73.8	13.3	10.6	53.4	9.3
March 1996	1.8	81.7	23.6	0.6	86.0	25.9	2.2	74.6	13.8	10.4	53.1	9.3
March 1997	1.7	82.1	23.9	0.6	86.3	26.2	2.0	75.3	13.3	9.4	54.7	10.3
March 1998	1.7	82.8	24.4	0.6	87.1	26.6	1.7	76.4	14.8	9.3	55.5	11.0
25 to 29												
1920 ⁴	—	—	—	12.9	22.0	4.5	44.6	8.3	1.2	—	—	—
April 1940	5.9	38.1	5.9	3.4	41.2	6.4	27.0	12.3	1.6	—	—	—
April 1950	4.6	52.8	7.7	3.3	56.3	8.2	16.1	23.6	2.8	—	—	—
April 1960	2.8	60.7	11.0	2.2	63.7	11.8	7.2	38.6	5.4	—	—	—
March 1970	1.1	75.4	16.4	0.9	77.8	17.3	2.2	58.4	10.0	—	—	—
March 1980	0.8	85.4	22.5	0.3	89.2	25.0	0.7	78.7	11.6	6.7	58.0	7.7
March 1985	0.7	86.1	22.2	0.2	89.5	24.4	0.4	80.5	11.6	6.0	60.9	11.1
March 1986	0.9	86.1	22.4	0.4	89.6	25.2	0.5	83.5	11.8	5.6	59.1	9.0
March 1987	0.9	86.0	22.0	0.4	89.4	24.7	0.4	83.5	11.5	4.8	59.8	8.7
March 1988	1.0	85.9	22.7	0.3	89.7	25.1	0.3	80.9	12.0	6.0	62.3	11.3
March 1989	1.0	85.5	23.4	0.3	89.3	26.3	0.5	82.3	12.7	5.4	61.0	10.1
March 1990	1.2	85.7	23.2	0.3	90.1	26.4	1.0	81.7	13.4	7.3	58.2	8.2
March 1991	1.0	85.4	23.2	0.3	89.8	26.7	0.5	81.8	11.0	5.8	58.7	9.2
March 1992	0.9	86.3	23.6	0.3	90.7	27.2	0.8	80.9	11.1	5.2	60.9	9.5
March 1993	0.7	86.7	23.7	0.3	91.2	27.2	0.2	82.7	13.3	4.0	60.9	8.3
March 1994	0.8	86.1	23.3	0.3	91.1	27.1	0.6	84.1	13.6	3.6	60.3	8.0
March 1995	1.0	86.9	24.7	0.3	92.5	28.8	0.2	86.7	15.4	4.9	57.2	8.9
March 1996	0.8	87.3	27.1	0.2	92.6	31.6	0.4	86.0	14.6	4.3	61.1	10.0
March 1997	0.8	87.4	27.8	0.1	92.9	32.6	0.6	86.9	14.2	4.2	61.8	11.0
March 1998	0.7	88.1	27.3	0.1	93.6	32.3	0.4	88.3	15.8	3.7	62.8	10.4
Males												
25 and over												
April 1940	15.1	22.7	5.5	12.0	24.2	5.9	46.2	6.9	1.4	—	—	—
April 1950	12.2	32.6	7.3	9.8	34.8	7.9	36.9	12.6	2.1	—	—	—
April 1960	9.4	39.5	9.7	7.4	41.6	10.3	27.7	20.0	3.5	—	—	—
March 1970	5.9	55.0	14.1	4.5	57.2	15.0	17.9	35.4	6.8	—	—	—
March 1980	3.6	69.2	20.9	2.0	72.4	22.8	11.3	51.2	7.7	16.5	44.9	9.2
March 1990	2.7	77.7	24.4	1.3	81.6	26.7	6.4	65.8	11.9	12.9	50.3	9.8
March 1994	2.1	81.1	25.1	0.8	85.1	27.8	3.9	71.8	12.7	11.4	53.4	9.6
March 1995	2.0	81.7	26.0	0.8	86.0	28.9	3.4	73.5	13.7	10.8	52.9	10.1
March 1996	1.9	81.9	28.0	0.7	86.1	28.8	2.9	74.6	12.5	10.2	53.0	10.3
March 1997	1.8	82.0	26.2	0.6	86.3	29.0	2.9	73.8	12.5	9.2	54.9	10.6
March 1998	1.7	82.8	26.5	0.7	87.1	29.3	2.3	75.4	14.0	9.3	55.7	11.1
Females												
25 and over												
April 1940	12.4	26.3	3.8	9.8	28.1	4.0	37.5	8.4	1.2	—	—	—
April 1950	10.0	36.0	5.2	8.1	38.2	5.4	28.6	14.7	2.4	—	—	—
April 1960	7.4	42.5	5.8	6.0	44.7	6.0	19.7	23.1	3.6	—	—	—
March 1970	4.7	55.4	8.2	3.9	57.7	8.6	11.9	38.6	5.6	—	—	—
March 1980	3.2	68.1	13.6	1.8	71.5	14.4	7.4	51.5	8.1	15.3	44.2	6.2
March 1990	2.2	77.5	18.4	1.0	81.3	19.8	4.1	66.5	10.8	11.7	51.3	8.7
March 1994	1.7	80.8	19.6	0.7	84.7	21.1	1.8	73.9	13.1	10.3	53.2	8.6
March 1995	1.7	81.6	20.2	0.6	85.8	22.2	1.8	74.1	13.0	10.4	53.8	8.4
March 1996	1.7	81.6	21.4	0.5	85.9	23.2	1.6	74.6	14.8	10.6	53.3	8.3
March 1997	1.6	82.2	21.7	0.5	86.3	23.7	1.3	76.5	14.0	9.5	54.6	10.1
March 1998	1.6	82.9	22.4	0.6	87.1	24.1	1.2	77.1	15.5	9.2	55.3	10.9

¹ Includes persons of Hispanic origin for years prior to 1980.² Data for years prior to 1993 include all persons with at least 4 years of high school.³ Data for 1993 and later years are for persons with a bachelor's degree or higher.⁴ Estimates based on Bureau of the Census retrojection of 1940 Census data on education by age.

—Data not available.

NOTE.—Data for 1980 and subsequent years are for the noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, Vol. 1, part 1; *Current Population Reports*, Series P-20 and unpublished data; and 1960 *Census Monograph*, "Education of the American Population," by John K. Folger and Charles B. Nam. (This table was prepared August 1999.)

HIGH SCHOOL COMPLETION RATES

The relative importance of a high school education has changed dramatically over the last half century in the United States. When the grandparents of today's high school students entered adulthood, a high school education was an asset in the labor force, held by about half of the population ages 25 through 29 in 1950.²⁰ By the early 1970s, when the parents of today's high school students entered the work force, about 83 to 84 percent of the population ages 18 through 24 who were not enrolled in high school had completed a high school education (figure 3 and table A13). At that time, a high school education still served as an entryway to a number of promising career paths. Now, a quarter of a century later, technological advances in the workplace have increased the demand for a skilled labor force to the point where a high school education serves more as a minimum requirement for entry into the labor force. Completing a high school education is now even more essential in order to enter additional education and training or the labor force.

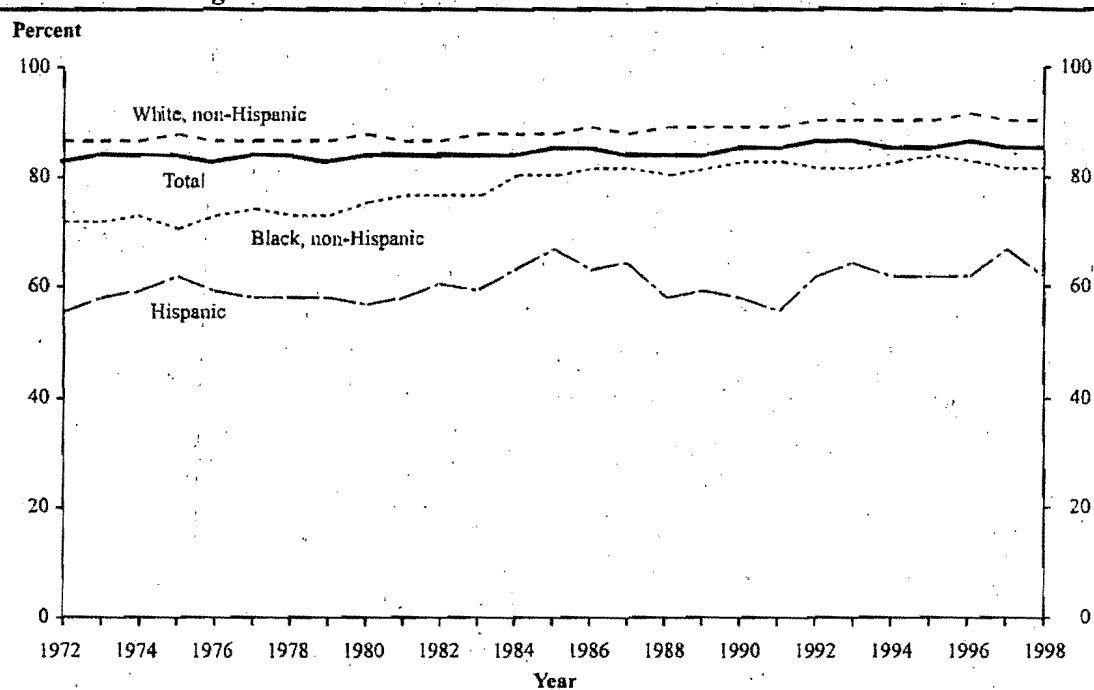
High School Completion Rates

The high school completion rate represents the proportion of 18- through 24-year-olds who have completed a high school diploma or an equivalent credential, including a General Educational Development (GED) credential.²¹ Despite the increased importance of a high school education, the high school completion rate for the country has increased only slightly over the last quarter of a century. Between 1972 and 1985, high school completion rates climbed by 2.6 percentage points (from 82.8 percent in 1972 to 85.4 percent in 1985); since 1985, the rate has fluctuated around 85 and 86 percent (figure 3 and table A13). This net increase of about 3 percentage points over 27 years represents slow progress toward achieving the national goal of a 90 percent high school completion rate.

²⁰U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1998*, NCES 1999-036 (Washington, D.C.: U.S. Government Printing Office, 1998).

²¹The high school completion rate is based on the population of young adults ages 18 through 24 who are not still enrolled in school; the status dropout rate is based on the population ages 16 through 24. Thus, the age range of the status dropout rate is 2 years wider, and those 18- through 24-year-olds who are still enrolled in a high school program are excluded from the calculation of the high school completion rate. Because of these differences, the status dropout rate and the high school completion rate are not the simple inverse of each other.

Figure 3—High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race-ethnicity:¹ October 1972 through October 1998²



¹Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

²Numbers for years 1987 through 1998 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 1998 reflect new wording of the educational attainment item in the CPS beginning in 1992. Numbers for years 1994 through 1998 reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Race-Ethnicity

High school completion rates analyzed within each racial-ethnic group have shown somewhat similar patterns over the past 27 years (figure 3 and table A13). Whites exhibited a positive trend in their high school completion over the last quarter of a century, although rates appear to have stabilized somewhat in the last decade. Specifically, their high school completion rates climbed from about 86 percent in the early 1970s to about 90 percent in the 1990s. Since 1990, white completion rates have fluctuated around 90 percent (figure 3 and table A13). Most recently, the high school completion rate of 90.2 percent for white young adults in 1998 was significantly higher than their completion rates in every year before 1986.

Black young adults also made significant gains in completing a high school education over the last quarter of a century, although, like whites, their completion rates appear to have stabilized in recent years. The 1998 black completion rate of 81.4 percent is significantly higher than their completion rates before 1981, indicating that a greater proportion of black young adults are now completing high school than they were in the 1970s. In addition, completion rates of black young adults continued to rise in the 1980s. Since 1990, black completion rates have fluctuated around 83 percent, and trend data over the period suggest that their completion rates have remained unchanged in the 1990s.

A relatively low percentage of Hispanic young adults complete high school programs. For example, in 1998, about 63 percent of all Hispanic 18- through 24-year-olds had completed secondary schooling. Overall, completion rates for Hispanics have fluctuated over the last quarter of a century, but have shown no consistent trend over the entire period. For example, completion rates for Hispanics increased between 1980 and 1985, declined between 1985 and 1990, and then remained at the same level between 1990 and 1998. The 1998 completion rate of 62.8 percent was not significantly different from the 1985 rate of 66.6 percent.

In 1998, as mentioned previously, Asians/Pacific Islanders were included as a distinctive group in the racial-ethnic categories being studied here. Overall, Asian youth are more likely than their white, black, and Hispanic peers to complete high school (table 4). For example, in 1998, 94.2 percent of Asian youth ages 18 through 24 had completed high school, compared with 90.2 percent of white youth, followed by 81.4 percent of black and 62.8 percent of Hispanic youth. Although a smaller proportion of white youth completed high school than did their Asian peers, they completed high school at higher rates than both black and Hispanic youth.

Table A13—Supporting data for figure 3: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race-ethnicity: October 1972 through October 1998

Year	Total (percent)	Race-ethnicity (percent) ¹		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1972	82.8	86.0	72.1	56.2
1973	83.7	87.0	71.6	58.7
1974	83.6	86.7	73.0	60.1
1975	83.8	87.2	70.2	62.2
1976	83.5	86.4	73.5	60.3
1977	83.6	86.7	73.9	58.6
1978	83.6	86.9	73.4	58.8
1979	83.1	86.6	72.6	58.5
1980	83.9	87.5	75.2	57.1
1981	83.8	87.1	76.7	59.1
1982	83.8	87.0	76.4	60.9
1983	83.9	87.4	76.8	59.4
1984	84.7	87.5	80.3	63.7
1985	85.4	88.2	81.0	66.6
1986	85.5	88.8	81.8	63.5
1987 ²	84.7	87.7	81.9	65.1
1988 ²	84.5	88.7	80.9	58.2
1989 ²	84.7	89.0	81.9	59.4
1990 ²	85.6	89.6	83.2	59.1
1991 ²	84.9	89.4	82.5	56.5
1992 ^{2,3}	86.4	90.7	82.0	62.1
1993 ^{2,3}	86.2	90.1	81.9	64.4
1994 ^{2,3,4}	85.8	90.7	83.3	61.8
1995 ^{2,3,4}	85.3	89.8	84.5	62.8
1996 ^{2,3,4}	86.2	91.5	83.0	61.9
1997 ^{2,3,4}	85.9	90.5	82.0	66.7
1998 ^{2,3,4}	84.8	90.2	81.4	62.8

¹Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

⁴Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table 267.—Associate degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1996–97

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total ¹	563,620	424,364	55,260	42,645	24,829	5,927	10,595	220,722	166,732	18,994	17,583	10,770	2,047	4,596	342,898	257,632	36,266	25,062	14,059	3,880	5,999
Agriculture and natural resources	6,463	6,118	49	93	32	84	87	4,329	4,147	31	52	16	40	43	2,134	1,971	18	41	16	44	44
Architecture and related programs	316	256	10	33	9	0	8	56	37	4	11	1	0	3	260	219	6	22	8	0	5
Area, ethnic, and cultural studies	84	16	19	11	0	33	5	32	3	8	5	0	16	0	52	13	11	6	0	17	5
Biological sciences/life sciences	2,116	1,354	145	224	267	48	78	769	489	62	87	81	18	32	1,347	865	83	137	186	30	46
Business	109,399	79,133	13,480	7,954	4,937	1,039	2,856	32,751	24,131	3,501	2,245	1,517	239	1,118	76,648	55,002	9,979	5,709	3,420	800	1,738
Communications	2,030	1,578	183	118	86	18	47	985	764	97	70	35	5	14	1,045	814	86	48	51	13	33
Communications technologies	1,743	1,322	179	118	45	9	70	1,091	870	90	65	27	7	32	652	452	89	53	18	2	38
Computer and information sciences	10,990	7,558	1,405	900	710	145	272	5,860	4,216	554	480	418	51	141	5,130	3,342	851	420	292	94	131
Construction trades	1,928	1,594	97	86	96	37	18	1,829	1,522	87	82	91	32	15	99	72	10	4	5	5	3
Education	10,526	7,693	1,184	1,055	234	262	98	3,356	2,592	372	219	87	51	35	7,170	5,101	812	836	147	211	63
Engineering	1,952	1,467	144	101	147	26	67	1,681	1,266	118	91	128	23	55	271	201	26	10	19	3	12
Engineering-related technologies	33,810	25,525	3,262	2,723	1,657	264	379	29,452	22,306	2,688	2,411	1,505	226	316	4,358	3,219	574	312	152	38	63
English language and literature/letters	1,455	834	87	178	110	12	234	528	281	42	61	44	5	95	927	553	45	117	66	7	139
Foreign languages and literatures	689	480	17	117	25	3	47	231	156	10	39	9	2	15	458	324	7	78	16	1	32
Health professions and related sciences	98,921	81,271	8,337	4,606	3,100	909	698	15,970	12,433	1,321	1,078	819	164	155	82,951	68,838	7,016	3,528	2,281	745	543
Home economics and vocational home economics	8,551	5,798	1,246	841	405	78	183	715	472	89	45	85	3	21	7,836	5,326	1,157	796	320	75	162
Law and legal studies	8,968	6,950	1,113	604	184	86	31	1,105	781	195	85	24	13	7	7,863	6,169	918	519	160	73	24
Liberal arts and sciences, general studies, and humanities	181,341	134,223	16,626	15,559	9,087	1,904	3,942	69,572	51,798	5,759	5,896	3,649	653	1,817	111,769	82,425	10,867	9,663	5,438	1,251	2,125
Library science	126	103	6	5	7	4	1	17	10	2	0	4	1	0	109	93	4	5	3	3	1
Mathematics	792	507	38	113	88	2	44	443	273	27	62	55	1	25	349	234	11	51	33	1	19
Mechanics and repairers	12,180	9,379	940	845	708	132	176	11,388	8,812	854	785	654	122	161	792	567	86	60	54	10	15
Multi/interdisciplinary studies	9,182	6,982	983	601	463	57	96	4,398	3,313	477	332	219	24	33	4,784	3,669	506	269	244	33	63
Parks, recreation, leisure and fitness studies	913	717	92	51	30	10	13	554	406	74	36	24	7	7	359	311	18	15	6	3	6
Philosophy and religion	89	68	5	6	7	1	2	51	37	4	4	5	0	1	38	31	1	2	2	1	1
Physical sciences and science technologies	2,526	1,798	195	155	252	25	101	1,281	953	78	87	107	6	50	1,245	845	117	68	145	19	51
Precision production trades	10,368	8,202	530	883	527	93	133	8,033	6,355	401	717	394	72	94	2,335	1,847	129	166	133	21	39
Protective services	19,889	15,100	2,014	2,142	351	215	67	13,588	10,674	949	1,523	275	121	46	6,301	4,426	1,065	619	76	94	21
Psychology	1,612	1,124	130	215	65	39	39	377	248	37	48	28	7	9	1,235	876	93	167	37	32	30
Public administration and services	4,270	2,561	1,025	447	86	120	31	667	377	165	74	23	23	5	3,603	2,184	860	373	63	97	26
R.O.T.C. and military technologies	556	447	83	2	24	0	0	521	422	75	2	22	0	0	35	25	8	0	2	0	0
Social sciences and history	4,056	2,475	523	555	254	110	139	1,550	960	187	212	99	32	60	2,506	1,515	336	343	155	78	79
Theological studies and religious vocations	574	471	56	12	10	4	21	321	261	33	5	7	2	13	253	210	23	7	3	2	8
Transportation and material moving workers	1,612	1,279	141	84	51	11	46	1,349	1,091	111	73	36	9	29	263	188	30	11	15	2	17
Visual and performing arts	13,593	9,981	916	1,208	775	147	566	5,872	4,276	492	601	282	72	149	7,721	5,705	424	607	493	75	417

¹Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 3,226 men and 4,380 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared August 1999.)

Table 186.—College enrollment rates of high school graduates, by race/ethnicity: 1960 to 1998

[Numbers in thousands]

Year	High school graduates ¹				Enrolled in college ²								Hispanic ⁴	
	Total	White ³	Black ^{3,4}	Hispanic ⁴	Total		White ³		Black ^{3,4}		Number	Percent		
					Number	Percent	Number	Percent	Number	Percent		Annual	3-year moving average	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1960	1,679	1,565	—	—	758	45.1	717	45.8	—	—	—	—	—	
1961	1,763	1,612	—	—	847	48.0	798	49.5	—	—	—	—	—	
1962	1,838	1,660	—	—	900	49.0	840	50.6	—	—	—	—	—	
1963	1,741	1,615	—	—	784	45.0	736	45.6	—	—	—	—	—	
1964	2,145	1,964	—	—	1,037	48.3	967	49.2	—	—	—	—	—	
1965	2,659	2,417	—	—	1,354	50.9	1,249	51.7	—	—	—	—	—	
1966	2,612	2,403	—	—	1,309	50.1	1,243	51.7	—	—	—	—	—	
1967	2,525	2,267	—	—	1,311	51.9	1,202	53.0	—	—	—	—	—	
1968	2,606	2,303	—	—	1,444	55.4	1,304	56.6	—	—	—	—	—	
1969	2,842	2,538	—	—	1,516	53.3	1,402	55.2	—	—	—	—	—	
1970	2,757	2,461	—	—	1,427	51.8	1,280	52.0	—	—	—	—	—	
1971	2,872	2,596	—	—	1,535	53.4	1,402	54.0	—	—	—	—	—	
1972	2,961	2,614	—	—	1,457	49.2	1,292	49.4	—	—	—	—	—	
1973	3,059	2,707	—	—	1,425	46.6	1,302	48.1	—	—	—	—	—	
1974	3,101	2,736	—	—	1,474	47.5	1,288	47.1	—	—	—	—	—	
1975	3,186	2,825	—	—	1,615	50.7	1,446	51.2	—	—	—	—	—	
1976	2,987	2,640	320	152	1,458	48.8	1,291	48.9	134	41.9	80	52.6	—	
1977	3,140	2,768	335	156	1,590	50.6	1,403	50.7	166	49.6	80	51.3	48.9	
1978	3,161	2,750	352	133	1,584	50.1	1,378	50.1	161	45.7	57	42.9	46.3	
1979	3,160	2,776	324	154	1,559	49.3	1,376	49.6	147	45.4	69	44.8	46.8	
1980	3,089	2,682	361	129	1,524	49.3	1,339	49.9	151	41.8	68	52.7	49.9	
1981	3,053	2,626	359	146	1,646	53.9	1,434	54.6	154	42.9	76	52.1	49.3	
1982	3,100	2,644	384	174	1,568	50.6	1,376	52.0	140	36.5	75	43.1	49.8	
1983	2,964	2,496	392	138	1,562	52.7	1,372	55.0	151	38.5	75	54.3	47.3	
1984	3,012	2,514	438	185	1,662	55.2	1,455	57.9	176	40.2	82	44.3	49.9	
1985	2,666	2,241	333	141	1,539	57.7	1,332	59.4	141	42.3	72	51.1	46.6	
1986	2,786	2,307	386	169	1,499	53.8	1,292	56.0	141	36.5	75	44.4	43.0	
1987	2,647	2,207	337	176	1,503	56.8	1,249	56.6	175	51.9	59	33.5	45.0	
1988	2,673	2,187	382	179	1,575	58.9	1,328	60.7	172	45.0	102	57.0	48.6	
1989	2,454	2,051	337	168	1,463	59.6	1,238	60.4	178	52.8	93	55.4	53.2	
1990	2,355	1,921	341	112	1,410	59.9	1,182	61.5	158	46.3	53	47.3	53.3	
1991	2,276	1,867	320	154	1,420	62.4	1,207	64.6	146	45.6	88	57.1	53.1	
1992	2,398	1,900	353	199	1,479	61.7	1,204	63.4	169	47.9	109	54.8	58.1	
1993	2,338	1,910	302	200	1,464	62.6	1,200	62.8	168	55.6	125	62.5	55.4	
1994	2,517	2,065	318	178	1,559	61.9	1,313	63.6	162	50.9	87	48.9	55.1	
1995	2,599	2,088	356	288	1,610	61.9	1,308	62.6	183	51.4	155	53.8	51.1	
1996	2,660	2,092	416	227	1,729	65.0	1,377	65.8	230	55.3	115	50.7	55.0	
1997	2,769	2,228	394	336	1,856	67.0	1,504	67.5	235	59.6	220	65.5	54.6	
1998	2,810	2,227	393	314	1,844	65.6	1,499	65.8	244	62.1	149	47.5	—	

¹Individuals age 16 to 24 who graduated from high school during the preceding 12 months.²Enrollment in college as of October of each year for individuals age 16 to 24 who graduated from high school during the preceding 12 months.³Includes persons of Hispanic origin.⁴Due to the small sample size, data are subject to relatively large sampling errors.
—Data not available.

NOTE.—Data are based upon sample surveys of the civilian population. High school graduate data in this table differ from figures appearing in other tables because of varying survey procedures and coverage. High school graduates include GED recipients.

SOURCE: American College Testing Program, unpublished tabulations, 1987, derived from statistics collected by the U.S. Bureau of the Census; and U.S. Department of Labor, *College Enrollment of High School Graduates*, various years. (This table was prepared August 1999.)

Table 311.—Percentage distribution of 1980 high school sophomores, by highest level of education completed through 1992, by selected student characteristics: 1980 to 1992

Student characteristics	All 1980 sophomores	Less than high school	High school	Certificate	Associate degree	Bachelor's degree	Master's degree	Professional degree	Doctor's degree
1	2	3	4	5	6	7	8	9	10
Total	100.0	5.8	51.5	11.0	7.9	20.0	2.7	0.9	0.2
Sex									
Male	100.0	6.5	53.5	9.7	6.7	19.5	2.6	1.3	0.2
Female	100.0	5.0	49.5	12.4	9.1	20.5	2.8	0.5	0.1
Race/ethnicity									
White, non-Hispanic	100.0	4.9	49.1	10.1	8.4	23.1	3.2	1.0	0.2
Black, non-Hispanic	100.0	6.9	59.6	16.3	5.2	10.0	1.5	0.5	0.2
Hispanic	100.0	11.9	59.6	11.2	7.3	9.0	0.6	0.3	—
Asian/Pacific Islander	100.0	0.6	40.9	6.9	6.2	32.7	4.7	7.5	0.7
American Indian/Alaskan Native	100.0	17.8	58.2	11.8	5.0	6.7	0.5	—	—
Socioeconomic status (1980)									
Low quartile	100.0	9.0	64.6	12.3	6.9	6.4	0.7	0.1	—
Middle two quartiles	100.0	3.9	53.8	11.5	9.1	19.0	2.0	0.5	0.1
High quartile	100.0	1.4	32.7	7.0	7.6	41.2	6.9	2.7	0.5
Test score composite (1982)									
Low quartile	100.0	15.6	64.0	13.0	4.1	3.0	0.2	—	0.1
Middle two quartiles	100.0	3.1	56.2	12.8	10.1	16.1	1.5	0.3	—
High quartile	100.0	0.1	26.5	4.8	7.2	49.2	8.7	3.0	0.6
Parents' educational attainment in 1980									
No high school diploma	100.0	6.5	59.8	12.8	8.6	10.8	1.2	0.3	0.1
High school graduate	100.0	5.2	59.1	12.4	6.0	16.6	0.3	0.4	—
Vocational/technical	100.0	3.0	49.2	15.4	10.2	19.1	2.4	0.5	0.1
Some college	100.0	2.1	43.7	8.4	8.4	32.0	4.3	1.0	0.2
Bachelor's degree	100.0	1.4	32.6	4.9	8.1	42.4	6.9	3.1	0.5
Advanced degree	100.0	3.5	23.9	8.6	4.9	44.1	10.0	4.3	0.7
High school diploma status									
Regular diploma in 1982	100.0	0.3	51.9	10.8	8.7	23.9	3.2	1.1	0.2
Returned for diploma	100.0	6.8	68.3	14.4	7.0	3.4	0.1	0.1	—
Returned but no diploma	100.0	27.1	47.7	19.9	3.4	1.9	—	—	—
Never returned	100.0	51.5	35.7	9.5	2.1	0.9	0.3	—	—
Postsecondary expectations in 1982									
None	100.0	15.5	71.1	9.3	3.0	1.0	0.1	—	0.1
Vocational/technical	100.0	4.6	61.6	19.8	10.7	3.3	0.1	—	—
Less-than-4-year degree	100.0	1.6	53.2	13.3	15.6	15.0	1.1	0.2	—
Bachelor's degree	100.0	0.9	35.3	6.8	6.3	44.9	5.0	0.8	0.1
Advanced degree	100.0	0.8	28.9	5.2	5.7	45.1	9.0	4.4	0.8
Type of start in postsecondary education									
Fall 1982 full-time 4-year	100.0	—	21.2	3.5	4.6	57.8	9.0	3.4	0.5
Fall 1982 full-time public 2-year	100.0	0.3	36.5	11.9	24.4	24.6	2.1	0.2	—
Fall 1982 part-time 4-year	100.0	—	52.2	6.7	10.0	27.2	3.5	0.1	0.4
Fall 1982 part-time public 2-year	100.0	1.6	59.5	13.4	9.4	14.4	0.9	0.8	—
Fall 1982 other	100.0	0.2	23.0	34.3	24.5	15.7	1.9	0.4	—
Delayed 4-year	100.0	0.4	55.6	8.1	7.4	24.0	3.7	0.4	0.4
Delayed public 2-year	100.0	1.7	63.0	16.9	12.0	6.2	0.2	—	—
Delayed other	100.0	1.9	31.4	48.4	14.4	3.8	0.1	0.1	—
Other enrollment	100.0	—	—	86.5	5.1	6.0	1.1	0.4	0.8
Never enrolled	100.0	16.1	83.9	—	—	—	—	—	—

—Data not applicable or not available.

NOTE.—Because of rounding, details may not add to 100.0 percent.

SOURCE: National Center for Education Statistics, High School and Beyond, *Educational Attainment of High School Sophomores by 1992*. (This table was prepared May 1995.)



"D'Amico, Aurora" <Aurora_D'Amico@ed.gov>
03/29/2000 07:21:40 PM

Record Type: Record

To: Dana C. Herskovic/OPD/EOP

cc:

Subject: 2000031c (<http://nces.ed.gov/pubs2000/2000031c.pdf>)

Hello, Dana:

Thank you for your inquiry about the postsecondary education of Hispanic students. For the most recent data on enrollment and degrees conferred, please see the new edition of our flagship publication:

Digest of Education Statistics, 1999
<http://nces.ed.gov/pubs2000/2000031c.pdf>

For IPEDS Fall Enrollment data by race/ethnicity, please see the following tables:

Table 209.-Total fall enrollment in institutions of higher education and degree-granting institutions, by type and control of institution and race/ethnicity of student: 1976 to 1997

Table 210.-Total fall enrollment in institutions of higher education and degree-granting institutions, by level of study, sex, and race/ethnicity of student: 1976 to 1997

Table 211.-Total fall enrollment in degree-granting institutions, by level, attendance status, sex, and race/ethnicity of student: 1996 and 1997

Table 213.-Total fall enrollment in degree-granting institutions of higher education, by race/ethnicity of student and by state: 1992 to 1997

For IPEDS Completions data by race/ethnicity, please see:

Table 267.- Associate degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1996- 97

Table 268.- Associate degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1995- 96

Table 269.-Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1996-97

Table 270.- Bachelor's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1996- 97

Table 271.- Bachelor's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1995- 96

Table 272.-Master's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1996-97

Table 273.- Master's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1996- 97

Table 274.- Master's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1995- 96

Table 275.-Doctor's degrees 1 conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1996-97

Table 276.- Doctor's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1996- 97

Table 277.- Doctor's degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student: 1995- 96

Table 278.-First-professional degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1996-97

Table 279.- First- professional degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student:
1996- 97

Table 280.- First- professional degrees conferred by institutions of higher education, by racial/ ethnic group, major field of study, and sex of student:
1995- 96

Other Digest tables that may be of interest to you include the following:

Table 186.-College enrollment rates of high school graduates, by race/ethnicity: 1960 to 1998

Table 189.-Enrollment rates of 18- to 24-year-olds in institutions of higher education, by race/ethnicity:
1967 to 1998

Table 215.-Enrollment of persons 14 to 34 years of age in institutions of

higher education, by race/ethnicity, sex, and year of college: October 1965 to October 1998

Table 303.-Statistical profile of persons receiving doctor's degrees, by field of study: 1996-97

Table 304.-Statistical profile of persons receiving doctor's degrees in education: 1979-80 to 1996-97

Table 305.-Statistical profile of persons receiving doctor's degrees in engineering: 1979-80 to 1996-97

Table 305.-Statistical profile of persons receiving doctor's degrees in engineering: 1979-80 to 1996-97

Table 306.-Statistical profile of persons receiving doctor's degrees in the humanities: 1979-80 to 1996-97

Table 307.-Statistical profile of persons receiving doctor's degrees in the life sciences: 1979-80 to 1996-97

Table 308.-Statistical profile of persons receiving doctor's degrees in the physical sciences: 1979-80 to 1996-97

Table 309.-Statistical profile of persons receiving doctor's degrees in the social sciences: 1979-80 to 1996-97

Table 311.-Percentage distribution of 1980 high school sophomores, by highest level of education completed through 1992, by selected student characteristics: 1980 to 1992

Table 315.-Percentage distribution of enrollment and completion status of first-time postsecondary students starting during the 1989-90 academic year, by type of institution and other student characteristics: 1994

The data source for some of the "other" tables, such as Tables 189 and 215 is the Current Population Survey (CPS) conducted annually by the Bureau of the Census. Thus, you may be able to find more up-to-date information from their website: <http://www.census.gov>

They produce an annual report (based on a household survey) "School Enrollment -- Social and Economic Characteristics of Students: October 19??", which is based on the Current Population Reports (CPS), Population Characteristics, P20-series. The most recent is:

P20-521 - School Enrollment - Social and Economic Characteristics of Students: October 1998 (Update) (Detailed Tables)

<http://www.census.gov/prod/www/abs/school.html>
<http://www.census.gov/prod/99pubs/p20-521.pdf>

For more information on the CPS and their P-20 reports, please contact:

Education & Social Stratification Branch
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If you need any assistance with the Digest tables or text, please contact the co-author:

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Please feel free to contact me again if you need any assistance with postsecondary education.

Hope this helps! Aurora d' :-)

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or adamico@inet.ed.gov



- 2000031c.url

Table 189.—Enrollment rates of 18- to 24-year-olds in institutions of higher education, by race/ethnicity: 1967 to 1998

Year	Total		White, non-Hispanic		Black, non-Hispanic		Hispanic origin	
	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates ¹	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates ¹	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates ¹	Enrollment as a percent of 18- to 24-year-olds	Enrollment as a percent of high school graduates ¹
1	2	3	4	5	6	7	8	9
1967 ²	25.5	33.7	26.9	34.5	13.0	23.3	—	—
1968 ²	26.0	34.2	27.5	34.9	14.5	25.2	—	—
1969 ²	27.3	35.0	28.7	35.6	16.0	27.2	—	—
1970 ²	25.7	32.7	27.1	33.2	15.5	26.0	—	—
1971 ²	26.2	33.2	27.2	33.5	18.2	29.2	—	—
1972	25.5	31.1	27.2	31.9	18.3	25.2	13.4	24.1
1973	24.0	28.9	25.5	29.5	15.9	22.5	16.1	27.6
1974	24.6	29.8	25.8	29.9	17.6	24.6	18.0	30.7
1975	26.3	31.4	27.4	31.3	20.4	30.1	20.4	33.0
1976	26.7	32.3	27.6	32.1	22.5	32.1	20.0	34.7
1977	26.1	31.4	27.2	31.3	21.1	29.1	17.2	30.5
1978	25.3	30.0	26.5	30.1	20.1	27.9	15.2	25.9
1979	25.0	29.9	26.3	30.2	19.8	27.5	16.7	27.8
1980	25.7	30.5	27.3	31.0	19.4	26.0	16.1	27.6
1981	26.2	31.3	27.7	31.6	19.9	26.6	16.6	28.5
1982	26.6	31.6	28.1	32.0	19.9	26.5	16.8	27.6
1983	26.2	31.3	28.0	31.8	19.2	25.3	17.3	29.9
1984	27.1	31.8	28.9	32.6	20.3	25.6	17.9	28.8
1985	27.8	32.5	30.0	33.9	19.6	24.5	16.9	25.0
1986	27.9	32.7	29.7	33.3	21.9	26.9	17.6	28.3
1987	29.7	35.4	31.9	36.6	23.0	28.2	17.7	26.6
1988	30.2	36.0	33.1	37.4	21.1	26.8	17.1	29.1
1989	30.9	36.5	34.2	38.3	23.4	28.5	16.0	26.6
1990	32.1	37.7	35.2	39.2	25.3	30.4	16.2	26.8
1991	33.3	39.3	36.8	41.0	23.4	28.2	17.8	31.4
1992	34.4	42.0	37.3	42.8	25.2	33.9	21.3	37.5
1993	34.0	41.6	36.8	42.6	24.5	32.8	21.7	36.1
1994	34.6	42.3	38.1	43.7	27.7	35.6	18.8	33.1
1995	34.3	42.3	37.9	44.0	27.5	35.4	20.7	35.2
1996	35.5	43.4	39.5	45.1	27.4	35.9	20.1	34.5
1997	36.8	45.2	40.6	46.6	29.8	39.5	22.4	36.0
1998	36.5	45.2	40.6	46.9	29.8	40.0	20.4	33.9

¹ Includes students who were enrolled in college, but did not report high school completion.

² Data for white and black enrollment include persons of Hispanic origin.

—Data not available.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Percents based on 18- to 24-year-old high school graduates for 1992 and later

years use a slightly different definition of graduation and may not be directly comparable with figures for other years. All college students are counted as high school graduates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data. (This table was prepared September 1999.)

Table 190.—Total undergraduate fall enrollment¹ in institutions of higher education, by sex of student, attendance status, and control of institution: 1969 to 1997

[In thousands]

Year	Total	Full-time	Part-time	Men	Women	Men		Women		Men		Women	
						Full-time	Part-time	Full-time	Part-time	Public	Private	Public	Private
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1969	6,884	4,991	1,893	4,008	2,876	2,952	1,056	2,039	837	2,997	1,011	2,162	714
1970	7,376	5,280	2,096	4,254	3,122	3,097	1,157	2,183	939	3,241	1,013	2,387	735
1971	7,743	5,512	2,231	4,418	3,325	3,201	1,217	2,311	1,014	3,427	991	2,580	745
1972	7,941	5,488	2,453	4,429	3,512	3,121	1,308	2,367	1,145	3,467	962	2,756	756
1973	8,261	5,580	2,681	4,538	3,723	3,135	1,403	2,445	1,278	3,579	959	2,943	780
1974	8,798	5,726	3,072	4,765	4,033	3,191	1,574	2,535	1,498	3,799	966	3,232	801
1975	9,679	6,169	3,510	5,257	4,422	3,459	1,798	2,710	1,712	4,245	1,012	3,581	841
1976	9,429	6,030	3,399	4,902	4,527	3,242	1,660	2,788	1,739	3,949	953	3,668	859
1977	9,717	6,094	3,623	4,897	4,820	3,188	1,709	2,906	1,914	3,937	960	3,906	914
1978	9,691	5,967	3,724	4,766	4,925	3,072	1,694	2,895	2,030	3,812	954	3,974	951
1979	9,998	6,080	3,919	4,821	5,178	3,087	1,734	2,993	2,185	3,865	956	4,181	995
1980	10,475	6,362	4,113	5,000	5,475	3,227	1,773	3,135	2,340	4,014	985	4,427	1,048
1981	10,755	6,449	4,306	5,109	5,646	3,261	1,848	3,188	2,458	4,090	1,018	4,558	1,088
1982	10,825	6,484	4,341	5,170	5,655	3,299	1,871	3,184	2,470	4,140	1,031	4,573	1,081
1983	10,846	6,514	4,332	5,158	5,688	3,304	1,854	3,210	2,478	4,117	1,042	4,580	1,107
1984	10,618	6,348	4,270	5,007	5,611	3,195	1,812	3,153	2,459	3,990	1,017	4,504	1,107
1985	10,597	6,320	4,277	4,962	5,635	3,156	1,806	3,163	2,471	3,953	1,010	4,525	1,110
1986	10,798	6,352	4,446	5,018	5,780	3,146	1,871	3,206	2,575	4,002	1,015	4,658	1,122
1987	11,046	6,463	4,584	5,068	5,978	3,164	1,905	3,299	2,679	4,076	992	4,842	1,136
1988	11,317	6,642	4,674	5,138	6,179	3,206	1,931	3,436	2,743	4,113	1,024	4,990	1,189
1989	11,743	6,841	4,902	5,311	6,432	3,279	2,032	3,562	2,869	4,272	1,039	5,216	1,216
1990	11,959	6,976	4,983	5,380	6,579	3,337	2,043	3,639	2,940	4,353	1,027	5,357	1,223
1991	12,439	7,221	5,218	5,571	6,868	3,436	2,135	3,786	3,082	4,531	1,040	5,617	1,251
1992	12,538	7,244	5,293	5,583	6,955	3,425	2,158	3,820	3,135	4,537	1,046	5,679	1,275
1993	12,324	7,179	5,144	5,484	6,840	3,382	2,102	3,797	3,043	4,447	1,036	5,565	1,276
1994	12,263	7,169	5,094	5,422	6,840	3,342	2,081	3,827	3,013	4,394	1,028	5,551	1,290
1995	12,232	7,145	5,086	5,401	6,831	3,297	2,105	3,849	2,982	4,380	1,021	5,524	1,307
1996	12,259	7,211	5,049	5,411	6,848	3,304	2,107	3,907	2,942	4,368	1,043	5,537	1,311
1997	12,298	7,306	4,992	5,405	6,893	3,330	2,075	3,976	2,917	4,385	1,021	5,574	1,319

¹ Includes unclassified undergraduate students.

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities" surveys; and Integrated Postsecondary Education Data System, "Fall Enrollment" surveys. (This table was prepared July 1999.)

Table 209.—Total fall enrollment in institutions of higher education and degree-granting institutions, by type and control of institution and race/ethnicity of student: 1976 to 1997

Type and control of institution and race/ethnicity of student	Institutions of higher education, in thousands						Degree-granting institutions, in thousands ¹		Percentage distribution of students ²								
	1976	1980	1990	1995	1996	1997	1996	1997	Institutions of higher education							Degree-granting institutions ¹	
									1976	1980	1990	1995	1996	1997	1996	1997	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
All students																	
Total	10,985.6	12,086.8	13,818.6	14,261.8	14,300.3	14,345.4	14,367.5	14,502.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	9,076.1	9,833.0	10,722.5	10,311.2	10,226.0	10,160.9	10,263.9	10,266.1	84.3	83.5	79.9	74.7	73.9	73.2	73.8	73.1	
Total minority	1,690.8	1,948.8	2,704.7	3,496.2	3,609.3	3,723.2	3,637.4	3,771.2	15.7	16.5	20.1	25.3	26.1	26.8	26.2	26.9	
Black, non-Hispanic	1,033.0	1,106.8	1,247.0	1,473.7	1,499.4	1,532.8	1,505.6	1,551.0	9.6	9.4	9.3	10.7	10.8	11.0	10.8	11.0	
Hispanic	383.8	471.7	782.4	1,093.8	1,152.2	1,200.1	1,166.1	1,218.5	3.6	4.0	5.8	7.9	8.3	8.6	8.4	8.7	
Asian or Pacific Islander	197.9	286.4	572.4	797.4	823.6	851.5	828.2	859.2	1.8	2.4	4.3	5.8	6.0	6.1	6.0	6.1	
American Indian/Alaskan																	
Native	76.1	83.9	102.8	131.3	134.0	138.8	137.6	142.5	0.7	0.7	0.8	1.0	1.0	1.0	1.0	1.0	
Nonresident alien	218.7	305.0	391.5	454.4	464.9	461.3	466.3	465.0	—	—	—	—	—	—	—	—	
Public																	
Total	8,641.0	9,456.4	10,844.7	11,092.4	11,090.2	11,146.2	11,120.5	11,196.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	7,094.5	7,656.1	8,385.4	7,945.4	7,848.3	7,820.1	7,871.9	7,857.8	83.5	82.7	79.2	73.6	72.8	72.1	73.6	72.8	
Total minority	1,401.2	1,596.2	2,199.2	2,849.5	2,938.2	3,028.9	2,944.8	3,040.9	16.5	17.3	20.8	26.4	27.2	27.9	26.4	27.2	
Black, non-Hispanic	831.2	876.1	976.4	1,160.6	1,177.3	1,202.0	1,177.4	1,205.3	9.8	9.5	9.2	10.8	10.9	11.1	10.8	10.9	
Hispanic	336.8	406.2	671.4	937.1	987.6	1,027.3	990.7	1,031.6	4.0	4.4	6.3	8.7	9.2	9.5	8.7	9.2	
Asian or Pacific Islander	165.7	239.7	461.0	638.0	657.1	678.6	657.9	680.4	2.0	2.6	4.4	5.9	6.1	6.3	5.9	6.1	
American Indian/Alaskan																	
Native	67.5	74.2	90.4	113.8	116.3	121.0	118.8	123.6	0.8	0.8	0.9	1.1	1.1	1.1	1.1	1.1	
Nonresident alien	145.3	204.2	260.0	297.5	303.7	297.1	303.8	297.3	—	—	—	—	—	—	—	—	
Private																	
Total	2,344.6	2,630.4	2,973.9	3,169.4	3,210.1	3,199.3	3,247.0	3,306.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	1,981.6	2,176.9	2,337.0	2,365.9	2,377.7	2,340.8	2,392.0	2,408.3	87.3	86.1	82.2	78.5	78.0	77.1	78.5	78.0	
Total minority	289.6	352.7	505.5	646.6	671.1	694.3	692.6	730.3	12.7	13.9	17.8	21.5	22.0	22.9	21.5	22.0	
Black, non-Hispanic	201.8	230.7	270.6	313.0	322.2	330.7	328.1	345.8	8.9	9.1	9.5	10.4	10.6	10.9	10.4	10.6	
Hispanic	47.0	65.6	111.0	156.8	164.7	172.8	175.4	186.9	2.1	2.6	3.9	5.2	5.4	5.7	5.2	5.4	
Asian or Pacific Islander	32.2	46.7	111.5	159.4	166.5	172.9	170.3	178.8	1.4	1.8	3.9	5.3	5.5	5.7	5.3	5.5	
American Indian/Alaskan																	
Native	8.6	9.7	12.4	17.5	17.7	17.9	18.8	18.8	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.6	
Nonresident alien	73.4	100.8	131.4	156.9	161.3	164.2	162.5	167.7	—	—	—	—	—	—	—	—	
4-year																	
Total	7,106.5	7,565.4	8,578.6	8,769.3	8,802.8	8,874.7	8,804.2	8,896.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	5,999.0	6,274.5	6,768.1	6,517.2	6,483.2	6,482.7	6,483.1	6,496.1	86.6	85.7	82.0	77.6	76.9	76.3	76.9	76.3	
Total minority	931.0	1,049.9	1,486.1	1,885.5	1,946.2	2,016.4	1,946.8	2,016.4	13.4	14.3	18.0	22.4	23.1	23.7	23.1	23.7	
Black, non-Hispanic	603.7	634.3	722.8	852.2	870.2	894.9	869.6	896.4	8.7	8.7	8.8	10.1	10.3	10.5	10.3	10.5	
Hispanic	173.6	216.6	358.2	485.5	508.1	528.0	508.8	530.0	2.5	3.0	4.3	5.8	6.0	6.2	6.0	6.2	
Asian or Pacific Islander	118.7	162.1	357.2	482.4	500.7	516.4	501.1	518.5	1.7	2.2	4.3	5.7	5.9	6.1	5.9	6.1	
American Indian/Alaskan																	
Native	35.0	36.9	47.9	65.7	67.2	71.3	67.3	71.5	0.5	0.5	0.6	0.8	0.8	0.8	0.8	0.8	
Nonresident alien	176.5	240.9	324.3	366.2	373.5	381.4	374.3	384.3	—	—	—	—	—	—	—	—	
Public																	
Total	4,892.9	5,127.6	5,848.2	5,814.5	5,806.9	5,834.5	5,806.0	5,835.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	4,120.2	4,243.0	4,605.6	4,303.3	4,259.6	4,249.0	4,258.7	4,249.6	86.1	85.1	81.5	76.8	76.2	75.7	76.2	75.7	
Total minority	666.7	740.8	1,046.2	1,299.3	1,332.3	1,365.2	1,332.3	1,365.5	13.9	14.9	18.5	23.2	23.8	24.3	23.8	24.3	
Black, non-Hispanic	421.8	438.2	495.1	572.5	580.0	588.9	580.1	589.0	8.8	8.8	8.8	10.2	10.4	10.5	10.4	10.5	
Hispanic	129.3	156.4	262.5	346.8	359.8	371.3	359.8	371.4	2.7	3.1	4.6	6.2	6.4	6.6	6.4	6.6	
Asian or Pacific Islander	87.5	117.2	250.6	329.3	340.5	349.3	340.5	349.3	1.8	2.4	4.4	5.9	6.1	6.2	6.1	6.2	
American Indian/Alaskan																	
Native	28.2	29.0	38.0	50.8	52.0	55.7	52.0	55.7	0.6	0.6	0.7	0.9	0.9	1.0	0.9	1.0	
Nonresident alien	106.0	143.8	196.4	211.9	215.0	220.4	215.0	220.4	—	—	—	—	—	—	—	—	
Private																	
Total	2,213.6	2,437.8	2,730.3	2,954.7	2,995.9	3,040.2	2,998.2	3,061.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	1,878.8	2,031.5	2,162.5	2,213.9	2,223.6	2,233.8	2,224.4	2,246.5	87.7	86.8	83.1	79.1	78.4	77.6	78.4	77.5	
Total minority	264.3	309.2	439.8	586.5	613.9	645.3	624.4	650.9	12.3	13.2	16.9	20.9	21.6	22.4	21.6	22.5	
Black, non-Hispanic	182.0	196.1	227.7	279.7	290.2	306.0	289.5	307.4	8.5	8.4	8.7	10.0	10.2	10.6	10.2	10.6	
Hispanic	44.3	60.2	95.7	138.7	148.3	156.7	149.0	158.6	2.1	2.6	3.7	5.0	5.2	5.4	5.2	5.4	
Asian or Pacific Islander	31.2	44.9	106.6	153.2	160.2	167.1	160.7	169.2	1.5	1.9	4.1	5.5	5.6	5.8	5.7	5.8	
American Indian/Alaskan																	
Native	6.8	7.9	9.9	14.9	15.2	15.6	15.3	15.8	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	
Nonresident alien	70.5	97.1	127.9	154.3	158.4	161.0	159.3	163.9	—	—	—	—	—	—	—	—	
2-year																	
Total	3,879.1	4,521.4	5,240.1	5,492.5	5,497.4	5,470.7	5,563.3	5,605.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
White, non-Hispanic	3,077.7	3,558.5	3,954.3	3,794.0	3,742.6	3,678.2	3,780.8	3,770.0	80.2	79.8	76.4	70.2	69.2	68.2	69.1	68.2	
Total minority	759.8	898.9	1,218.6	1,610.4	1,663.1	1,712.6	1,690.6	1,754.8	19.8	20.2	23.6	29.8	30.8	31.8	30.9	31.8	
Black, non-Hispanic	429.3	472.5	524.3	621.5	629.3	637.9	636.0	654.6	11.2	10.6	10.1	11.5	11.6	11.8	11.6	11.8	
Hispanic	210.2	255.1	424.2	608.4	644.2	672.1	657.3	688.5	5.5	5.7	8.2	11.3	11.9	12.5	12.0	12.5	
Asian or Pacific Islander	79.2	124.3	215.2	314.9	322.9	335.1	327.0	340.7	2.1	2.8	4.2	5.8	6.0	6.2	6.0	6.2	
American Indian/Alaskan																	
Native	41.2	47.0	54.9	65.6	66.7	67.5	70.2	71.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.3	
Nonresident alien	42.2	64.1	67.1	88.1	91.5	79.9	82.0	80.7	—	—	—	—	—	—	—	—	
Public																	
Total	3,748.1	4,328.8	4,996.5	5,277.8	5,283.3	5,311.6	5,314.5	5,360.7	100.0	100.0	10						

Table 210.—Total fall enrollment in institutions of higher education and degree-granting institutions, by level of study, sex, and race/ethnicity of student: 1976 to 1997

Level of study, sex, and race/ethnicity of student	Institutions of higher education, in thousands						Degree-granting institutions, in thousands ¹		Percentage distribution of students ²							
	1976	1980	1990	1995	1996	1997	1996	1997	Institutions of higher education						Degree-granting institutions ¹	
									1976	1980	1990	1995	1996	1997	1996	1997
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
All students																
Total	10,985.6	12,086.8	13,818.6	14,261.8	14,300.3	14,345.4	14,367.5	14,502.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	9,076.1	9,833.0	10,722.5	10,311.2	10,226.0	10,160.9	10,263.9	10,266.1	84.3	83.5	79.9	74.7	73.9	73.2	73.8	73.3
Total minority	1,690.8	1,948.8	2,704.7	3,496.2	3,609.3	3,723.2	3,637.4	3,771.2	15.7	16.5	20.1	25.3	26.1	26.8	26.2	26.7
Black, non-Hispanic	1,033.0	1,106.8	1,247.0	1,473.7	1,499.4	1,532.8	1,505.6	1,551.0	9.6	9.4	9.3	10.7	10.8	11.0	10.8	11.0
Hispanic	383.8	471.7	782.4	1,093.8	1,152.2	1,200.1	1,166.1	1,218.5	3.6	4.0	5.8	7.9	8.3	8.6	8.4	8.7
Asian or Pacific Islander	197.9	286.4	572.4	797.4	823.6	851.5	828.2	859.2	1.8	2.4	4.3	5.8	6.0	6.1	6.0	6.1
American Indian/Alaskan																
Native	76.1	83.9	102.8	131.3	134.0	138.8	137.6	142.5	0.7	0.7	0.8	1.0	1.0	1.0	1.0	1.0
Nonresident alien	218.7	305.0	391.5	454.4	464.9	461.3	466.3	465.0	—	—	—	—	—	—	—	—
Men	5,794.4	5,868.1	6,283.9	6,342.5	6,344.0	6,330.0	6,352.8	6,396.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	4,813.7	4,772.9	4,861.0	4,594.1	4,553.0	4,504.8	4,552.2	4,548.8	85.3	84.4	80.5	75.6	74.9	74.3	74.8	74.2
Total minority	826.6	884.4	1,176.6	1,484.2	1,524.3	1,562.2	1,533.4	1,582.3	14.7	15.6	19.5	24.4	25.1	25.7	25.2	25.8
Black, non-Hispanic	469.9	463.7	484.7	555.9	563.6	572.5	564.1	579.8	8.3	8.2	8.0	9.1	9.3	9.4	9.3	9.5
Hispanic	209.7	231.6	353.9	480.2	501.3	518.1	506.6	525.8	3.4	4.1	5.9	7.9	8.2	8.5	8.3	8.6
Asian or Pacific Islander	108.4	151.3	294.9	393.3	403.6	414.0	405.5	417.7	1.9	2.7	4.9	6.5	6.6	6.8	6.7	6.8
American Indian/Alaskan																
Native	38.5	37.8	43.1	54.8	55.7	57.6	57.2	59.0	0.7	0.7	0.7	0.9	0.9	0.9	0.9	1.0
Nonresident alien	154.1	210.8	246.3	264.3	266.7	262.9	267.2	264.9	—	—	—	—	—	—	—	—
Women	5,191.2	6,218.7	7,534.7	7,919.2	7,956.3	8,015.5	8,014.7	8,106.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	4,262.4	5,060.1	5,861.5	5,717.2	5,673.1	5,656.1	5,711.7	5,717.4	83.1	82.6	79.3	74.0	73.1	72.4	73.1	72.3
Total minority	864.2	1,064.4	1,528.1	2,012.0	2,085.0	2,161.0	2,104.0	2,188.9	16.9	17.4	20.7	26.0	26.9	27.6	26.9	27.7
Black, non-Hispanic	563.1	643.0	762.3	917.8	935.8	960.2	941.4	971.3	11.0	10.5	10.3	11.9	12.1	12.3	12.0	12.3
Hispanic	174.1	240.1	428.5	613.7	650.9	682.0	659.5	692.7	3.4	3.9	5.8	7.9	8.4	8.7	8.4	8.8
Asian or Pacific Islander	89.4	135.2	277.5	404.1	420.0	437.4	422.6	441.5	1.7	2.2	3.8	5.2	5.4	5.6	5.4	5.6
American Indian/Alaskan																
Native	37.6	46.1	59.7	76.5	78.2	81.3	80.4	83.4	0.7	0.8	0.8	1.0	1.0	1.0	1.0	1.1
Nonresident alien	64.6	94.2	145.2	190.1	198.2	198.4	199.0	200.1	—	—	—	—	—	—	—	—
Full-time	6,703.6	7,088.9	7,821.0	8,128.8	8,213.5	8,322.4	8,303.0	8,438.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	5,512.6	5,717.0	6,016.5	5,833.8	5,847.5	5,886.7	5,906.1	5,960.1	84.2	83.4	79.9	74.9	74.4	73.9	74.3	73.8
Total minority	1,030.9	1,137.5	1,514.9	1,955.3	2,017.2	2,079.8	2,046.8	2,118.7	15.8	16.6	20.1	25.1	25.6	26.1	25.7	26.2
Black, non-Hispanic	659.2	685.6	718.3	840.4	861.0	880.7	871.9	896.6	10.1	10.0	9.5	10.8	10.9	11.1	11.0	11.1
Hispanic	211.1	247.0	394.7	553.2	577.1	599.6	588.8	614.0	3.2	3.6	5.2	7.1	7.3	7.5	7.4	7.6
Asian or Pacific Islander	117.7	162.0	347.4	488.7	503.9	520.6	508.5	526.6	1.8	2.4	4.6	6.3	6.4	6.5	6.4	6.5
American Indian/Alaskan																
Native	43.0	43.0	54.4	73.0	75.2	79.0	77.5	81.5	0.7	0.6	0.7	0.9	1.0	1.0	1.0	1.0
Nonresident alien	160.0	234.4	289.6	339.7	348.7	355.9	350.1	359.2	—	—	—	—	—	—	—	—
Part-time	4,282.1	4,997.9	5,997.7	6,133.0	6,086.8	6,023.1	6,064.6	6,064.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	3,563.5	4,116.0	4,706.0	4,477.4	4,378.5	4,274.3	4,357.8	4,306.0	84.4	83.5	79.8	74.4	73.3	72.2	73.3	72.3
Total minority	659.9	811.3	1,189.8	1,540.9	1,592.1	1,643.4	1,590.6	1,652.5	15.6	16.5	20.2	25.6	26.7	27.8	26.7	27.7
Black, non-Hispanic	373.8	421.2	528.7	633.3	638.4	652.1	633.6	654.5	8.9	8.5	9.0	10.5	10.7	11.0	10.7	11.0
Hispanic	172.7	224.8	387.7	540.7	575.1	600.6	577.3	604.5	4.1	4.6	6.6	9.0	9.6	10.1	9.7	10.1
Asian or Pacific Islander	80.2	124.4	225.1	308.6	319.7	330.9	319.6	332.6	1.9	2.5	3.8	5.1	5.4	5.6	5.4	5.6
American Indian/Alaskan																
Native	33.1	40.9	48.4	58.3	58.8	59.9	60.0	61.0	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
Nonresident alien	58.7	70.6	101.8	114.7	116.2	105.4	116.2	105.8	—	—	—	—	—	—	—	—
Undergraduate																
Total	9,419.0	10,469.1	11,959.1	12,231.7	12,259.4	12,298.3	12,326.9	12,450.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	7,740.5	8,480.7	9,272.6	8,805.6	8,730.9	8,681.8	8,769.5	8,783.9	83.4	82.7	79.0	73.6	72.8	72.1	72.8	72.1
Total minority	1,535.3	1,778.5	2,467.7	3,158.5	3,254.4	3,351.5	3,282.1	3,398.5	16.6	17.3	21.0	26.4	27.2	27.9	27.2	27.9
Black, non-Hispanic	943.4	1,018.8	1,147.2	1,333.6	1,352.6	1,379.9	1,358.6	1,398.1	10.2	9.9	9.8	11.1	11.3	11.5	11.3	11.5
Hispanic	352.9	433.1	724.6	1,012.0	1,065.6	1,107.8	1,079.4	1,125.9	3.8	4.2	6.2	8.5	8.9	9.2	9.0	9.2
Asian or Pacific Islander	169.3	248.7	500.5	692.2	713.2	736.6	717.6	743.7	1.8	2.4	4.3	5.8	6.0	6.1	6.0	6.1
American Indian/Alaskan																
Native	69.7	77.9	95.5	120.7	122.9	127.2	126.5	130.8	0.8	0.8	0.8	1.0	1.0	1.1	1.0	1.1
Nonresident alien	143.2	209.9	218.7	267.6	274.1	265.0	275.3	268.2	—	—	—	—	—	—	—	—
Men	4,896.8	4,997.4	5,379.8	5,401.1	5,411.1	5,405.4	5,420.7	5,468.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	4,052.2	4,054.9	4,184.4	3,918.1	3,890.7	3,857.3	3,890.8	3,899.3	84.4	83.5	79.6	74.5	73.9	73.3	73.8	73.2
Total minority	748.2	802.7	1,069.3	1,339.3	1,375.0	1,408.4	1,384.1	1,427.9	15.6	16.5	20.4	25.5	26.1	26.7	26.2	26.8
Black, non-Hispanic	430.7	428.2	448.0	506.8	513.1	520.6	513.6	527.7	9.0	8.8	8.5	9.6	9.7	9.9	9.7	9.9
Hispanic	191.7	211.2	326.9	444.2	464.0	479.1	469.2	486.7	4.0	4.3	6.2	8.4	8.8	9.1	8.9	9.1
Asian or Pacific Islander	91.1	128.5	254.5	338.1	346.9	356.1	348.8	359.4	1.9	2.6	4.8	6.4	6.6	6.8	6.6	6.7
American Indian/Alaskan																
Native	34.8	34.8	39.9	50.2	51.0	52.6	52.4	54.1	0.7	0.7	0.8	1.0	1.0	1.0	1.0	1.0
Nonresident alien	96.4	139.8	126.1	143.8	145.3	139.6	145.8	141.4	—	—	—	—	—	—	—	—
Women	4,522.1	5,471.7	6,579.3	6,830.6	6,848.4	6,892.9	6,906.3	6,982.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic	3,688.3	4,425.8	5,088.2	4,887.5	4,840.2	4,824.5	4,878.7	4,884.6	82.4	81.9	78.4	72.9	72.0	71.3	72.0	71.3
Total minority	787.0	975.8	1,398.5	1,819.2	1,879.3	1,943.0	1,898.1	1,970.6	17.6	18.1	21.6	27.1	28.0	28.7	28.0	28.7
Black, non-Hispanic	512.7	590.6	699.2	826.9	839.5	859.3	845.0	870.3	11.5	10.9	10.8	12.3	12.5	12.7	12.5	12.7
Hispanic	161.2	221.8	397.6	567.8	601.6	628.7										

Table 211.—Total fall enrollment in degree-granting institutions, by level, attendance status, sex, and race/ethnicity of student: 1996 and 1997

Level and enrollment status	1997											Percent minority, fall 1996 ¹
	Total	Enrollment, by sex		Enrollment, by race/ethnicity							Non-resident alien	
		Male	Female	White	Total, minority	Percent minority ¹	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native		
1	2	3	4	5	6	7	8	9	10	11	12	13
All students	14,502,334	6,396,028	8,106,306	10,266,122	3,771,210	26.9	1,551,044	1,218,493	859,206	142,467	465,002	26.2
Undergraduate, full-time and part-time	12,450,587	5,468,532	6,982,055	8,783,903	3,398,505	27.9	1,398,058	1,125,924	743,706	130,817	268,179	27.2
Degree seeking	10,608,340	4,669,187	5,939,153	7,527,357	2,845,923	27.4	1,230,934	886,567	619,903	108,519	235,060	27.4
Percent of undergraduates												
seeking degrees	85.2	85.4	85.1	85.7	83.7	—	88.0	78.7	83.4	83.0	87.7	—
First-time freshmen	2,219,255	1,026,058	1,193,197	1,583,445	595,165	27.3	266,296	184,936	119,804	24,129	40,645	28.2
Other first-year	2,248,654	973,117	1,275,537	1,476,924	727,575	33.0	323,375	249,959	127,061	27,180	44,155	33.6
Second year	2,867,544	1,206,394	1,661,150	2,052,324	759,498	27.0	325,295	239,057	165,306	29,840	55,722	26.3
Third year	1,415,095	627,693	787,402	1,039,461	336,622	24.5	139,571	95,687	89,471	11,893	39,012	23.9
Fourth year and beyond	1,736,704	785,916	950,788	1,281,124	404,308	24.0	163,597	111,924	114,307	14,480	51,272	23.1
Unclassified by level	121,088	50,009	71,079	94,079	22,755	19.5	12,800	5,004	3,954	997	4,254	17.4
Others in credit courses	1,842,247	799,345	1,042,902	1,256,546	552,582	30.5	167,124	239,357	123,803	22,298	33,119	26.1
Full-time	7,418,598	3,379,597	4,039,001	5,284,553	1,924,059	26.7	826,756	568,855	453,365	75,083	209,986	26.2
Degree seeking	7,104,341	3,231,650	3,872,691	5,096,661	1,812,133	26.2	790,611	518,991	431,367	71,164	195,547	26.1
First-time freshmen	1,733,512	806,054	927,458	1,251,597	446,482	26.3	204,260	129,538	95,053	17,631	35,433	26.7
Other first-year	1,135,024	518,098	616,926	740,863	360,656	32.7	168,397	114,330	63,372	14,567	33,505	32.8
Second year	1,762,010	780,462	981,548	1,279,537	437,014	25.5	189,365	124,155	105,259	18,235	45,459	25.0
Third year	1,156,482	526,028	630,454	853,702	266,522	23.8	107,661	72,056	77,197	9,608	36,258	23.4
Fourth year and beyond	1,288,809	588,779	700,030	951,415	294,750	23.7	116,580	77,801	89,449	10,920	42,644	22.8
Unclassified by level	28,504	12,229	16,275	19,547	6,709	25.6	4,358	1,111	1,037	203	2,248	24.7
Others in credit courses	314,257	147,947	166,310	187,892	111,926	37.3	36,145	49,864	21,998	3,919	14,439	31.0
Part-time	5,031,989	2,088,935	2,943,054	3,499,350	1,474,446	29.6	571,302	557,069	290,341	55,734	58,193	28.7
Degree seeking	3,503,999	1,437,537	2,066,462	2,430,696	1,033,790	29.8	440,323	367,576	188,536	37,355	39,513	29.9
First-time freshmen	485,743	220,004	265,739	331,848	148,683	30.9	62,036	55,398	24,751	6,498	5,212	33.2
Other first-year	1,113,630	455,019	658,611	736,061	366,919	33.3	154,988	135,629	63,689	12,613	10,650	34.4
Second year	1,105,534	425,932	679,602	772,787	322,484	29.4	135,930	114,902	60,047	11,605	10,263	28.2
Third year	258,613	101,665	156,948	185,759	70,100	27.4	31,910	23,631	12,274	2,285	2,754	26.1
Fourth year and beyond	447,895	197,137	250,758	329,709	109,558	24.9	47,017	34,123	24,858	3,560	8,628	23.8
Unclassified by level	92,584	37,780	54,804	74,532	16,046	17.7	8,442	3,893	2,917	794	2,006	15.8
Others in credit courses	1,527,990	651,398	876,592	1,068,654	440,656	29.2	130,979	189,493	101,805	18,379	18,680	25.1
Postbaccalaureate	2,051,747	927,496	1,124,251	1,482,219	372,705	20.1	152,986	92,569	115,500	11,650	196,823	19.2
First-professional	298,258	169,627	128,631	220,386	70,414	24.2	21,364	13,865	32,903	2,282	7,458	23.7
First-time	87,914	48,725	39,189	64,648	21,214	24.7	6,498	4,299	9,734	683	2,052	24.2
Other	210,344	120,902	89,442	155,738	49,200	24.0	14,866	9,566	23,169	1,599	5,406	23.5
Full-time	267,218	151,325	115,893	196,499	63,840	24.5	18,120	12,533	31,108	2,079	6,879	24.1
First-time	78,337	43,272	35,065	57,487	18,953	24.8	5,397	3,823	9,113	620	1,897	24.4
Other	188,881	108,053	80,828	139,012	44,887	24.4	12,723	8,710	21,995	1,459	4,982	23.9
Part-time	31,040	18,302	12,738	23,887	6,574	21.6	3,244	1,332	1,795	203	579	21.0
First-time	9,577	5,453	4,124	7,161	2,261	24.0	1,101	476	621	63	155	22.6
Other	21,463	12,849	8,614	16,726	4,313	20.5	2,143	856	1,174	140	424	20.3
Graduate students	1,753,489	757,869	995,620	1,261,833	302,291	19.3	131,622	78,704	82,597	9,368	189,365	18.4
Degree seeking	1,477,955	659,855	818,100	1,050,051	247,000	19.0	108,620	61,507	69,225	7,648	180,904	18.2
Percent of graduate students												
seeking degrees	84.3	87.1	82.2	83.2	81.7	—	82.5	78.1	83.8	81.6	95.5	—
First-time	380,204	168,429	211,775	258,688	68,132	20.8	29,221	16,639	20,309	1,963	53,384	20.2
Other degree seeking	1,097,751	491,426	606,325	791,363	178,868	18.4	79,399	44,868	48,916	5,685	127,520	17.5
Others in credit courses	275,534	98,014	177,520	211,782	55,291	20.7	23,002	17,197	13,372	1,720	8,461	19.3
Full-time	752,246	359,520	392,726	479,093	130,804	21.4	51,695	32,605	42,161	4,343	142,349	20.6
Degree seeking	704,719	338,987	365,732	448,353	118,074	20.8	47,967	28,595	37,563	3,949	138,292	20.1
First-time	229,058	107,850	121,208	143,906	38,748	21.2	14,882	9,289	13,372	1,205	46,404	21.1
Other degree seeking	475,661	231,137	244,524	304,447	79,326	20.7	33,085	19,306	24,191	2,744	91,888	19.5
Others in credit courses	47,527	20,533	26,994	30,740	12,730	29.3	3,728	4,010	4,598	394	4,057	26.8
Part-time	1,001,243	398,349	602,894	782,740	171,487	18.0	79,927	46,099	40,436	5,025	47,016	17.0
Degree seeking	773,236	320,868	452,368	601,698	128,926	17.6	60,653	32,912	31,662	3,699	42,612	16.7
First-time	151,146	60,579	90,567	114,782	29,384	20.4	14,339	7,350	6,937	758	6,980	19.1
Other degree seeking	622,090	260,289	361,801	486,916	99,542	17.0	46,314	25,562	24,725	2,941	35,632	16.2
Others in credit courses	228,007	77,481	150,526	181,042	42,561	19.0	19,274	13,187	8,774	1,326	4,404	17.9

¹ Percentage based on U.S. citizens only.

—Data not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared July 1999.)

NOTE.—Data are for 4-year and 2-year degree-granting higher education institutions that were eligible to participate in Title IV federal financial aid programs.

Table 213.—Total fall enrollment in degree-granting institutions of higher education, by race/ethnicity of student and by state: 1992 to 1997

State or other area	1997								Percent minority ¹				
	Total	White, non-Hispanic	Minority enrollment, by race/ethnicity					Non-resident alien	1992	1994	1995	1996	1997
			Total	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native						
1	2	3	4	5	6	7	8	9	10	11	12	13	14
United States	14,502,334	10,266,122	3,771,210	1,551,044	1,218,493	859,206	142,467	465,002	22.5	24.6	25.3	26.2	26.9
Alabama	218,785	154,674	59,434	53,622	1,696	2,506	1,610	4,677	23.7	25.5	26.1	27.0	27.8
Alaska	27,915	21,559	5,960	1,033	836	975	3,116	396	18.3	18.7	19.3	19.4	21.7
Arizona	292,730	208,648	75,978	10,006	44,614	9,503	11,855	8,104	22.2	24.0	25.0	26.0	26.7
Arkansas	112,342	88,641	21,226	17,461	1,251	1,460	1,054	2,475	16.8	17.1	17.9	18.3	19.3
California	1,958,200	955,696	930,023	153,200	406,326	348,222	22,275	72,481	40.5	46.3	47.9	48.8	49.3
Colorado	252,245	200,332	45,828	8,922	24,728	8,836	3,342	6,085	15.8	16.9	17.7	18.3	18.6
Connecticut	153,128	120,373	26,939	12,188	8,154	6,049	548	5,816	14.2	16.3	16.9	17.6	18.3
Delaware	44,890	34,824	8,933	6,723	999	1,013	198	1,133	16.0	18.0	18.6	19.4	20.4
District of Columbia	72,397	35,438	28,381	20,828	2,906	4,413	234	8,578	44.0	45.4	45.8	45.7	44.5
Florida	658,259	420,529	215,727	93,337	99,092	20,351	2,947	22,003	27.5	29.5	31.0	32.9	33.9
Georgia	306,238	203,447	93,844	78,736	5,051	9,294	763	8,947	26.4	29.0	29.7	30.8	31.6
Hawaii	61,514	15,183	40,658	1,657	1,429	37,353	219	5,673	69.6	70.6	70.8	71.0	72.8
Idaho	61,641	56,560	3,944	406	1,773	930	835	1,137	5.5	6.1	6.4	6.5	6.5
Illinois	726,199	500,787	206,171	94,788	67,595	41,294	2,494	19,241	25.6	26.9	27.3	28.4	29.2
Indiana	295,517	252,832	32,858	19,437	6,838	5,362	1,221	9,827	9.8	10.5	10.9	11.2	11.5
Iowa	180,967	160,715	12,922	5,048	3,044	4,021	809	7,330	6.2	7.2	7.4	7.7	7.4
Kansas	177,544	148,335	23,837	8,957	7,999	4,204	2,677	5,372	10.7	11.5	12.8	12.6	13.8
Kentucky	178,924	158,464	17,054	12,711	1,354	2,258	731	3,406	8.2	8.9	9.1	9.5	9.7
Louisiana	219,196	142,688	70,708	59,487	5,271	4,704	1,246	5,800	29.7	31.4	31.8	32.8	33.1
Maine	56,368	52,997	2,511	571	376	840	724	860	4.4	3.7	4.8	4.0	4.5
Maryland	261,262	167,418	83,508	60,582	6,750	15,157	1,019	10,336	27.3	30.0	30.9	32.2	33.3
Massachusetts	412,620	315,279	72,223	25,129	18,983	26,434	1,677	25,118	14.4	16.5	17.3	17.7	18.6
Michigan	549,742	436,283	95,075	61,698	12,125	16,786	4,466	18,384	15.3	16.8	17.2	17.5	17.9
Minnesota	269,887	238,810	24,230	8,235	3,844	9,330	2,821	6,847	6.8	8.0	8.9	9.0	9.2
Mississippi	130,561	85,796	42,848	40,439	759	1,046	604	1,917	29.8	31.2	31.5	32.7	33.3
Missouri	302,896	253,158	41,535	27,336	5,536	6,989	1,674	8,203	12.6	13.2	13.4	13.8	14.1
Montana	44,141	38,242	4,950	158	546	362	3,884	949	12.9	11.5	11.4	11.2	11.5
Nebraska	111,542	99,226	9,434	3,748	2,387	2,419	880	2,882	7.2	7.4	7.8	8.0	8.7
Nevada	76,417	56,116	18,306	4,582	7,167	5,258	1,299	1,995	18.7	19.5	21.1	23.0	24.6
New Hampshire	63,811	58,976	3,543	975	1,120	1,200	248	1,292	5.4	4.6	5.2	5.0	5.7
New Jersey	325,754	217,788	96,223	38,614	33,498	23,146	965	11,743	24.8	27.4	28.6	29.5	30.6
New Mexico	108,560	57,803	49,083	2,822	36,516	1,916	7,829	1,674	39.8	41.8	43.1	44.9	45.9
New York	1,024,498	665,873	314,280	137,711	104,157	68,688	3,724	44,345	26.9	28.9	30.7	31.6	32.1
North Carolina	373,717	272,743	94,160	76,801	5,478	8,046	3,835	6,814	22.6	24.1	24.2	24.9	25.7
North Dakota	38,937	34,676	3,024	340	291	276	2,117	1,237	7.3	7.8	7.6	8.2	8.0
Ohio	537,169	447,217	73,166	51,838	8,201	11,181	1,946	16,786	12.1	13.2	13.6	14.1	14.1
Oklahoma	177,157	132,180	37,097	13,370	4,610	4,801	14,316	7,880	17.7	19.9	20.4	20.9	21.9
Oregon	169,852	142,148	21,665	2,894	6,022	10,013	2,736	6,039	10.6	12.2	13.4	13.0	13.2
Pennsylvania	588,185	486,970	83,604	49,132	11,876	21,075	1,521	17,611	12.5	13.2	14.0	14.3	14.7
Rhode Island	72,078	59,982	9,457	3,352	3,089	2,754	262	2,639	10.2	11.4	12.3	13.0	13.6
South Carolina	176,278	126,555	46,655	41,993	1,816	2,316	530	3,068	23.7	24.7	25.3	26.1	26.9
South Dakota	39,042	34,718	3,537	275	165	259	2,838	787	7.5	8.6	8.9	8.3	9.2
Tennessee	249,805	199,031	45,688	37,708	2,780	1,693	3,507	5,086	17.1	17.7	17.8	18.2	18.7
Texas	969,283	582,361	359,255	98,255	209,984	45,851	5,165	27,667	32.4	35.1	36.3	37.4	38.2
Utah	157,891	141,988	10,521	909	4,603	3,531	1,478	5,382	5.9	6.5	6.6	6.8	6.9
Vermont	36,482	33,875	1,790	413	571	590	216	817	4.0	4.8	5.9	4.5	5.0
Virginia	364,904	265,443	91,132	61,941	9,151	18,291	1,749	8,329	21.3	23.6	24.0	24.9	25.6
Washington	315,281	246,843	58,480	12,631	13,278	26,267	6,304	9,958	14.8	16.9	17.5	18.2	19.2
West Virginia	87,965	80,282	5,865	3,706	933	950	276	1,818	5.4	5.9	5.9	6.2	6.8
Wisconsin	298,248	262,482	28,731	12,780	6,612	6,565	2,774	7,035	8.7	9.4	9.5	9.7	9.9
Wyoming	30,280	27,485	2,365	275	1,284	265	541	430	7.3	6.9	7.4	8.0	7.9
U.S. Service Schools	83,090	65,653	16,844	11,284	3,029	2,163	368	593	21.1	22.0	19.8	19.9	20.4
Outlying areas	178,154	3,095	174,388	2,252	162,990	9,033	113	671	99.5	99.5	99.6	99.6	98.3
American Samoa	1,248	0	1,248	0	0	1,248	0	0	100.0	100.0	100.0	100.0	100.0
Federated States of Micronesia	1,372	0	1,369	0	0	1,369	0	3	100.0	100.0	100.0	100.0	100.0
Guam	5,533	415	4,762	36	44	4,675	7	356	89.5	90.0	90.4	90.9	92.0
Marshall Islands	459	0	459	0	0	459	0	0	100.0	100.0	100.0	100.0	100.0
Northern Marianas	1,136	62	911	1	6	904	0	163	89.5	92.3	92.1	92.2	93.6
Palau	330	0	330	0	0	330	0	0	100.0	100.0	100.0	100.0	100.0
Puerto Rico	165,466	2,494	162,926	64	162,823	22	17	46	100.0	100.0	100.0	100.0	98.5
Virgin Islands	2,610	124	2,383	2,151	117	26	89	103	91.3	92.5	94.5	95.2	95.1

¹Percent minority based on U.S. citizen enrollment (total enrollment less enrollment of nonresident aliens). Data for 1992 through 1995 are based on institutions of higher education. Data for 1996 and 1997 are for degree-granting institutions.

NOTE.—Data prior to 1996 are based on higher education institutions that were accredited by an agency or association that was recognized by the U.S. Department of Education. The Department of Education no longer distinguishes between those institutions and other institutions that are eligible to participate in Title IV programs. The new degree-granting classification is very similar to the earlier higher education classification,

except that it includes some additional institutions, primarily 2-year colleges, and excludes a few higher education institutions that did not award degrees.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys. (This table was prepared July 1999.)

Table 215.—Enrollment of persons 14 to 34 years of age¹ in institutions of higher education, by race/ethnicity, sex, and year of college: October 1965 to October 1998

Characteristic	1965	1970	1975	1980	1985 ²	1988	1989	1990	1991	1992	1993	1994 ³	1995	1996	1997	1998
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Numbers in thousands																
All students	5,675	7,413	9,697	10,181	10,863	10,937	11,066	11,303	11,589	11,671	11,409	12,298	12,046	12,448	12,640	12,860
White, non-Hispanic ⁴																
Total	5,317	6,759	8,141	8,453	8,781	8,616	8,786	8,892	8,916	8,883	8,592	9,076	8,973	8,943	9,087	9,089
Men	3,326	4,066	4,566	4,225	4,361	4,155	4,220	4,298	4,323	4,207	4,168	4,313	4,319	4,222	4,353	4,346
Women	1,991	2,693	3,576	4,228	4,420	4,461	4,565	4,594	4,594	4,676	4,424	4,764	4,654	4,721	4,734	4,743
Black, non-Hispanic ⁴																
Total	274	522	927	996	1,036	1,096	1,116	1,167	1,190	1,205	1,227	1,469	1,415	1,513	1,500	1,640
Men	126	253	433	431	458	423	425	508	523	467	515	641	579	633	595	649
Women	148	269	494	565	578	674	690	659	667	738	713	828	837	879	904	991
Hispanic origin																
Total	—	—	411	443	579	654	640	617	721	816	867	982	1,014	1,039	1,109	1,166
Men	—	—	219	222	280	313	311	297	310	349	391	443	495	440	495	485
Women	—	—	192	221	299	341	330	321	411	468	475	539	519	599	614	680
Year of college																
First	1,861	2,212	2,886	2,958	2,956	3,131	2,983	3,109	2,995	3,274	3,139	3,357	3,236	3,295	3,637	3,521
Second	1,256	1,739	2,376	2,411	2,585	2,598	2,680	2,798	2,959	3,002	2,964	3,075	3,068	3,060	2,764	3,148
Third	896	1,248	1,491	1,716	1,931	1,979	2,017	1,958	2,009	2,136	2,080	2,244	2,239	2,235	2,280	2,362
Fourth	803	1,074	1,354	1,403	1,642	1,631	1,676	1,817	1,877	1,681	1,692	1,902	1,772	2,033	2,010	1,863
Fifth or higher	859	1,140	1,590	1,692	1,749	1,598	1,711	1,620	1,749	1,578	1,535	1,719	1,731	1,823	1,948	1,966
Percentage distribution																
All students	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White, non-Hispanic ⁴																
Total	93.7	91.2	84.0	83.0	80.8	78.8	79.4	78.7	76.9	76.1	75.3	73.8	74.5	71.8	71.9	70.7
Men	58.6	54.8	47.1	41.5	40.1	38.0	38.1	38.0	37.3	36.0	36.5	35.1	35.9	33.9	34.4	33.8
Women	35.1	36.3	36.9	41.5	40.7	40.8	41.3	40.6	39.6	40.1	38.8	38.7	38.6	37.9	37.5	36.9
Black, non-Hispanic ⁴																
Total	4.8	7.0	9.6	9.8	9.5	10.0	10.1	10.3	10.3	10.3	10.8	11.9	11.7	12.2	11.9	12.8
Men	2.2	3.4	4.5	4.2	4.2	3.9	3.8	4.5	4.5	4.0	4.5	5.2	4.8	5.1	4.7	5.1
Women	2.6	3.6	5.1	5.5	5.3	6.2	6.2	5.8	5.8	6.3	6.2	6.7	6.9	7.1	7.2	7.7
Hispanic origin																
Total	—	—	4.2	4.4	5.3	6.0	5.8	5.5	6.2	7.0	7.6	8.0	8.4	8.3	8.8	9.1
Men	—	—	2.3	2.2	2.6	2.9	2.8	2.6	2.7	3.0	3.4	3.6	4.1	3.5	3.9	3.8
Women	—	—	2.0	2.2	2.8	3.1	3.0	2.8	3.5	4.0	4.2	4.4	4.3	4.8	4.9	5.3
Year of college																
First	32.8	29.8	29.8	29.1	27.2	28.6	27.0	27.5	25.8	28.1	27.5	27.3	26.9	26.5	28.8	27.4
Second	22.1	23.5	24.5	23.7	23.8	23.8	24.2	24.8	25.5	25.7	26.0	25.0	25.5	24.6	21.9	24.5
Third	15.8	16.8	15.4	16.9	17.8	18.1	18.2	17.3	17.3	18.3	18.2	18.3	18.6	18.0	18.0	18.4
Fourth	14.1	14.5	14.0	13.8	15.1	14.9	15.1	16.1	16.2	14.4	14.8	15.5	14.7	16.3	15.9	14.5
Fifth or higher	15.1	15.4	16.4	16.6	16.1	14.6	15.5	14.3	15.1	13.5	13.5	14.0	14.4	14.6	15.4	15.3

¹Totals differ from those shown in other tables. This table presents data collected in sample surveys of households rather than surveys of institutions. Excludes persons age 35 and over.

²Data for 1985 to 1993 are controlled to 1980 census base.

³Data are controlled to 1990 census base. Large increase in 1994 is partly due to the change in census base and change in survey form administration procedures.

⁴Data for 1965 and 1970 include persons of Hispanic origin.

—Data not available.

NOTE.—Data are based upon sample surveys of the civilian noninstitutional population. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 403, and unpublished data. (This table was prepared October 1999.)

Table 270.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1996–97

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total¹	1,168,023	898,224	94,053	61,941	67,969	7,409	38,427	517,901	401,878	33,509	26,007	32,111	2,988	21,408	650,122	496,346	60,544	35,934	35,858	4,421	17,019
Agriculture and natural resources	22,602	20,313	600	616	548	181	344	13,794	12,575	308	341	251	94	225	8,808	7,738	292	275	297	87	119
Architecture and related programs	7,944	5,850	301	579	663	40	511	5,090	3,778	203	382	393	27	307	2,854	2,072	98	197	270	13	204
Area, ethnic, and cultural studies	5,839	3,617	710	616	636	72	188	1,995	1,240	240	224	204	27	60	3,844	2,377	470	392	432	45	128
Biological sciences/life sciences	63,975	46,398	4,209	2,839	8,729	346	1,454	29,470	21,913	1,334	1,299	4,101	159	664	34,505	24,485	2,875	1,540	4,628	187	790
Business	226,633	166,729	19,999	11,787	13,952	1,122	13,044	116,519	88,722	7,725	5,621	6,442	527	7,482	110,114	78,007	12,274	6,166	7,510	595	5,562
Communications	47,230	37,678	4,192	2,208	1,537	243	1,372	19,412	15,937	1,498	825	553	75	524	27,818	21,741	2,694	1,383	984	168	848
Communications technologies	538	426	79	8	8	4	13	276	227	28	7	5	1	8	262	199	51	1	3	3	5
Computer and information sciences	24,768	16,232	2,463	1,106	2,870	101	1,996	18,037	12,534	1,259	745	1,999	72	1,428	6,731	3,698	1,204	361	871	29	568
Construction trades	108	91	8	3	0	2	4	93	81	5	1	0	2	4	15	10	3	2	0	0	0
Education	105,233	90,004	7,540	4,155	1,637	932	965	26,271	22,353	1,952	995	476	226	269	78,962	67,651	5,588	3,160	1,161	706	696
Engineering	61,185	42,642	3,149	3,072	7,257	268	4,797	50,058	35,450	2,070	2,465	5,752	200	4,121	11,127	7,192	1,079	607	1,505	68	676
Engineering-related technologies	13,816	10,826	1,383	488	478	97	544	12,452	9,897	1,101	441	428	83	502	1,364	929	282	47	50	14	42
English language and literature/letters	49,345	40,962	3,438	2,197	1,926	303	519	16,531	14,038	885	746	585	114	163	32,814	26,924	2,553	1,451	1,341	189	356
Foreign languages and literatures	13,674	9,878	479	2,138	643	62	474	4,138	3,078	127	617	192	16	108	9,536	6,800	352	1,521	451	46	366
Health professions and related sciences	85,631	69,702	6,599	3,152	4,523	553	1,102	15,877	12,678	962	692	1,139	116	290	69,754	57,024	5,637	2,460	3,384	437	812
Home economics and vocational home economics	16,571	13,813	1,203	589	605	86	275	1,914	1,519	175	83	69	13	55	14,657	12,294	1,028	506	536	73	220
Law and legal studies	2,038	1,572	234	120	85	18	9	603	453	61	49	33	5	2	1,435	1,119	173	71	52	13	7
Liberal arts and sciences, general studies, and humanities	34,776	26,126	3,607	2,855	1,233	344	611	13,483	10,549	1,181	889	436	152	276	21,293	15,577	2,426	1,966	797	192	335
Library science	48	42	5	0	0	0	1	6	6	0	0	0	0	0	42	36	5	0	0	0	1
Mathematics	12,820	9,693	1,089	570	887	58	523	6,908	5,208	520	332	501	29	318	5,912	4,485	569	238	386	29	205
Mechanics and repairers	48	40	4	0	0	2	2	45	39	3	0	0	1	2	3	1	1	0	0	1	0
Multi/interdisciplinary studies	26,137	19,347	2,074	2,441	1,722	175	378	8,901	6,689	622	616	718	61	195	17,236	12,658	1,452	1,825	1,004	114	183
Parks, recreation, leisure and fitness studies	15,401	13,187	932	673	280	101	228	7,858	6,551	544	419	151	55	138	7,543	6,636	388	254	129	46	90
Philosophy and religion	7,685	6,425	331	323	439	37	130	4,882	4,132	192	202	255	21	80	2,803	2,293	139	121	184	16	50
Physical sciences and science technologies	19,531	15,368	1,140	566	1,685	103	669	12,228	10,003	479	345	913	59	429	7,303	5,365	661	221	772	44	240
Precision production trades	326	278	28	3	8	2	7	257	223	17	2	8	1	6	69	55	11	1	0	1	1
Protective services	25,165	18,334	3,873	2,053	553	225	127	15,150	11,711	1,715	1,171	366	104	83	10,015	6,623	2,158	882	187	121	44
Psychology	74,191	56,737	6,811	4,934	4,162	508	1,039	19,379	14,904	1,633	1,228	1,237	127	250	54,812	41,833	5,178	3,706	2,925	381	789
Public administration and services	20,649	14,623	3,640	1,425	566	226	169	4,177	2,813	786	319	174	45	40	16,472	11,810	2,854	1,106	392	181	129
R.O.T.C. and military sciences	4	3	0	0	1	0	0	4	3	0	0	1	0	0	0	0	0	0	0	0	0
Social sciences and history	124,891	93,662	11,298	7,836	7,379	877	3,839	64,115	49,868	4,564	3,665	3,519	400	2,099	60,776	43,794	6,734	4,171	3,860	477	1,740
Theological studies and religious vocations	5,591	4,895	227	135	144	23	167	4,119	3,656	149	92	98	21	103	1,472	1,239	78	43	46	2	64
Transportation and material moving workers	3,547	3,020	165	138	68	23	133	3,130	2,667	143	123	61	18	118	417	353	22	15	7	5	15
Visual and performing arts	50,083	39,711	2,243	2,316	2,745	275	2,793	20,729	16,383	1,028	1,071	1,051	137	1,059	29,354	23,328	1,215	1,245	1,694	138	1,734

¹Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 2,614 men and 2,242 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared August 1999.)

Table 271.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1995–96

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total¹	1,163,036	904,709	91,166	58,288	64,359	6,970	37,544	521,439	408,829	32,852	24,994	30,630	2,885	21,249	641,597	495,880	58,314	33,294	33,729	4,085	16,295
Agriculture and natural resources	21,431	19,286	606	573	448	171	347	13,535	12,341	323	337	215	100	219	7,896	6,945	283	236	233	71	128
Architecture and related programs	8,352	6,293	317	576	706	33	427	5,340	4,088	207	369	392	23	261	3,012	2,205	110	207	314	10	166
Area, ethnic, and cultural studies	5,786	3,583	690	573	668	68	204	1,984	1,226	228	186	222	21	101	3,802	2,357	462	387	446	47	103
Biological sciences/life sciences	60,994	44,676	3,874	2,616	8,143	324	1,361	28,849	21,586	1,261	1,269	3,976	147	610	32,145	23,090	2,613	1,347	4,167	177	751
Business	227,102	168,220	20,190	11,286	13,523	1,089	12,794	116,842	89,656	7,728	5,488	6,131	518	7,321	110,260	78,564	12,462	5,798	7,392	571	5,473
Communications	47,320	38,144	4,220	2,049	1,430	198	1,279	19,391	16,016	1,520	797	495	80	483	27,929	22,128	2,700	1,252	935	118	796
Communications technologies	683	564	74	9	12	8	16	369	321	31	4	5	2	6	314	243	43	5	7	6	10
Computer and information sciences	24,098	15,827	2,471	1,042	2,502	91	2,165	17,468	12,198	1,248	678	1,734	51	1,559	6,630	3,629	1,223	364	768	40	606
Construction trades	80	73	2	0	0	0	5	76	69	2	0	0	0	5	4	4	0	0	0	0	0
Education	105,509	91,259	7,149	3,792	1,517	886	906	26,233	22,539	1,863	889	415	234	293	79,276	68,720	5,286	2,903	1,102	652	613
Engineering	62,114	44,185	3,073	2,883	6,968	249	4,756	51,069	36,922	2,016	2,292	5,503	200	4,136	11,045	7,263	1,057	591	1,465	49	620
Engineering-related technologies	15,189	11,719	1,326	748	727	105	564	13,763	10,785	1,033	678	661	86	520	1,426	934	293	70	66	19	44
English language and literature/letters	50,698	42,166	3,499	2,235	1,979	273	546	17,253	14,673	900	750	623	110	197	33,445	27,493	2,599	1,485	1,356	163	349
Foreign languages and literatures	13,952	10,137	488	2,122	695	61	449	4,219	3,182	112	602	184	14	125	9,733	6,955	376	1,520	511	47	324
Health professions and related sciences	84,036	69,156	6,317	2,912	4,013	520	1,118	15,432	12,515	938	650	982	95	252	68,604	56,641	5,379	2,262	3,031	425	866
Home economics and vocational home economics	15,803	13,351	1,101	448	552	98	253	1,885	1,531	159	66	74	17	38	13,918	11,820	942	382	478	81	215
Law and legal studies	2,052	1,634	214	104	75	14	11	556	431	51	34	30	6	4	1,496	1,203	163	70	45	8	7
Liberal arts and sciences, general studies, and humanities	33,997	26,053	3,474	2,470	1,193	279	528	13,379	10,682	1,173	747	446	98	233	20,618	15,371	2,301	1,723	747	181	295
Library science	58	52	3	0	2	0	1	8	5	1	0	1	0	1	50	47	2	0	1	0	0
Mathematics	13,143	10,033	986	558	955	54	557	7,134	5,366	465	334	552	31	386	6,009	4,667	521	224	403	23	171
Mechanics and repairers	54	39	3	2	2	4	4	48	36	2	1	1	4	4	6	3	1	1	1	0	0
Multi/interdisciplinary studies	26,515	20,043	2,115	2,192	1,568	210	387	9,286	7,129	668	540	675	66	208	17,229	12,914	1,447	1,652	893	144	179
Parks, recreation, leisure and fitness studies	13,983	12,146	790	579	219	79	170	7,090	6,022	457	350	113	46	102	6,893	6,124	333	229	106	33	68
Philosophy and religion	7,388	6,182	346	307	375	20	158	4,859	4,071	209	219	242	12	106	2,529	2,111	137	88	133	8	52
Physical sciences and science technologies	19,647	15,551	1,130	566	1,605	108	687	12,578	10,277	497	355	934	77	438	7,069	5,274	633	211	671	31	249
Precision production trades	401	345	32	13	7	0	4	305	261	24	12	6	0	2	96	84	8	1	1	0	2
Protective services	24,810	18,386	3,710	1,918	447	222	127	15,274	11,979	1,687	1,106	294	126	82	9,536	6,407	2,023	812	153	96	45
Psychology	73,291	57,254	6,157	4,640	3,744	482	1,014	19,817	15,582	1,455	1,218	1,151	136	275	53,474	41,672	4,702	3,422	2,593	346	739
Public administration and services	19,849	14,205	3,433	1,290	546	194	181	4,205	2,942	747	286	147	33	50	15,644	11,263	2,686	1,004	399	161	131
R.O.T.C. and military sciences	7	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0
Social sciences and history	126,479	96,637	10,977	7,366	6,892	811	3,796	65,872	51,938	4,635	3,568	3,242	395	2,094	60,607	44,699	6,342	3,798	3,650	416	1,702
Theological studies and religious vocations	5,358	4,740	205	106	122	20	165	4,044	3,630	139	74	74	17	110	1,314	1,110	66	32	48	3	55
Transportation and material moving workers	3,561	3,020	192	137	75	21	116	3,143	2,681	159	118	67	19	99	418	339	33	19	8	2	17
Visual and performing arts	49,296	39,743	2,002	2,176	2,649	278	2,448	20,126	16,142	914	977	1,043	121	929	29,170	23,601	1,088	1,199	1,606	157	1,519

¹ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 1,015 men and 741 women whose racial/ethnic group and field of study were not available.

- NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1998.)

Table 272.—Master's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976–77 to 1996–97

Year	Number of degrees conferred							Percentage distribution of degrees conferred to U.S. citizens					
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Total							Total					
1976–77 ¹	316,602	266,061	21,037	6,071	5,122	967	17,344	100.0	88.9	7.0	2.0	1.7	0.3
1978–79 ²	300,255	249,360	19,418	5,555	5,496	999	19,427	100.0	88.8	6.9	2.0	2.0	0.4
1980–81 ³	294,183	241,216	17,133	6,461	6,282	1,034	22,057	100.0	88.6	6.3	2.4	2.3	0.4
1984–85 ⁴	280,421	223,628	13,939	6,864	7,782	1,256	26,952	100.0	88.2	5.5	2.7	3.1	0.5
1986–87 ⁵	289,349	228,874	13,873	7,044	8,559	1,103	29,896	100.0	88.2	5.3	2.7	3.3	0.4
1988–89 ^{5,6}	309,770	242,764	14,095	7,277	10,335	1,086	34,213	100.0	88.1	5.1	2.6	3.8	0.4
1989–90 ^{5,7}	322,465	251,690	15,446	7,950	10,577	1,101	35,701	100.0	87.8	5.4	2.8	3.7	0.4
1990–91 ^{5,8}	328,645	255,281	16,139	8,386	11,180	1,136	36,523	100.0	87.4	5.5	2.9	3.8	0.4
1991–92 ^{5,9}	348,682	268,371	18,116	9,358	12,658	1,273	38,906	100.0	86.6	5.8	3.0	4.1	0.4
1992–93 ^{5,10}	368,701	278,829	19,780	10,665	13,866	1,407	44,154	100.0	85.9	6.1	3.3	4.3	0.4
1993–94 ^{5,11}	385,419	288,288	21,937	11,913	15,267	1,697	46,317	100.0	85.0	6.5	3.5	4.5	0.5
1994–95 ^{5,12}	397,052	292,784	24,171	12,907	16,842	1,621	48,727	100.0	84.1	6.9	3.7	4.8	0.5
1995–96 ^{5,13}	405,521	297,558	25,801	14,412	18,161	1,778	47,811	100.0	83.2	7.2	4.0	5.1	0.5
1996–97 ^{5,14}	414,882	302,541	28,224	15,187	18,477	1,924	48,529	100.0	82.6	7.7	4.1	5.0	0.5
	Men							Men					
1976–77 ¹	167,396	139,210	7,781	3,268	3,123	521	13,493	100.0	90.5	5.1	2.1	2.0	0.3
1978–79 ²	152,637	124,058	7,070	2,786	3,325	495	14,903	100.0	90.1	5.1	2.0	2.4	0.4
1980–81 ³	145,666	115,562	6,158	3,085	3,773	501	16,587	100.0	89.5	4.8	2.4	2.9	0.4
1984–85 ⁴	139,417	106,059	5,200	3,059	4,842	583	19,674	100.0	88.6	4.3	2.6	4.0	0.5
1986–87 ⁵	141,269	105,572	5,153	3,331	5,239	518	21,456	100.0	88.1	4.3	2.8	4.4	0.4
1988–89 ^{5,6}	148,872	109,715	5,175	3,325	6,048	476	24,133	100.0	88.0	4.1	2.7	4.8	0.4
1989–90 ^{5,7}	152,926	112,877	5,539	3,586	6,002	463	24,459	100.0	87.9	4.3	2.8	4.7	0.4
1990–91 ^{5,8}	151,796	111,224	5,709	3,670	6,319	459	24,415	100.0	87.3	4.5	2.9	5.0	0.4
1991–92 ^{5,9}	159,543	116,096	6,054	4,132	7,062	523	25,676	100.0	86.7	4.5	3.1	5.3	0.4
1992–93 ^{5,10}	168,754	120,225	6,821	4,735	7,544	586	28,843	100.0	85.9	4.9	3.4	5.4	0.4
1993–94 ^{5,11}	175,355	123,854	7,413	5,113	8,225	691	30,059	100.0	85.2	5.1	3.5	5.7	0.5
1994–95 ^{5,12}	178,123	123,809	8,103	5,490	8,920	659	31,142	100.0	84.2	5.5	3.7	6.1	0.4
1995–96 ^{5,13}	176,661	124,514	8,442	5,833	9,373	704	29,795	100.0	83.6	5.7	3.9	6.3	0.5
1996–97 ^{5,14}	178,165	124,060	8,871	6,115	8,879	729	29,511	100.0	83.5	6.0	4.1	6.0	0.5
	Women							Women					
1976–77 ¹	149,206	126,851	13,256	2,803	1,999	446	3,851	100.0	87.3	9.1	1.9	1.4	0.3
1978–79 ²	147,618	125,302	12,348	2,769	2,171	504	4,524	100.0	87.6	8.6	1.9	1.5	0.4
1980–81 ³	148,517	125,654	10,975	3,376	2,509	533	5,470	100.0	87.8	7.7	2.4	1.8	0.4
1984–85 ⁴	141,004	117,569	8,739	3,805	2,940	673	7,278	100.0	87.9	6.5	2.8	2.2	0.5
1986–87 ⁵	148,080	123,302	8,720	3,713	3,320	585	8,440	100.0	88.3	6.2	2.7	2.4	0.4
1988–89 ^{5,6}	160,898	133,049	8,920	3,952	4,287	610	10,080	100.0	88.2	5.9	2.6	2.8	0.4
1989–90 ^{5,7}	169,539	138,813	9,907	4,364	4,575	638	11,242	100.0	87.7	6.3	2.8	2.9	0.4
1990–91 ^{5,8}	176,849	144,057	10,430	4,716	4,861	677	12,108	100.0	87.4	6.3	2.9	3.0	0.4
1991–92 ^{5,9}	189,139	152,275	12,062	5,226	5,596	750	13,230	100.0	86.6	6.9	3.0	3.2	0.4
1992–93 ^{5,10}	199,947	158,604	12,959	5,930	6,322	821	15,311	100.0	85.9	7.0	3.2	3.4	0.4
1993–94 ^{5,11}	210,064	164,434	14,524	6,800	7,042	1,006	16,258	100.0	84.8	7.5	3.5	3.6	0.5
1994–95 ^{5,12}	218,929	168,975	16,068	7,417	7,922	962	17,585	100.0	83.9	8.0	3.7	3.9	0.5
1995–96 ^{5,13}	226,860	173,044	17,359	8,579	8,788	1,074	18,016	100.0	82.9	8.3	4.1	4.2	0.5
1996–97 ^{5,14}	236,717	178,481	19,353	9,072	9,598	1,195	19,018	100.0	82.0	8.9	4.2	4.4	0.5

¹ Excludes 387 men and 175 women whose racial/ethnic group was not available.² Excludes 733 men and 91 women whose racial/ethnic group was not available.³ Excludes 1,377 men and 179 women whose racial/ethnic group was not available.⁴ Excludes 3,973 men and 1,857 women whose racial/ethnic group was not available.⁵ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported.⁶ Excludes 482 men and 369 women whose racial/ethnic group and field of study were not available.⁷ Excludes 727 men and 1,109 women whose racial/ethnic group and field of study were not available.⁸ Excludes 4,686 men and 3,837 women whose racial/ethnic group and field of study were not available.⁹ Excludes 2,299 men and 1,857 women whose racial/ethnic group and field of study were not available.¹⁰ Excludes 504 men and 380 women whose racial/ethnic group and field of study were not available.¹¹ Excludes 730 men and 921 women whose racial/ethnic group and field of study were not available.¹² Excludes 475 men and 102 women whose racial/ethnic group and field of study were not available.¹³ Excludes 420 men and 360 women whose racial/ethnic group and field of study were not available.¹⁴ Excludes 2,782 and 1,737 whose racial/ethnic group and field of study were not available.

NOTE.—For years 1984–85 to 1996–97, reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Because of rounding, percents may not add to 100.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys. (This table was prepared August 1999.)

Table 273.—Master's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1996–97

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total ¹	414,882	302,541	28,224	15,187	18,477	1,924	48,529	178,165	124,060	8,871	6,115	8,879	729	29,511	236,717	178,481	19,353	9,072	9,598	1,195	19,018
Agriculture and natural resources	4,516	3,256	138	89	127	21	885	2,608	1,873	73	48	46	11	557	1,908	1,383	65	41	81	10	328
Architecture and related programs	4,034	2,620	160	198	255	17	784	2,336	1,512	90	108	118	9	499	1,698	1,108	70	90	137	8	285
Area, ethnic, and cultural studies	1,651	1,114	122	91	100	24	200	739	525	44	48	38	7	77	912	589	78	43	62	17	123
Biological sciences/life sciences	6,466	4,519	246	188	582	23	908	3,035	2,188	72	100	254	11	410	3,431	2,331	174	88	328	12	498
Business	97,619	67,531	6,359	3,163	5,681	320	14,565	59,611	42,399	2,810	1,873	3,179	180	9,170	38,008	25,132	3,549	1,290	2,502	140	5,395
Communications	5,227	3,459	415	166	174	31	982	1,800	1,250	96	50	51	11	342	3,427	2,209	319	116	123	20	640
Communications technologies	374	198	23	11	15	2	125	204	117	8	6	6	2	65	170	81	15	5	9	0	60
Computer and information sciences	10,098	4,164	405	203	1,364	27	3,935	7,248	3,209	224	148	814	17	2,836	2,850	955	181	55	550	10	1,099
Construction trades	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education	110,087	89,783	9,630	4,904	1,990	619	3,161	25,806	20,886	2,146	1,201	444	159	970	84,281	68,897	7,484	3,703	1,546	460	2,191
Engineering	25,787	13,210	713	721	2,453	56	8,634	21,120	10,986	475	564	1,860	49	7,186	4,667	2,224	238	157	593	7	1,448
Engineering-related technologies	1,040	786	67	15	35	1	136	808	612	50	11	29	1	105	232	174	17	4	6	0	31
English language and literature/letters	7,722	6,500	318	241	231	55	377	2,733	2,344	70	107	63	20	129	4,989	4,156	248	134	168	35	248
Foreign languages and literatures	3,077	1,989	63	316	110	5	594	1,004	670	14	93	36	2	189	2,073	1,319	49	223	74	3	405
Health professions and related sciences	35,958	29,414	2,003	1,013	1,675	174	1,679	7,702	5,871	341	241	529	34	686	28,256	23,543	1,662	772	1,146	140	993
Home economics and vocational home economics	2,888	2,240	194	99	101	10	244	440	335	19	17	15	2	52	2,448	1,905	175	82	86	8	192
Law and legal studies	2,886	1,302	95	83	112	5	1,289	1,817	836	41	55	68	2	815	1,069	466	54	28	44	3	474
Liberal arts and sciences, general studies, and humanities	2,661	2,237	140	76	48	16	144	892	739	51	22	18	6	56	1,769	1,498	89	54	30	10	88
Library science	4,982	4,299	225	112	170	18	158	1,115	959	41	26	28	5	56	3,867	3,340	184	86	142	13	102
Mathematics	3,783	2,271	166	68	263	14	1,001	2,241	1,308	81	49	132	8	663	1,542	963	85	19	131	6	338
Multi/interdisciplinary studies	2,819	2,224	156	132	86	22	199	1,214	946	58	55	35	6	114	1,605	1,278	98	77	51	16	85
Parks, recreation, leisure and fitness studies	1,966	1,657	114	41	30	11	113	965	785	59	22	21	5	73	1,001	872	55	19	9	6	40
Philosophy and religion	1,252	1,005	37	38	66	3	103	745	588	21	22	46	2	66	507	417	16	16	20	1	37
Physical sciences and science technologies	5,563	3,316	150	111	321	17	1,648	3,752	2,275	77	70	176	12	1,142	1,811	1,041	73	41	145	5	506
Precision production trades	3	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
Protective services	1,845	1,429	257	60	28	7	64	1,098	919	90	28	15	5	41	747	510	167	32	13	2	23
Psychology	14,353	11,558	1,170	716	389	104	416	3,852	3,132	268	199	89	37	127	10,501	8,426	902	517	300	67	289
Public administration and services	24,781	18,092	3,234	1,300	773	195	1,187	6,957	4,950	803	361	212	62	569	17,824	13,142	2,431	939	561	133	618
R.O.T.C. and military technologies	136	127	5	0	1	0	3	132	123	5	0	1	0	3	4	0	0	0	0	0	0
Social sciences and history	14,787	9,928	954	549	609	65	2,682	7,830	5,283	411	304	267	35	1,530	6,957	4,645	543	245	342	30	1,152
Theological studies and religious vocations	4,975	3,826	255	106	205	26	557	3,025	2,307	140	67	125	13	373	1,950	1,519	115	39	80	13	184
Transportation and material moving workers	919	819	39	27	11	10	13	863	779	30	25	10	9	10	56	40	9	2	1	1	3
Visual and performing arts	10,627	7,665	371	350	472	26	1,743	4,470	3,351	163	195	154	7	600	6,157	4,314	208	155	318	19	1,143

¹Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 2,782 men and 1,737 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared August 1999.)

Table 274.—Master's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1995–96

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total¹	405,521	297,558	25,801	14,412	18,161	1,778	47,811	178,661	124,514	8,442	5,833	9,373	704	29,795	226,860	173,044	17,359	8,579	8,788	1,074	18,016
Agriculture and natural resources	4,569	3,334	116	101	124	15	879	2,650	1,922	63	59	50	6	550	1,919	1,412	53	42	74	9	329
Architecture and related programs	3,993	2,664	142	187	248	11	741	2,361	1,607	73	97	136	6	442	1,632	1,057	69	90	112	5	299
Area, ethnic, and cultural studies	1,713	1,198	115	99	98	24	179	798	558	38	60	42	9	91	915	640	77	39	56	15	88
Biological sciences/life sciences	6,157	4,262	207	161	533	17	977	2,902	2,044	79	69	246	9	455	3,255	2,218	128	92	287	8	522
Business	93,982	65,685	5,753	2,938	5,417	302	13,887	58,685	41,964	2,611	1,800	3,194	184	8,932	35,297	23,721	3,142	1,138	2,223	118	4,955
Communications	5,080	3,471	406	146	170	14	873	1,900	1,326	108	60	55	7	344	3,180	2,145	298	86	115	7	529
Communications technologies	524	297	26	15	20	4	162	271	167	12	8	7	2	75	253	130	14	7	13	2	87
Computer and information sciences	10,151	4,382	406	178	1,321	25	3,839	7,444	3,384	221	129	829	18	2,863	2,707	998	185	49	492	7	976
Construction trades	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education	106,253	87,310	8,557	4,628	1,833	598	3,327	25,214	20,376	1,991	1,110	464	159	1,114	81,039	66,934	6,566	3,518	1,369	439	2,213
Engineering	27,441	14,250	704	707	2,755	59	8,966	22,735	11,972	484	546	2,103	54	7,576	4,706	2,278	220	161	652	5	1,390
Engineering-related technologies	1,125	843	62	36	45	3	136	906	682	44	27	37	2	114	219	161	18	9	8	1	22
English language and literature/letters	7,893	6,736	292	228	223	48	366	2,814	2,410	85	95	68	20	136	5,079	4,326	207	133	155	28	230
Foreign languages and literatures	3,124	2,054	55	322	117	12	564	1,017	692	23	99	31	4	168	2,107	1,362	32	223	86	8	396
Health professions and related sciences	33,398	27,008	1,875	996	1,832	156	1,531	7,021	5,122	311	235	670	41	642	26,377	21,886	1,564	761	1,162	115	889
Home economics and vocational home economics	2,917	2,293	192	94	74	24	240	496	374	38	15	9	6	54	2,421	1,919	154	79	65	18	186
Law and legal studies	2,751	1,245	119	79	100	10	1,198	1,751	791	53	56	59	6	786	1,000	454	66	23	41	4	412
Liberal arts and sciences, general studies, and humanities	2,778	2,347	136	70	54	10	161	961	791	46	24	21	4	75	1,817	1,556	90	46	33	6	86
Library science	5,099	4,411	211	116	146	15	200	1,071	928	31	34	31	2	45	4,028	3,483	180	82	115	13	155
Mathematics	4,031	2,430	165	92	256	7	1,081	2,465	1,459	86	59	145	6	710	1,566	971	79	33	111	1	371
Multi/interdisciplinary studies	2,347	1,865	119	73	85	11	194	1,082	848	40	38	31	7	118	1,265	1,017	79	35	54	4	76
Parks, recreation, leisure and fitness studies	1,751	1,483	124	36	17	8	83	911	773	54	22	9	3	50	840	710	70	14	8	5	33
Philosophy and religion	1,302	1,067	37	39	34	2	123	845	682	21	26	26	0	90	457	385	16	13	8	2	33
Physical sciences and science technologies	5,847	3,548	123	102	327	10	1,737	3,966	2,459	63	69	182	6	1,187	1,881	1,089	60	33	145	4	550
Precision production trades	8	6	1	0	0	0	1	6	4	1	0	0	0	1	2	2	0	0	0	0	0
Protective services	1,812	1,437	240	64	25	11	35	1,151	957	118	30	14	9	23	661	480	122	34	11	2	12
Psychology	13,792	11,249	992	682	346	84	439	3,813	3,157	254	173	82	23	124	9,979	8,092	738	509	264	61	315
Public administration and services	24,229	17,968	3,004	1,267	713	165	1,112	6,927	4,989	753	378	227	49	531	17,302	12,979	2,251	889	486	116	581
R.O.T.C. and military technologies	136	127	5	0	1	0	3	132	123	5	0	1	0	3	4	4	0	0	0	0	0
Social sciences and history	15,012	10,339	911	511	530	80	2,641	8,093	5,637	380	273	269	32	1,502	6,919	4,702	531	238	261	48	1,139
Theological studies and religious vocations	5,107	3,858	298	95	242	9	605	3,056	2,314	159	50	136	6	391	2,051	1,544	139	45	106	3	214
Transportation and material moving workers	919	830	26	26	19	5	13	856	784	20	22	17	5	8	63	46	6	4	2	0	5
Visual and performing arts	10,280	7,561	382	324	456	39	1,518	4,361	3,218	177	170	182	19	595	5,919	4,343	205	154	274	20	923

¹Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 420 men and 360 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1998.)

Table 275.—Doctor's degrees¹ conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976–77 to 1996–97

Year	Number of degrees conferred							Percentage distribution of degrees conferred to U.S. citizens					
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Total							Total					
1976–77 ²	33,126	26,851	1,253	522	658	95	3,747	100.0	91.4	4.3	1.8	2.2	0.3
1978–79 ³	32,675	26,138	1,268	439	811	104	3,915	100.0	90.9	4.4	1.5	2.8	0.4
1980–81 ⁴	32,839	25,908	1,265	456	877	130	4,203	100.0	90.5	4.4	1.6	3.1	0.5
1984–85 ⁵	32,307	23,934	1,154	677	1,106	119	5,317	100.0	88.7	4.3	2.5	4.1	0.4
1986–87 ⁶	34,041	24,434	1,057	751	1,098	105	6,596	100.0	89.0	3.9	2.7	4.0	0.4
1988–89 ^{6,7}	35,659	24,884	1,066	629	1,323	85	7,672	100.0	88.9	3.8	2.2	4.7	0.3
1989–90 ^{6,8}	38,113	25,880	1,153	788	1,235	99	8,958	100.0	88.8	4.0	2.7	4.2	0.3
1990–91 ^{6,9}	38,547	25,328	1,211	732	1,459	102	9,715	100.0	87.8	4.2	2.5	5.1	0.4
1991–92 ^{6,10}	40,090	25,813	1,223	811	1,559	118	10,566	100.0	87.4	4.1	2.7	5.3	0.4
1992–93 ^{6,11}	42,021	26,700	1,352	827	1,582	106	11,454	100.0	87.3	4.4	2.7	5.2	0.3
1993–94 ^{6,12}	43,149	27,156	1,393	903	2,025	134	11,538	100.0	85.9	4.4	2.9	6.4	0.4
1994–95 ^{6,13}	44,427	27,826	1,667	984	2,690	130	11,130	100.0	83.6	5.0	3.0	8.1	0.4
1995–96 ^{6,14}	44,645	27,756	1,636	999	2,646	158	11,450	100.0	83.6	4.9	3.0	8.0	0.5
1996–97 ^{6,15}	45,394	28,344	1,847	1,098	2,607	173	11,325	100.0	83.2	5.4	3.2	7.7	0.5
	Men							Men					
1976–77 ²	25,036	20,032	766	383	540	67	3,248	100.0	91.9	3.5	1.8	2.5	0.3
1978–79 ³	23,488	18,433	734	294	646	69	3,312	100.0	91.4	3.6	1.5	3.2	0.3
1980–81 ⁴	22,595	17,310	694	277	655	95	3,564	100.0	91.0	3.6	1.5	3.4	0.5
1984–85 ⁵	21,296	15,017	561	431	802	64	4,421	100.0	89.0	3.3	2.6	4.8	0.4
1986–87 ⁶	22,061	14,812	485	441	794	57	5,472	100.0	89.3	2.9	2.7	4.8	0.3
1988–89 ^{6,7}	22,597	14,541	491	350	945	50	6,220	100.0	88.8	3.0	2.1	5.8	0.3
1989–90 ^{6,8}	24,248	15,105	533	423	871	49	7,267	100.0	89.0	3.1	2.5	5.1	0.3
1990–91 ^{6,9}	24,333	14,565	581	387	987	58	7,755	100.0	87.9	3.5	2.3	6.0	0.3
1991–92 ^{6,10}	25,168	14,674	576	458	1,062	65	8,333	100.0	87.2	3.4	2.7	6.3	0.4
1992–93 ^{6,11}	25,980	14,902	615	439	1,041	51	8,932	100.0	87.4	3.6	2.6	6.1	0.3
1993–94 ^{6,12}	26,531	15,126	631	465	1,373	66	8,870	100.0	85.6	3.6	2.6	7.8	0.4
1994–95 ^{6,13}	26,898	15,354	731	488	1,758	58	8,509	100.0	83.5	4.0	2.7	9.6	0.3
1995–96 ^{6,14}	26,836	15,101	730	516	1,693	80	8,716	100.0	83.3	4.0	2.8	9.3	0.4
1996–97 ^{6,15}	26,826	15,339	786	572	1,606	86	8,437	100.0	83.4	4.3	3.1	8.7	0.5
	Women							Women					
1976–77 ²	8,090	6,819	487	139	118	28	499	100.0	89.8	6.4	1.8	1.6	0.4
1978–79 ³	9,187	7,705	534	145	165	35	603	100.0	89.8	6.2	1.7	1.9	0.4
1980–81 ⁴	10,244	8,598	571	179	222	35	639	100.0	89.5	5.9	1.9	2.3	0.4
1984–85 ⁵	11,011	8,917	593	246	304	55	896	100.0	88.2	5.9	2.4	3.0	0.5
1986–87 ⁶	11,980	9,622	572	310	304	48	1,124	100.0	88.6	5.3	2.9	2.8	0.4
1988–89 ^{6,7}	13,062	10,343	575	279	378	35	1,452	100.0	89.1	5.0	2.4	3.3	0.3
1989–90 ^{6,8}	13,865	10,775	620	365	364	50	1,691	100.0	88.5	5.1	3.0	3.0	0.4
1990–91 ^{6,9}	14,214	10,763	630	345	472	44	1,960	100.0	87.8	5.1	2.8	3.9	0.4
1991–92 ^{6,10}	14,922	11,139	647	353	497	53	2,233	100.0	87.8	5.1	2.8	3.9	0.4
1992–93 ^{6,11}	16,041	11,798	737	388	541	55	2,522	100.0	87.3	5.5	2.9	4.0	0.4
1993–94 ^{6,12}	16,618	12,030	762	438	652	68	2,668	100.0	86.2	5.5	3.1	4.7	0.5
1994–95 ^{6,13}	17,529	12,472	936	496	932	72	2,621	100.0	83.7	6.3	3.3	6.3	0.5
1995–96 ^{6,14}	17,809	12,655	906	483	953	78	2,734	100.0	83.9	6.0	3.2	6.3	0.5
1996–97 ^{6,15}	18,568	13,005	1,061	526	1,001	87	2,888	100.0	82.9	6.8	3.4	6.4	0.6

¹Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Excludes first-professional degrees.

²Excludes 106 men whose racial/ethnic group was not available.

³Excludes 53 men and 2 women whose racial/ethnic group was not available.

⁴Excludes 116 men and 3 women whose racial/ethnic group was not available.

⁵Excludes 404 men and 232 women whose racial/ethnic group was not available.

⁶Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported.

⁷Excludes 51 men and 10 women whose racial/ethnic group and field of study were not available.

⁸Excludes 153 men and 105 women whose racial/ethnic group and field of study were not available.

⁹Excludes 423 men and 324 women whose racial/ethnic group and field of study were not available.

¹⁰Excludes 389 men and 180 women whose racial/ethnic group and field of study were not available.

¹¹Excludes 93 men and 18 women whose racial/ethnic group and field of study were not available.

¹²Excludes 21 men and 15 women whose racial/ethnic group and field of study were not available.

¹³Excludes 18 men and 1 woman whose racial/ethnic group and field of study were not available.

¹⁴Excludes 5 men and 2 women whose racial/ethnic group and field of study were not available.

¹⁵Excludes 320 men and 162 women whose racial/ethnic group and field of study were not available.

NOTE.—For years 1984–85 to 1996–97, reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Because of rounding, percents may not add to 100.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys. (This table was prepared August 1999.)

Table 276.—Doctor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1996–97

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total ¹	45,394	28,344	1,847	1,098	2,607	173	11,325	26,826	15,339	786	572	1,606	86	8,437	18,568	13,005	1,061	526	1,001	87	2,888
Agriculture and natural resources	1,217	582	26	22	45	3	539	884	400	18	18	38	3	407	333	182	8	4	7	0	132
Architecture and related programs	135	72	7	3	7	0	46	93	47	4	1	3	0	38	42	25	3	2	4	0	8
Area, ethnic, and cultural studies	182	125	23	5	5	6	18	95	65	7	2	3	4	14	67	60	16	3	2	2	4
Biological sciences/life sciences	4,812	2,825	101	115	433	5	1,333	2,738	1,598	45	57	223	1	814	2,074	1,227	56	58	210	4	519
Business	1,336	824	55	23	73	4	357	947	546	31	14	48	2	306	389	278	24	9	25	2	51
Communications	296	202	16	7	18	1	52	152	107	5	2	12	0	26	144	95	11	5	6	1	26
Communications technologies	4	3	0	0	0	0	1	3	2	0	0	0	0	1	1	1	0	0	0	0	0
Computer and information sciences	857	399	5	12	70	2	369	721	328	4	11	53	2	323	136	71	1	1	17	0	46
Education	6,751	5,137	654	217	146	52	545	2,512	1,879	208	83	53	19	270	4,239	3,258	446	134	93	33	275
Engineering	6,201	2,519	91	91	481	13	3,006	5,438	2,154	66	74	398	12	2,734	763	365	25	17	83	1	272
Engineering-related technologies	9	4	1	0	0	0	4	8	3	1	0	0	0	4	1	1	0	0	0	0	0
English language and literature/letters	1,575	1,271	43	37	41	4	179	670	533	11	17	18	3	88	905	738	32	20	23	1	91
Foreign languages and literatures	915	516	11	82	40	4	262	385	209	4	36	19	1	116	530	307	7	46	21	3	146
Health professions and related sciences	2,672	1,536	77	56	363	5	635	1,176	555	22	22	217	1	359	1,496	981	55	34	146	4	276
Home economics and vocational home economics	382	261	33	12	8	0	68	95	65	6	5	1	0	18	287	196	27	7	7	0	50
Law and legal studies	81	19	2	1	3	1	55	59	15	0	1	1	1	41	22	4	2	0	2	0	14
Liberal arts and sciences, general studies, and humanities	77	56	10	3	1	1	6	34	24	3	2	1	0	4	43	32	7	1	0	1	2
Library science	46	25	3	1	1	0	16	16	6	2	1	0	0	7	30	19	1	0	1	0	9
Mathematics	1,174	506	7	18	83	2	558	891	360	4	12	59	2	454	283	146	3	6	24	0	104
Multi/interdisciplinary studies	451	310	36	15	17	4	69	232	156	11	7	11	1	46	219	154	25	8	6	3	23
Parks, recreation, leisure and fitness studies ..	108	81	2	3	5	0	17	60	39	2	3	5	0	11	48	42	0	0	0	0	6
Philosophy and religion	593	437	29	11	23	2	91	418	301	20	10	18	2	67	175	136	9	1	5	0	24
Physical sciences and science technologies ..	4,474	2,460	58	65	309	11	1,571	3,444	1,892	42	53	212	10	1,235	1,030	568	16	12	97	1	336
Precision production trades	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective services	31	22	3	2	1	1	2	15	11	1	1	1	0	1	16	11	2	1	0	1	1
Psychology	4,053	3,405	170	156	138	30	154	1,350	1,139	44	50	35	12	70	2,703	2,266	126	106	103	18	84
Public administration and services	518	347	47	15	27	0	82	243	147	16	8	14	0	58	275	200	31	7	13	0	24
R.O.T.C. and military technologies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Social sciences and history	3,989	2,623	144	91	167	13	951	2,479	1,541	80	55	98	4	701	1,510	1,082	64	36	69	9	250
Theological studies and religious vocations ..	1,395	978	152	20	61	4	180	1,143	805	109	19	53	4	153	252	173	43	1	8	0	27
Transportation and material moving workers ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Visual and performing arts	1,060	799	41	15	41	5	159	525	412	20	8	12	2	71	535	387	21	7	29	3	88

¹Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 320 men and 162 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared August 1999.)

Table 277.—Doctor's degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1995–96

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total ¹	44,645	27,756	1,636	999	2,646	158	11,450	26,836	15,101	730	516	1,693	80	8,716	17,809	12,655	906	483	953	78	2,734
Agriculture and natural resources	1,271	575	23	11	72	3	587	935	403	21	8	51	1	451	336	172	2	3	21	2	136
Architecture and related programs	141	67	5	0	6	0	63	96	38	3	0	5	0	50	45	29	2	0	1	0	13
Area, ethnic, and cultural studies	184	117	22	3	13	1	28	94	55	8	2	7	1	21	90	62	14	1	6	0	7
Biological sciences/life sciences	4,780	2,838	79	101	464	14	1,284	2,773	1,610	43	55	264	6	795	2,007	1,228	36	46	200	8	489
Business	1,368	817	45	20	77	6	403	974	529	26	14	58	5	342	394	288	19	6	19	1	61
Communications	338	232	19	5	12	0	70	184	124	10	4	6	0	40	154	108	9	1	6	0	30
Communications technologies	7	0	1	0	4	0	2	6	0	0	0	4	0	2	1	0	1	0	0	0	0
Computer and information sciences	867	367	10	9	84	2	395	741	302	10	8	72	2	347	126	65	0	1	12	0	48
Education	6,676	5,128	564	218	157	51	558	2,525	1,899	175	86	60	16	289	4,151	3,229	389	132	97	35	269
Engineering	6,369	2,507	74	89	570	12	3,117	5,570	2,125	55	72	482	10	2,826	799	382	19	17	88	2	291
Engineering-related technologies	11	3	0	0	1	0	7	10	3	0	0	1	0	6	1	0	0	0	0	0	1
English language and literature/letters	1,535	1,240	50	32	46	5	162	590	460	16	12	17	3	82	945	780	34	20	29	2	80
Foreign languages and literatures	876	499	8	64	45	1	259	387	209	3	28	18	0	129	489	290	5	36	27	1	130
Health professions and related sciences	2,119	1,342	64	52	166	2	493	919	493	18	15	90	1	302	1,200	849	46	37	76	1	191
Home economics and vocational home economics	414	289	33	9	8	0	75	117	83	8	5	3	0	18	297	206	25	4	5	0	57
Law and legal studies	91	40	2	3	5	0	41	59	24	1	1	2	0	31	32	16	1	2	3	0	10
Liberal arts and sciences, general studies, and humanities	75	61	6	1	2	0	5	33	28	3	1	0	0	1	42	33	3	0	2	0	4
Library science	53	39	2	1	6	0	5	10	6	0	1	2	0	1	43	33	2	0	4	0	4
Mathematics	1,209	547	9	9	98	1	545	962	427	7	8	73	1	446	247	120	2	1	25	0	99
Multi/interdisciplinary studies	441	301	38	11	16	4	71	218	131	22	5	7	2	51	223	170	16	6	9	2	20
Parks, recreation, leisure and fitness studies	104	71	7	2	3	0	21	65	39	4	2	2	0	18	39	32	3	0	1	0	3
Philosophy and religion	549	436	15	8	14	1	75	385	301	10	6	7	1	60	164	135	5	2	7	0	15
Physical sciences and science technologies	4,571	2,446	56	68	389	11	1,601	3,515	1,864	39	58	267	7	1,280	1,056	582	17	10	122	4	321
Precision production trades	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective services	38	32	2	0	2	0	2	22	17	1	0	2	0	2	16	15	1	0	0	0	0
Psychology	3,711	3,087	159	148	100	23	194	1,259	1,047	41	45	28	12	86	2,452	2,040	118	103	72	11	108
Public administration and services	499	340	44	14	11	1	89	220	142	9	5	6	0	58	279	198	35	9	5	1	31
R.O.T.C. and military technologies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Social sciences and history	3,760	2,471	121	95	163	15	895	2,339	1,448	69	59	86	10	667	1,421	1,023	52	36	77	5	228
Theological studies and religious vocations	1,521	1,062	147	10	63	4	235	1,304	903	112	9	57	2	221	217	159	35	1	6	2	14
Transportation and material moving workers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Visual and performing arts	1,067	802	31	16	49	1	168	524	391	16	7	16	0	94	543	411	15	9	33	1	74

¹ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 5 men and 2 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1998.)

Table 278.—First-professional degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976–77 to 1996–97

Year	Number of degrees conferred							Percentage distribution of degrees conferred to U.S. citizens					
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total							Total						
1976–77 ¹	63,953	58,422	2,537	1,076	1,021	196	701	100.0	92.4	4.0	1.7	1.6	0.3
1978–79 ²	68,611	62,430	2,836	1,283	1,205	216	641	100.0	91.8	4.2	1.9	1.8	0.3
1980–81 ³	71,340	64,551	2,931	1,541	1,456	192	669	100.0	91.3	4.1	2.2	2.1	0.3
1984–85 ⁴	71,057	63,219	3,029	1,884	1,816	248	861	100.0	90.1	4.3	2.7	2.6	0.4
1986–87	71,617	62,688	3,420	2,051	2,270	304	884	100.0	88.6	4.8	2.9	3.2	0.4
1988–89	70,856	61,214	3,148	2,269	2,976	264	985	100.0	87.6	4.5	3.2	4.3	0.4
1989–90 ⁵	70,744	60,240	3,410	2,427	3,362	257	1,048	100.0	86.4	4.9	3.5	4.8	0.4
1990–91 ⁶	71,515	60,327	3,575	2,527	3,755	261	1,070	100.0	85.6	5.1	3.6	5.3	0.4
1991–92 ⁷	72,129	59,800	3,560	2,766	4,455	296	1,252	100.0	84.4	5.0	3.9	6.3	0.4
1992–93 ⁸	74,960	60,830	4,100	2,984	5,160	368	1,518	100.0	82.8	5.6	4.1	7.0	0.5
1993–94	75,418	60,140	4,444	3,134	5,892	371	1,437	100.0	81.3	6.0	4.2	8.0	0.5
1994–95	75,800	59,402	4,747	3,231	6,397	412	1,611	100.0	80.1	6.4	4.4	8.6	0.6
1995–96 ⁹	76,641	59,456	5,016	3,476	6,617	463	1,613	100.0	79.2	6.7	4.6	8.8	0.6
1996–97 ¹⁰	77,815	59,852	5,251	3,553	7,037	511	1,611	100.0	78.5	6.9	4.7	9.2	0.7
Men							Men						
1976–77 ¹	51,980	47,777	1,761	893	776	159	614	100.0	93.0	3.4	1.7	1.5	0.3
1978–79 ²	52,425	48,123	1,783	989	860	150	520	100.0	92.7	3.4	1.9	1.7	0.3
1980–81 ³	52,194	47,629	1,772	1,131	991	134	537	100.0	92.2	3.4	2.2	1.9	0.3
1984–85 ⁴	47,501	42,630	1,623	1,239	1,152	176	681	100.0	91.1	3.5	2.6	2.5	0.4
1986–87	46,523	41,149	1,835	1,303	1,420	183	633	100.0	89.7	4.0	2.8	3.1	0.4
1988–89	45,046	39,399	1,618	1,374	1,819	148	688	100.0	88.8	3.6	3.1	4.1	0.3
1989–90 ⁵	43,778	37,850	1,672	1,450	1,963	135	708	100.0	87.9	3.9	3.4	4.6	0.3
1990–91 ⁶	43,601	37,348	1,672	1,506	2,178	144	753	100.0	87.2	3.9	3.5	5.1	0.3
1991–92 ⁷	43,812	36,939	1,603	1,635	2,593	157	885	100.0	86.1	3.7	3.8	6.0	0.4
1992–93 ⁸	44,821	37,157	1,777	1,762	2,858	190	1,077	100.0	84.9	4.1	4.0	6.5	0.4
1993–94	44,707	36,573	1,902	1,781	3,214	222	1,015	100.0	83.7	4.4	4.1	7.4	0.5
1994–95	44,853	36,146	2,077	1,836	3,491	222	1,081	100.0	82.6	4.7	4.2	8.0	0.5
1995–96 ⁹	44,679	35,732	2,107	1,947	3,533	256	1,104	100.0	82.0	4.8	4.5	8.1	0.6
1996–97 ¹⁰	45,067	35,749	2,178	1,951	3,798	289	1,102	100.0	81.3	5.0	4.4	8.6	0.7
Women							Women						
1976–77 ¹	11,973	10,645	776	183	245	37	87	100.0	89.6	6.5	1.5	2.1	0.3
1978–79 ²	16,186	14,307	1,053	294	345	66	121	100.0	89.1	6.6	1.8	2.1	0.4
1980–81 ³	19,146	16,922	1,159	410	465	58	132	100.0	89.0	6.1	2.2	2.4	0.3
1984–85 ⁴	23,556	20,589	1,406	645	664	72	180	100.0	88.1	6.0	2.8	2.8	0.3
1986–87	25,094	21,539	1,585	748	850	121	251	100.0	86.7	6.4	3.0	3.4	0.5
1988–89	25,810	21,815	1,530	895	1,157	116	297	100.0	85.5	6.0	3.5	4.5	0.5
1989–90 ⁵	26,966	22,390	1,738	977	1,399	122	340	100.0	84.1	6.5	3.7	5.3	0.5
1990–91 ⁶	27,914	22,979	1,903	1,021	1,577	117	317	100.0	83.3	6.9	3.7	5.7	0.4
1991–92 ⁷	28,317	22,861	1,957	1,131	1,862	139	367	100.0	81.8	7.0	4.0	6.7	0.5
1992–93 ⁸	30,139	23,673	2,323	1,222	2,302	178	441	100.0	79.7	7.8	4.1	7.8	0.6
1993–94	30,711	23,567	2,542	1,353	2,678	149	422	100.0	77.8	8.4	4.5	8.8	0.5
1994–95	30,947	23,256	2,670	1,395	2,906	190	530	100.0	76.5	8.8	4.6	9.6	0.6
1995–96 ⁹	31,962	23,724	2,909	1,529	3,084	207	509	100.0	75.4	9.2	4.9	9.8	0.7
1996–97 ¹⁰	32,748	24,103	3,073	1,602	3,239	222	509	100.0	74.8	9.5	5.0	10.0	0.7

¹ Excludes 394 men and 12 women whose racial/ethnic group was not available.² Excludes 227 men and 10 women whose racial/ethnic group was not available.³ Excludes 598 men and 18 women whose racial/ethnic group was not available.⁴ Excludes 2,954 men and 1,052 women whose racial/ethnic group and field of study were not available.⁵ Excludes 183 men and 61 women whose racial/ethnic group and field of study were not available.⁶ Excludes 245 men and 188 women whose racial/ethnic group and field of study were not available.⁷ Excludes 1,259 men and 758 women whose racial/ethnic group and field of study were not available.⁸ Excludes 332 men and 95 women whose racial/ethnic group and field of study were not available.⁹ Excludes 69 men and 24 women whose racial/ethnic group and field of study were not available.¹⁰ Excludes 497 men and 418 women whose racial/ethnic group and field of study were not available.

NOTE.—For years 1984–85 to 1996–97, reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Because of rounding, percents may not add to 100.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys. (This table was prepared August 1999.)

Table 279.—First-professional degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1996–97

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields¹	77,815	59,852	5,251	3,553	7,037	511	1,611	45,067	35,749	2,178	1,951	3,798	289	1,102	32,748	24,103	3,073	1,602	3,239	222	509
Dentistry (D.D.S. or D.M.D.)	3,784	2,498	190	185	659	19	233	2,387	1,701	75	95	355	12	149	1,397	797	115	90	304	7	84
Medicine (M.D.)	15,571	11,095	1,123	703	2,377	111	162	9,121	6,741	429	398	1,378	70	105	6,450	4,354	694	305	999	41	57
Optometry (O.D.)	1,264	929	31	41	198	5	60	591	482	6	17	53	1	32	673	447	25	24	145	4	28
Osteopathic medicine (D.O.)	2,011	1,676	72	50	181	17	15	1,297	1,091	35	32	120	11	8	714	585	37	18	61	6	7
Pharmacy (Pharm.D.)	2,708	1,829	265	58	466	12	78	961	709	67	18	126	9	32	1,747	1,120	198	40	340	3	46
Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.)	614	473	27	24	65	3	22	423	339	9	19	41	2	13	191	134	18	5	24	1	9
Veterinary medicine (D.V.M.)	2,188	1,988	54	71	45	14	16	731	657	23	25	16	5	5	1,457	1,331	31	46	29	9	11
Chiropractic medicine (D.C. or D.C.M.)	3,654	2,986	62	90	196	18	302	2,658	2,165	37	60	139	12	245	996	821	25	30	57	6	57
Law (LL.B. or J.D.)	40,079	31,672	2,951	2,211	2,534	298	413	22,548	18,445	1,205	1,198	1,298	158	244	17,531	13,227	1,746	1,013	1,236	140	169
Theology (M.Div., M.H.L., B.D., or Ord.)	5,859	4,632	472	120	311	14	310	4,323	3,394	292	89	270	9	269	1,536	1,238	180	31	41	5	41
Other	83	74	4	0	5	0	0	27	25	0	0	2	0	0	56	49	4	0	3	0	0

¹ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 497 men and 418 women whose racial/ethnic group and field of study were not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared August 1999.)

Table 280.—First-professional degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1995–96

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields¹	76,641	59,456	5,016	3,476	6,617	463	1,613	44,679	35,732	2,107	1,947	3,533	256	1,104	31,962	23,724	2,909	1,529	3,084	207	509
Dentistry (D.D.S. or D.M.D.)	3,697	2,516	175	177	598	11	220	2,374	1,705	76	103	332	9	149	1,323	811	99	74	266	2	71
Medicine (M.D.)	15,341	10,956	988	702	2,406	93	196	9,061	6,661	387	397	1,435	54	127	6,280	4,295	601	305	971	39	69
Optometry (O.D.)	1,231	911	35	47	169	2	67	568	442	9	17	60	1	39	663	469	26	30	109	1	28
Osteopathic medicine (D.O.)	1,895	1,529	45	74	210	14	23	1,232	1,009	23	54	124	8	14	663	520	22	20	86	6	9
Pharmacy (Pharm.D.)	2,555	1,570	275	80	526	8	96	873	572	78	33	148	3	39	1,682	998	197	47	378	5	57
Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.)	650	462	56	43	64	5	20	453	344	15	29	46	3	16	197	118	41	14	18	2	4
Veterinary medicine (D.V.M.)	2,109	1,935	33	77	37	17	10	715	656	14	27	8	6	4	1,394	1,279	19	50	29	11	6
Chiropractic medicine (D.C. or D.C.M.)	3,379	2,777	65	113	134	18	272	2,470	2,051	29	75	103	11	201	909	726	36	38	31	7	71
Law (LL.B. or J.D.)	39,828	32,085	2,842	2,052	2,182	280	387	22,508	18,794	1,162	1,115	1,031	153	253	17,320	13,291	1,680	937	1,151	127	134
Theology (M.Div., M.H.L., B.D., or Ord.)	5,879	4,657	501	111	289	15	306	4,400	3,478	313	97	244	8	260	1,479	1,179	188	14	45	7	46
Other	77	58	1	0	2	0	16	25	20	1	0	2	0	2	52	38	0	0	0	0	0

¹ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 69 men and 24 women whose racial/ethnic group and field of study were not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1998.)

Table 303.—Statistical profile of persons receiving doctor's degrees, by field of study: 1996–97

Item	All fields	Field of study								
		Education	Engineering	Humanities	Life sciences	Physical sciences ¹		Business and management	Social sciences and psychology	Other professional fields
						Total	Mathematics			
1	2	3	4	5	6	7	8	9	10	11
Doctor's degrees conferred (number)	42,705	6,497	6,052	5,387	8,213	6,574	1,112	1,221	6,917	1,081
Sex (percent)										
Men	58.5	36.4	87.0	51.5	54.6	77.4	76.0	68.9	46.9	52.8
Women	40.6	62.8	12.3	47.7	44.7	21.9	23.4	30.3	52.2	46.4
Racial/ethnic group (percent)²										
American Indian	0.5	0.9	0.4	0.5	0.3	0.3	0.2	0.6	0.5	0.5
Asian	10.6	3.2	22.3	4.8	15.3	16.8	16.7	10.5	6.2	5.8
Black	5.0	10.2	3.1	3.5	3.4	1.7	1.2	6.3	5.5	7.4
Hispanic	3.9	4.6	2.8	4.8	3.5	2.7	2.7	2.1	4.8	3.3
White	80.0	81.1	71.5	86.4	77.5	78.4	79.3	80.5	82.9	83.0
Citizenship (percent)										
United States	64.8	82.6	44.3	76.5	62.0	54.1	46.2	63.5	72.5	72.4
Non-U.S., permanent visa	6.8	2.6	9.8	6.0	9.1	9.4	9.0	6.9	4.8	4.3
Non-U.S., temporary visa	19.8	5.6	39.7	10.1	22.6	29.8	37.6	21.9	13.0	16.3
Unknown	8.5	9.3	6.2	7.4	6.3	6.6	7.2	7.8	9.7	7.0
Median age at doctorate (years)	33.6	44.0	31.3	35.2	32.3	30.8	31.3	35.7	33.4	38.9
Percent with bachelor's degree in same field as doctorate	50.8	34.1	75.9	46.1	46.9	61.5	64.8	31.7	55.2	29.5
Median time lapse from bachelor's to doctorate (years)										
Total time	10.5	20.0	8.7	11.7	9.2	8.0	8.6	12.4	10.0	15.1
Registered time	7.3	8.4	6.5	8.6	7.0	6.8	6.9	7.6	7.5	8.4
Postdoctoral plans (percent)										
Postdoctoral study plans	22.9	3.8	19.5	5.8	51.6	38.9	26.0	2.6	17.0	4.1
Fellowship	12.3	1.7	6.1	3.7	31.4	17.3	12.2	0.9	11.7	1.6
Research associateship	9.1	1.4	12.3	1.1	16.6	20.3	11.4	1.2	3.8	1.5
Traineeship	0.7	0.3	0.8	0.3	1.3	0.8	1.5	0.3	1.0	0.3
Other	0.8	0.4	0.3	0.6	2.4	0.5	0.8	0.2	0.5	0.7
Postdoctoral employment³	63.6	81.6	70.8	81.0	38.1	50.8	62.3	85.3	68.4	84.9
Educational institution	32.4	62.2	11.3	59.7	15.6	15.1	31.9	63.8	32.9	53.4
Industry, business	16.7	5.3	47.5	6.0	9.2	26.1	19.9	13.4	12.5	8.4
Government	4.3	3.7	6.4	1.4	4.1	3.5	2.3	2.1	6.7	6.2
Nonprofit organization	3.1	3.4	1.3	3.6	2.1	1.0	1.1	1.7	6.8	10.5
Other and unknown	7.0	7.0	4.4	10.2	7.2	5.1	7.1	4.2	9.6	6.4
Postdoctoral plans unknown	13.5	14.6	9.6	13.2	10.3	10.3	11.7	12.1	14.6	11.0
Definite postdoctoral study	16.5	2.2	12.2	3.4	39.0	29.2	18.0	1.6	11.9	2.2
Seeking postdoctoral study	6.4	1.5	7.3	2.4	12.6	9.8	8.0	1.0	5.1	1.9
Definite employment	41.6	59.2	46.6	45.2	24.7	33.4	39.7	64.5	43.5	58.8
Seeking employment	21.9	22.4	24.2	35.8	13.4	17.4	22.6	20.7	25.0	26.1
Primary postdoctoral activity (percent)⁴										
Research and development	30.5	5.5	69.3	7.2	36.1	56.8	36.7	25.9	26.8	12.6
Teaching	37.0	40.9	11.3	74.3	28.4	23.3	42.5	55.1	33.6	52.0
Administration	11.9	38.4	2.1	5.0	5.1	2.3	0.7	6.0	5.7	12.3
Professional services	13.2	10.8	10.9	6.2	14.5	9.1	10.9	7.4	26.9	18.1
Other	3.3	1.8	4.0	3.7	3.8	4.0	2.0	2.7	3.7	2.4
Activity unknown	4.0	2.3	2.3	3.6	11.9	4.3	7.0	3.0	3.2	2.5
Region of employment after doctorate (percent)⁴										
New England	6.5	4.5	7.0	7.8	5.3	8.6	9.7	4.3	7.7	4.1
Middle Atlantic	13.8	12.9	12.6	15.3	11.4	16.1	18.8	13.5	15.0	13.7
East North Central	13.4	14.7	11.9	14.8	12.4	11.5	13.6	15.1	13.5	15.1
West North Central	6.8	9.9	3.7	7.8	7.6	5.1	6.8	5.2	6.2	7.5
South Atlantic	15.5	18.5	12.0	14.7	15.9	13.8	16.3	15.8	16.6	15.9
East South Central	4.6	7.0	2.8	4.1	4.6	3.6	3.6	6.5	3.5	5.7
West South Central	8.3	9.3	8.6	8.1	7.6	7.2	4.3	10.9	6.7	11.3
Mountain	5.5	6.7	5.1	5.5	5.4	5.4	4.5	4.3	5.1	4.6
Pacific and insular	13.9	10.6	21.7	12.0	12.7	18.4	10.2	10.5	12.2	7.7
U.S., region unknown	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Foreign	10.2	4.7	12.9	8.9	14.7	8.9	10.2	12.7	12.5	13.7
Region unknown	1.3	1.2	1.6	0.9	2.3	1.5	2.0	1.0	1.0	0.8

¹ Includes mathematics, computer science, physics and astronomy, chemistry, and earth, atmospheric, and marine sciences.

² Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

³ Includes 2-year, 4-year, and foreign colleges and universities, medical schools, and elementary/secondary schools.

⁴ Includes only recipients with definite employment plans.

NOTE.—The above classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major differences are that history is included under humanities rather than social sciences and

that psychology is included under social sciences. Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Excludes first-professional degrees, such as M.D., D.D.S., and D.V.M. The number of degrees also differs slightly from that reported in the NCES "Completions" survey. The above tabulation excludes some non-research doctorate degrees such as doctor's degrees in theology. Total includes a small number of graduates not reported by field of study. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Summary Report 1997: Doctorate Recipients from United States Universities*. (This table was prepared September 1999.)

Table 304.—Statistical profile of persons receiving doctor's degrees in education: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	7,576	7,489	6,717	6,649	6,454	6,362	6,281	6,510	6,454	6,677	6,689	6,708	6,649	6,772	6,497
Sex (percent)															
Men	55.5	52.8	48.2	45.6	44.9	44.8	42.5	42.4	41.9	40.5	41.3	39.1	38.4	38.3	36.4
Women	44.5	47.2	51.8	54.4	55.1	55.2	57.5	57.6	58.1	59.5	58.7	60.9	61.6	61.7	62.8
Racial/ethnic group (percent) ¹															
American Indian	0.8	0.6	0.7	0.5	0.7	0.6	0.4	0.6	1.0	0.8	0.8	0.6	0.7	1.0	0.9
Asian	1.3	1.9	1.7	1.6	1.7	2.4	1.9	1.8	2.2	2.4	2.4	2.9	3.0	3.1	3.2
Black	9.1	9.1	8.7	8.1	7.4	7.6	8.1	8.2	7.9	8.4	9.4	8.6	10.4	10.1	10.2
Hispanic	2.4	2.5	3.2	3.7	3.6	2.9	3.1	3.3	3.3	3.5	3.7	4.0	4.4	3.6	4.6
White	86.3	85.9	85.6	86.1	86.6	86.4	86.5	86.0	85.6	84.8	83.7	83.9	81.6	82.2	81.1
Citizenship (percent)															
United States	88.7	87.7	85.5	84.7	84.9	83.1	82.9	84.4	84.8	86.8	86.4	87.4	86.8	86.6	82.6
Foreign	8.2	8.8	10.4	9.6	9.2	10.2	9.7	9.7	10.2	10.7	10.8	11.0	11.0	9.9	8.2
Unknown	3.1	3.6	4.1	5.6	6.0	6.7	7.4	5.8	5.0	2.4	2.7	1.6	2.3	3.4	9.3
Median age at doctorate (years)	37.0	37.3	38.7	39.4	39.8	40.5	41.1	41.6	42.1	42.7	43.0	43.6	43.8	44.3	44.0
Percent with bachelor's degree in same field as doctorate	39.0	38.9	38.7	39.0	37.8	36.9	38.5	37.5	39.3	38.7	37.4	36.9	37.0	36.1	34.1
Median time lapse from bachelor's to doctorate (years)															
Total time	13.1	13.5	15.1	15.7	16.2	16.9	17.3	17.9	18.4	18.9	19.2	19.7	19.9	20.2	20.0
Registered time	6.9	7.0	7.6	7.8	7.9	8.1	8.2	8.1	8.1	8.2	8.2	8.1	8.2	8.2	8.4

¹Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics

(NCES). The number of degrees also differs slightly from that reported in the NCES "Completions" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 305.—Statistical profile of persons receiving doctor's degrees in engineering: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	2,479	2,528	3,165	3,376	3,712	4,187	4,543	4,894	5,214	5,438	5,698	5,822	6,008	6,305	6,052
Sex (percent)															
Men	96.4	96.1	93.7	93.3	93.5	93.2	91.8	91.5	91.3	90.7	90.9	89.1	88.4	87.7	87.0
Women	3.6	3.9	6.3	6.7	6.6	6.8	8.2	8.5	8.7	9.3	9.1	10.9	11.6	12.3	12.3
Racial/ethnic group (percent) ¹															
American Indian	0.2	0.3	0.1	0.3	0.4	0.2	0.3	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.4
Asian	18.9	20.0	18.4	15.6	17.7	16.0	16.6	15.3	17.4	18.2	19.7	28.8	31.5	26.8	22.3
Black	1.2	1.4	2.2	1.4	1.3	1.4	1.4	1.8	2.4	1.9	1.9	1.8	2.2	2.2	3.1
Hispanic	1.9	1.0	1.5	2.1	1.8	3.0	2.2	2.4	2.6	3.0	2.4	2.2	2.4	2.9	2.8
White	77.8	77.3	77.8	80.6	78.8	79.4	79.5	80.4	77.4	76.5	75.9	67.0	63.7	67.6	71.5
Citizenship (percent)															
United States	50.6	46.2	40.4	40.8	41.8	42.4	40.9	39.4	37.9	38.7	39.1	38.0	39.7	41.1	44.3
Foreign	46.3	49.1	54.6	50.8	50.7	49.8	50.4	52.5	54.7	57.8	57.1	60.0	57.9	55.7	49.5
Unknown	3.1	4.7	5.0	8.4	7.4	7.7	8.8	8.1	7.3	3.5	3.9	2.1	2.5	3.3	6.2
Median age at doctorate (years)	30.3	30.5	30.9	31.0	31.0	31.0	31.1	31.2	31.4	31.5	31.6	31.7	31.7	31.7	31.3
Percent with bachelor's degree in same field as doctorate	75.2	74.1	74.2	73.0	75.2	76.4	76.2	76.9	79.0	81.8	80.1	80.4	79.1	80.2	75.9
Median time lapse from bachelor's to doctorate (years)															
Total time	7.6	7.9	8.1	8.1	8.1	8.1	8.1	8.2	8.5	8.7	8.8	9.0	9.1	9.0	8.7
Registered time	5.6	5.6	5.8	5.9	5.9	5.9	6.0	6.0	6.1	6.2	6.3	6.4	6.4	6.4	6.5

¹Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics

(NCES). The number of degrees also differs slightly from that reported in the NCES "Completions" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 306.—Statistical profile of persons receiving doctor's degrees in the humanities: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	3,863	3,745	3,428	3,461	3,500	3,555	3,552	3,822	4,099	4,444	4,482	4,744	5,061	5,116	5,387
Sex (percent)															
Men	60.4	58.7	56.6	54.8	55.1	55.7	54.5	54.4	53.5	53.7	52.5	52.3	51.7	50.3	51.5
Women	39.6	41.3	43.4	45.2	44.9	44.3	45.5	45.6	46.5	46.3	47.5	47.7	48.3	49.7	47.7
Racial/ethnic group (percent) ¹															
American Indian	0.3	0.4	0.3	0.2	0.4	0.2	0.2	0.3	0.3	0.5	0.3	0.6	0.4	0.5	0.5
Asian	2.0	1.8	2.3	1.8	2.1	2.3	3.0	2.4	2.5	3.0	3.6	4.6	5.1	5.1	4.8
Black	3.0	2.9	2.6	2.9	2.9	3.0	2.9	2.3	3.0	2.7	3.0	2.9	2.9	3.1	3.5
Hispanic	3.0	3.2	3.8	3.5	4.3	3.9	3.8	4.2	4.3	3.9	4.2	4.4	3.8	4.3	4.8
White	91.6	91.7	91.1	91.6	90.3	90.5	90.2	90.9	89.9	89.9	88.9	87.5	87.8	87.0	86.4
Citizenship (percent)															
United States	87.3	85.7	83.1	78.8	78.0	78.4	76.4	78.3	77.0	77.7	78.3	78.3	78.6	77.4	76.5
Foreign	8.8	10.2	12.1	13.7	14.3	14.4	15.5	15.2	18.3	19.2	18.7	19.9	19.4	19.6	16.1
Unknown	3.9	4.1	4.8	7.4	7.7	7.1	8.1	6.5	4.7	3.2	3.0	1.8	1.9	3.0	7.4
Median age at doctorate (years)	33.4	33.5	34.7	35.0	35.0	35.4	35.7	35.7	35.8	35.6	35.6	35.7	35.4	35.2	35.2
Percent with bachelor's degree in same field as doctorate	64.2	61.0	58.8	58.2	58.5	56.7	55.5	57.1	57.7	56.5	56.4	57.4	56.6	55.8	46.1
Median time lapse from bachelor's to doctorate (years)															
Total time	10.6	10.8	11.7	12.1	12.0	12.2	12.5	12.2	12.3	12.0	11.9	12.0	12.0	11.8	11.7
Registered time	7.7	7.7	8.3	8.2	8.4	8.5	8.4	8.3	8.4	8.3	8.3	8.5	8.4	8.3	8.6

¹Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major differences are that history is included under humanities rather than social sciences and that psychology is included under social sciences. Includes Amer-

ican studies, archeology, art history, classics, comparative literature, history, letters, linguistics, music, philosophy, religion, speech and rhetorical studies, and theatre. The number of degrees also differs slightly from that reported in the NCES "Completions" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 307.—Statistical profile of persons receiving doctor's degrees in the life sciences: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	5,325	5,461	5,748	5,734	5,754	6,164	6,342	6,605	6,933	7,115	7,395	7,739	7,918	8,255	8,213
Sex (percent)															
Men	74.8	73.6	67.7	66.0	64.8	63.2	61.8	62.6	61.4	60.7	58.3	58.4	57.9	56.5	54.6
Women	25.2	26.4	32.3	34.0	35.2	36.8	38.2	37.4	38.6	39.3	41.7	41.6	42.1	43.5	44.7
Racial/ethnic group (percent) ¹															
American Indian	0.2	0.2	0.4	0.5	0.4	0.4	0.3	0.2	0.4	0.4	0.3	0.4	0.5	0.5	0.3
Asian	5.3	4.8	4.7	4.9	5.7	5.0	5.3	5.6	6.6	7.1	8.7	15.7	18.5	17.9	15.3
Black	1.6	1.9	2.1	1.9	2.5	2.2	2.1	1.9	2.4	2.3	2.9	2.6	3.1	2.9	3.4
Hispanic	1.1	1.4	1.9	2.1	2.0	2.3	2.1	2.7	2.6	2.8	3.0	3.2	3.0	3.1	3.5
White	91.8	91.7	90.8	90.5	89.4	90.0	90.1	89.6	88.0	87.3	85.1	78.2	74.9	75.5	77.5
Citizenship (percent)															
United States	80.4	80.3	77.1	75.9	73.5	71.3	71.1	68.0	66.8	65.7	65.3	64.0	63.1	60.7	62.0
Foreign	17.6	17.1	19.3	18.8	20.5	22.2	22.1	26.3	29.1	31.8	32.6	34.9	35.2	37.0	31.7
Unknown	2.0	2.6	3.6	5.3	6.1	6.4	6.9	5.6	4.0	2.5	2.2	1.1	1.7	2.2	6.3
Median age at doctorate (years)	30.0	30.1	31.3	31.6	31.7	31.9	32.2	32.3	32.4	32.7	32.5	32.7	32.4	32.5	32.3
Percent with bachelor's degree in same field as doctorate	40.9	40.7	58.3	57.1	55.6	55.4	53.4	53.8	54.1	53.5	51.9	51.0	50.8	49.2	46.9
Median time lapse from bachelor's to doctorate (years)															
Total time	7.3	7.3	8.4	8.7	8.7	8.9	9.1	9.1	9.1	9.4	9.4	9.5	9.5	9.6	9.2
Registered time	5.8	5.9	6.3	6.4	6.5	6.5	6.5	6.7	6.7	6.7	6.8	7.0	7.0	7.0	7.0

¹Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). Includes agricultural, biological, and health sciences. The number of degrees

also differs slightly from that reported in the NCES "Completions" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 308.—Statistical profile of persons receiving doctor's degrees in the physical sciences: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	3,151	3,208	3,531	3,679	3,840	4,045	3,984	4,262	4,441	4,575	4,470	4,799	4,618	4,632	4,573
Sex (percent)															
Men	87.7	88.7	83.7	83.6	83.3	82.6	80.9	81.2	81.0	79.1	78.9	79.0	77.3	78.1	77.2
Women	12.3	11.3	16.3	16.4	16.7	17.4	19.2	18.8	19.0	20.9	21.1	21.0	22.7	21.9	22.8
Racial/ethnic group (percent) ¹															
American Indian	0.2	0.1	0.1	0.2	0.3	0.3	0.6	0.1	0.5	0.5	0.3	0.2	0.3	0.3	0.4
Asian	7.7	6.9	6.9	7.1	7.0	5.7	6.7	6.6	6.6	8.9	10.2	20.8	25.3	18.9	16.1
Black	1.0	1.3	1.2	1.0	1.0	1.3	1.3	1.0	1.2	1.1	1.6	1.6	1.4	2.1	2.0
Hispanic	1.1	1.3	1.7	2.1	2.4	2.6	2.6	3.1	2.9	3.2	3.4	2.6	2.5	2.8	2.6
White	90.0	90.5	90.1	89.5	89.3	90.1	88.8	89.3	88.8	86.4	84.5	74.8	70.6	76.0	78.9
Citizenship (percent)															
United States	75.9	75.4	70.3	66.1	65.1	64.3	62.5	61.0	59.3	57.9	57.1	56.3	56.7	54.7	57.5
Foreign	21.6	21.3	25.5	27.8	28.5	28.8	29.8	32.4	35.9	39.6	39.7	41.7	41.7	41.8	36.3
Unknown	2.4	3.3	4.1	6.1	6.4	6.9	7.8	6.7	4.8	2.5	3.2	2.1	1.8	3.5	6.2
Median age at doctorate (years)	29.1	29.0	29.5	29.9	29.8	30.1	30.0	30.7	30.2	30.3	30.6	30.7	30.7	30.8	30.4
Percent with bachelor's degree in same field as doctorate	76.5	76.6	75.0	73.4	72.6	72.6	72.6	80.0	76.9	74.5	72.9	73.0	70.8	74.3	65.4
Median time lapse from bachelor's to doctorate (years)															
Total time	6.8	6.7	7.1	7.1	7.1	7.2	7.2	7.8	7.5	7.8	8.0	8.2	8.1	8.0	7.5
Registered time	5.7	5.7	6.0	6.0	5.9	6.1	6.0	6.3	6.2	6.4	6.4	6.6	6.8	6.6	6.6

¹ Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). Includes physics, astronomy, chemistry, and earth, atmospheric, and marine

sciences. Excludes mathematics and computer science. The number of degrees also differs slightly from that reported in the NCES "Completions" survey. Some data have been revised from previously published figures. Percents may not add to 100 due to rounding.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 309.—Statistical profile of persons receiving doctor's degrees in the social sciences: 1979–80 to 1996–97

Item	1979–80	1980–81	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number of doctorates	6,253	6,505	5,720	5,893	5,790	5,781	5,961	6,093	6,152	6,216	6,545	6,613	6,635	6,814	6,917
Sex (percent)															
Men	65.4	64.4	58.9	57.6	57.2	55.0	54.8	53.7	50.6	52.6	50.7	50.6	49.2	48.4	46.9
Women	34.6	35.6	41.1	42.4	42.8	45.0	45.2	46.3	49.4	47.4	49.3	49.4	50.8	51.6	52.2
Racial/ethnic group (percent) ¹															
American Indian	0.3	0.2	0.4	0.4	0.5	0.3	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.7	0.5
Asian	2.8	2.5	2.6	2.6	3.2	3.3	3.1	3.0	3.3	3.6	4.0	6.1	7.3	6.4	6.2
Black	4.2	4.0	4.4	4.1	3.8	4.4	4.4	4.4	4.9	4.5	4.7	4.7	5.2	5.0	5.5
Hispanic	2.0	2.3	2.9	3.3	3.6	3.3	3.3	3.9	4.2	3.8	4.1	3.6	4.2	4.6	4.8
White	90.7	91.0	89.8	89.7	89.0	88.8	88.7	88.2	87.2	87.7	86.9	85.0	82.8	83.3	82.9
Citizenship (percent)															
United States	84.7	84.0	79.3	77.9	76.1	74.8	70.4	73.8	73.4	74.3	75.5	75.5	76.0	76.2	72.5
Foreign	11.6	11.9	15.3	15.3	15.7	16.1	17.3	18.0	19.8	21.2	21.3	21.7	21.4	20.7	17.8
Unknown	3.7	4.2	5.4	6.9	8.3	9.1	12.2	8.2	6.8	4.4	3.1	2.8	2.6	3.1	9.7
Median age at doctorate (years)	31.6	32.0	33.0	33.4	33.5	34.1	33.9	34.2	34.1	34.3	34.3	34.1	34.1	33.7	33.4
Percent with bachelor's degree in same field as doctorate	58.6	59.1	58.5	57.0	56.4	54.5	52.3	55.4	54.2	53.1	53.7	53.2	52.2	53.4	55.2
Median time lapse from bachelor's to doctorate (years)															
Total time	8.7	9.0	9.9	10.0	10.3	10.5	10.3	10.6	10.5	10.6	10.4	10.5	10.5	10.3	10.0
Registered time	6.4	6.5	7.1	7.2	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.5

¹ Longitudinal comparisons by race/ethnicity should be done with extreme care, due to periodic changes in the survey. Distribution by race/ethnicity based on U.S. citizens and those with permanent visas only.

NOTE.—The National Research Council's classification of degrees by field differs somewhat from that in most publications of the National Center for Education Statistics (NCES). The major differences are that history is included under humanities rather than social sciences and that psychology is included under social sciences. Includes anthropology, area studies, criminology, demographic/population studies, economics, econo-

metrics, geography, international relations/affairs, political science, public policy, psychology, sociology, statistics, and urban affairs/studies. The number of degrees also differs slightly from that reported in the NCES "Completions" survey. Because of rounding, percents may not add to 100.0.

SOURCE: National Academy of Sciences, National Research Council, Office of Scientific and Engineering Personnel, *Doctorate Records File*. (This table was prepared September 1999.)

Table 315.—Percentage distribution of enrollment and completion status of first-time postsecondary students starting during the 1989–90 academic year, by type of institution and other student characteristics: 1994

Student and institution characteristics	Students starting in 2-year institutions						Students starting in 4-year institutions					
	Highest degree attained				No degree, still enrolled	No degree, not enrolled	Highest degree attained				No degree, still enrolled	No degree, not enrolled
	Total, any degree	Certificate	Associate	Bachelor's			Total, any degree	Certificate	Associate	Bachelor's		
1	2	3	4	5	6	7	8	9	10	11	12	13
Total	38.4	13.8	18.6	6.1	13.6	48.0	60.4	2.9	4.2	53.3	15.2	24.4
Male	34.6	13.0	16.2	5.5	16.2	49.2	56.5	2.4	3.9	50.2	17.3	26.3
Female	41.9	14.4	20.9	6.6	11.2	46.8	63.9	3.3	4.4	56.2	13.4	22.7
Age (as of 12/31/89)												
18 years or younger	46.8	9.9	25.8	11.0	14.7	38.5	64.4	2.4	4.0	58.0	15.3	20.3
19 years	33.2	13.6	19.3	0.2	17.4	49.5	47.8	4.7	3.0	40.0	16.7	35.5
20 to 29 years	31.2	18.8	9.9	2.5	12.0	56.8	34.8	5.3	6.9	22.5	12.7	52.5
30 years or over	27.3	18.4	8.0	0.8	8.4	64.3	23.5	7.9	6.4	9.2	11.1	65.4
Socioeconomic status in 1989–90												
Low (25 percent)	31.9	18.1	11.8	1.9	9.6	58.4	33.5	2.8	4.9	25.8	17.4	49.1
Middle (50 percent)	36.9	14.9	16.6	5.4	14.8	48.3	53.8	3.7	5.0	45.1	17.0	29.2
High (25 percent)	45.4	8.9	26.6	9.9	13.9	40.7	67.3	2.4	3.5	61.3	13.8	19.0
Race												
White, non-Hispanic	39.0	13.1	19.6	6.4	12.2	48.8	61.4	2.7	4.4	54.3	14.1	24.4
Black, non-Hispanic	35.2	17.8	14.1	3.2	11.3	53.5	50.8	4.6	4.3	41.9	21.3	27.9
Hispanic	38.2	15.3	16.4	6.6	20.5	41.3	50.6	1.3	2.1	47.2	21.3	28.1
Asian/Pacific Islander	37.6	15.0	16.7	5.9	23.0	39.3	67.6	2.7	1.7	63.1	18.5	13.9
Highest education level of parents												
Less than high school diploma	30.3	19.2	9.1	2.0	10.2	59.5	55.8	7.1	6.6	42.0	14.7	29.6
High school diploma	39.6	14.6	18.7	6.3	9.8	50.7	50.5	4.6	4.6	41.3	16.7	32.8
Some postsecondary	39.0	11.4	20.9	6.8	16.3	44.7	58.1	2.1	4.9	51.2	14.9	26.9
Bachelor's or higher	43.0	9.8	25.0	8.2	21.1	35.9	68.1	1.8	3.2	63.1	14.7	17.2
Dependency status in 1989–90												
Dependent	43.5	11.7	23.5	8.4	14.6	41.8	62.9	2.6	4.0	56.3	15.3	21.8
Independent	28.8	17.6	9.4	1.8	11.7	59.5	33.1	6.2	5.4	21.5	14.1	52.8
Dependent student family income in 1989–90												
Less than \$20,000	40.6	12.7	22.3	5.6	14.4	45.1	52.5	3.0	4.9	44.5	18.2	29.3
\$20,000 to \$39,999	44.0	13.1	21.5	9.3	12.6	43.4	58.1	2.5	4.0	51.5	16.5	25.5
\$40,000 to \$59,999	44.5	12.1	23.3	9.1	12.5	43.0	64.8	3.3	4.1	57.4	15.5	19.6
\$60,000 or more	46.1	5.9	30.5	9.8	23.6	30.2	72.2	1.7	3.4	67.1	12.2	15.6
Delayed postsecondary enrollment												
Did not delay ¹	46.4	11.1	25.8	9.5	15.1	38.5	64.1	2.4	4.0	57.7	15.5	20.4
Delayed entry	28.4	17.1	9.6	1.7	11.6	60.0	32.6	6.4	5.4	20.8	12.7	54.7
Attendance status when began at first institution												
Full-time	48.0	12.6	25.6	9.8	13.7	38.3	63.9	2.6	4.0	57.4	14.9	21.2
Part-time	27.3	15.0	10.6	1.8	14.4	58.2	33.3	6.4	8.2	18.7	14.9	51.9
Intensity of enrollment through first degree												
Exclusively part-time	12.6	10.9	1.6	0.2	7.7	79.8	9.7	5.5	2.5	1.7	5.9	84.4
Mixed full-time and part-time	46.5	14.3	24.7	7.5	22.3	31.3	59.4	2.9	4.1	52.4	19.8	20.8
Exclusively full-time	51.3	15.7	26.1	9.6	7.3	41.4	67.3	2.5	4.4	60.3	11.2	21.6
Degree working towards at first institution												
None	13.0	6.0	3.6	3.4	13.8	73.3	30.5	5.3	4.4	20.8	12.4	57.1
Certificate	44.0	37.7	6.2	0.2	5.3	50.7	57.3	15.2	9.3	32.8	9.4	33.3
Associate degree	42.6	11.4	23.7	7.5	12.1	45.2	44.0	5.8	16.7	21.5	13.1	43.0
Bachelor's	36.9	8.1	21.0	7.9	22.5	40.6	62.6	2.4	3.1	57.1	15.6	21.8
Worked full time while enrolled when began at first institution												
Did not work full time	44.9	15.4	22.1	7.3	11.9	43.2	61.9	2.8	4.2	54.9	15.9	22.2
Worked full time	26.6	11.6	12.2	2.8	16.7	56.7	55.5	3.5	4.4	47.6	12.5	32.1
Control of first institution												
Public	36.7	12.9	17.5	6.3	14.7	48.6	54.8	3.2	4.7	47.0	18.4	26.8
Private, not for profit	52.2	14.5	29.6	8.1	12.5	35.3	71.9	2.3	3.0	66.6	8.6	19.5
Private, for profit	52.0	22.9	26.8	2.3	1.5	46.5	—	—	—	—	—	—

¹ Students with a standard high school diploma who attended higher education in the same year as their graduation.
 —Data not available or not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Postsecondary Students Longitudinal Study, 1994. (This table was prepared February 1999.)

NOTE.—Data reflect completion and enrollment status by spring 1994 of first-time postsecondary students starting in academic year 1989–90. Some cells in this table have relatively large sampling errors.

The Educational Progress of Hispanic Students

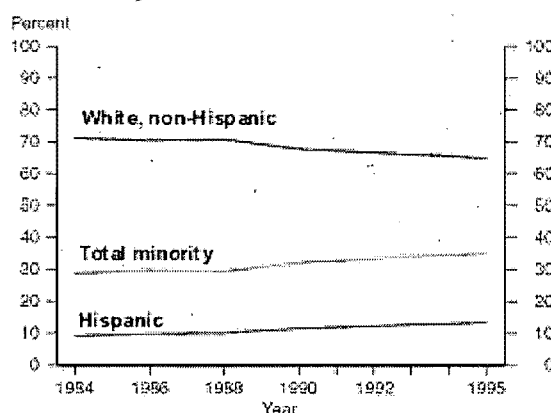
By Jennifer Sable and Janis Stennett, Pinkerton Computer Consultants, Inc.

In order to prepare American students for the types of jobs that will be available in the future, schools and parents need to work together to ensure that all students acquire the academic skills necessary to compete.¹ As the Hispanic population grows, the successful transition of Hispanic youth from school to work and active engagement in American society becomes more important for the Nation.

Racial and ethnic diversity in the United States has grown dramatically in recent years, and the growth of the Hispanic population has been a major contributor to this diversity. The Hispanic population has increased more rapidly than any other racial or ethnic group, growing from 9 percent of the child population in the United States in 1980 to 14 percent in 1996. Predictions indicate that by the year 2020, more than 20 percent of the children in the United States will be Hispanic.²

The increase in the Hispanic population in the United States, and the resulting rise in the enrollment of Hispanic students, has contributed to an 11 percentage point increase in minority enrollment in public elementary and secondary schools between 1976 and 1995. In 1976, Hispanic students made up 6 percent of the student population at public elementary and secondary schools. By 1995, the proportion of Hispanic students rose 8 percentage points, reaching 14 percent, the largest increase of any minority group (table 43-1).

Figure 1. Percentage distribution of enrollment in public elementary and secondary school: 1984-95



NOTE: Data for 1992-95 are from the Common Core of Data (CCD) survey.

SOURCE: U.S. Department of Education, Office for Civil Rights, Elementary and Secondary School Civil Rights Survey, 1984, 1986, 1988, and 1990; National Center for Education Statistics, Common Core of Data Survey, 1992; and *Digest of Education Statistics, 1995* and *1996*, table 44, and 1997, table 45.

In general, the educational achievement and attainment of Hispanics has been lower than that of whites. Since Hispanics account for a growing percentage of the general U.S. and public school population, it has become increasingly important to understand the educational experiences and transitions to the labor force of Hispanics. Understanding the differences in educational experiences between Hispanics and whites, and how these differences have changed over time, provides an overview of the educational progress of Hispanics in the United States.

It should be noted that although limited data availability often leads researchers to treat Hispanics as if they were a homogeneous group, the U.S. Hispanic population is diverse. The three largest Hispanic subgroups are Mexican Americans, Puerto Ricans, and Cubans. Recent immigrants from Central America and South America constitute other, smaller groups. These subgroups are concentrated in different parts of the United States, their economic circumstances vary, and the timing of the immigration differs. In this analysis, overall trends for the U.S. Hispanic population are provided, as data are usually not available for these subpopulations.

Family characteristics and parent's involvement in education

A child's family characteristics and home environment have implications for many aspects of a child's life, including academic experiences. Children who live in poverty, in single-parent homes, or whose parents have low levels of educational attainment are at greater risk for dropping out of high school, not achieving at higher levels, and not attending postsecondary institutions. As differences between whites and Hispanics in these family background characteristics change, the educational progress of Hispanics compared to whites can be expected to change.

- *Both the likelihood of living in poverty and with a single parent increased among Hispanic children.*

The number of Hispanic youth under age 18 living below 100 percent of the poverty line has increased from 33 percent in 1985 to 40 percent in 1996. In contrast, the percentage of white children living in poverty has decreased slightly from 12 percent in 1990 to 10 percent in 1996.³ The percentage of Hispanic 15- to 18-year-olds living with one parent increased from 23 percent in 1972 to 33 percent in 1997, while the percentage of whites in the same age range living with one parent increased from 12 to 22 percent (Indicator 44).

- *The levels of parental education among Hispanic children have increased.*

Higher levels of parent education are generally associated with positive educational outcomes and experiences, such as participation in preprimary education and not dropping out of high school. The parental education levels of Hispanic students ages 15 to 18 nearly doubled in the past 25 years. For example, in 1997, 45 percent of mothers and 46 percent of fathers of Hispanic 15- to 18-year olds had at least a high school diploma or GED, up from 24 percent of mothers and fathers in 1972. The increase for white students has been from 68 to 64 percent of mothers and fathers having a high school diploma or GED in 1972 to 92 and 90 percent, respectively, having these credentials in 1997 (Indicator 44).

- *Many parents of Hispanic children are actively involved in their children's educational activities.*

Parents' involvement in their children's education is another way through which the family influences educational experiences. Parent participation in their children's education is evidenced by their involvement in school-related issues and activities. In 1996, parents of Hispanic children were equally or more involved in education-related activities that directly influenced their children than were parents of white children. For example, parents of Hispanics were as likely as parents of whites to attend general school meetings, and more likely to help their children with homework during the week than parents of white children. However, parents of Hispanic children were less likely than parents of white children to participate in school activities that did not directly influence their child's education, such as attending a school event, acting as a volunteer, or serving on a committee (Indicator 49).

Issues of limited English proficiency

The ability to speak and read English, a problem which is not unique to the Hispanic population, is a concern for many. Spanish-speakers may have difficulty with English because they have had limited opportunities to use English. For example, Hispanic students may speak English only at school, while speaking Spanish at home and outside of school. Difficulties in speaking and reading English places students at risk for academic failure. In fact, Hispanic students who speak Spanish are more likely to drop out of high school than peers who speak only English.

Between 1979 and 1989, the percentage of Spanish speakers age 5 and older increased 65 percent in the United States. In 1989, more than 14 million people in the United States spoke Spanish. Of those who spoke languages other than English, 58 percent spoke Spanish. Of these Spanish speakers, almost half reported having difficulty speaking English.⁴

The limited English proficiency of many Hispanics is likely to serve as an important impediment to success in the educational careers and employment outcomes of Hispanic youths. Knowing the pervasiveness of this problem is important for understanding the differences that exist between Hispanics and other racial and ethnic groups in terms of educational participation, progress, and achievement.

Preprimary education

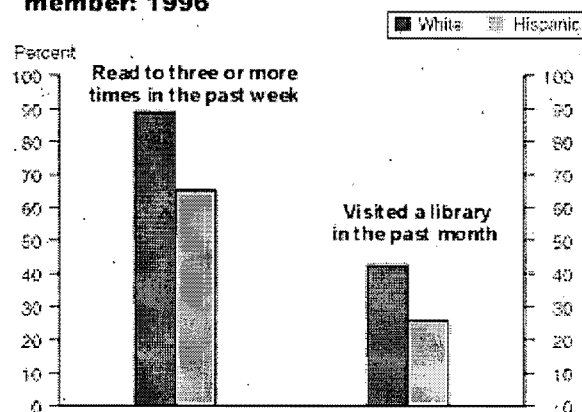
Research has shown that a quality preschool experience is an important indicator of student success. Preprimary education prepares children for school by teaching learning and socialization skills.⁵

- *The preprimary educational experiences of Hispanic children differ from those of whites. Hispanic 3- and 4-year-olds are less likely to participate in preprimary education than their white peers, and are less likely to participate in early literacy activities.*

One form of preprimary education is organized preprimary programs, such as Head Start or pre-kindergarten. In 1996, about 22 percent of Hispanic 3-year-olds were enrolled in such preprimary programs compared to 40 percent of whites. Among 4-year-olds, 45 percent of Hispanics and 59 percent of whites were enrolled. Among 5-year-olds of normal kindergarten age, these differences largely disappeared: Hispanic enrollment rates, including kindergarten enrollment, were similar to the enrollment rates of white 5-year-olds (Indicator 1).

Preprimary educational opportunities are fostered in the home environment as well as in preprimary programs. In 1996, Hispanic children, ages 3-5, were less likely to have been read to in the past week or to have visited a library in the past month than white children (figure 2 and Indicator 2). This lack of early reading experience can create learning deficits for Hispanic youngsters.⁶

Figure 2. Percentage of children ages 3-5 who participated in various literacy activities with a parent or family member: 1996



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1996 (Parent and Family Involvement in Education File).

Academic performance of Hispanic students

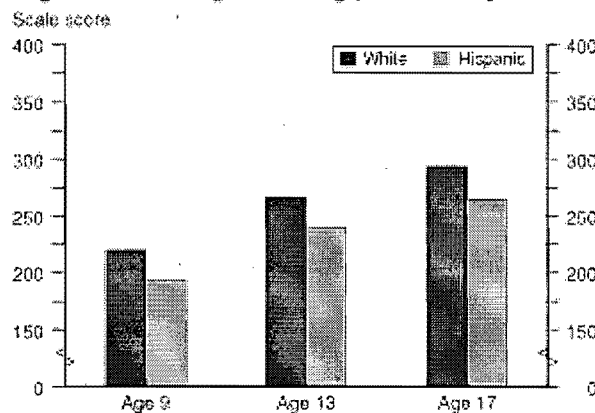
- *Hispanic students score lower than white students in national assessments of reading, writing, mathematics, and science proficiency, but their performance has improved in some areas since 1975.*

Developing reading skills at an early stage is important to future educational success. Once behind in reading proficiency, a student risks having difficulty with other aspects of the curriculum, and a continued lag behind other peers in reading skills as the student gets older. In 1996, at age 9, Hispanic students had an average reading scale score of 194 while white students had an average score of 220 (Indicator 16).

There is evidence that the majority of reading skills are mastered by age 13, which is generally when reading is taught in school as a explicit subject for the most part.⁷ On average, the reading scores of all 13-year-old students in 1996 were about 50 points higher than their reading scores as 9-year-olds in 1992. In 1996, Hispanic reading scores differed by 46 points between ages 9 and 13, compared to 25 points between ages 13 and 17. The Hispanic-white differences in reading scores were about the same at all three age levels: 26 points at age 9, 27 points at age 13, and 30 points at age 17. At age 17, Hispanic students were reading at levels similar to white 13-year-olds (Indicator 16).

These scoring differences between Hispanics and whites mean that the average Hispanic score is below that of the average student by about 25 to 30 points. The extent to which these large differences may be attributable to recent immigration or language difficulties is unknown. Also, students whose English proficiency is judged not to be appropriate for the NAEP tests are excluded from taking them.⁸

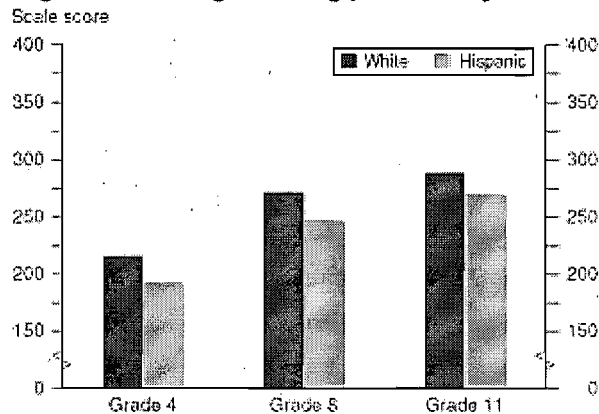
Figure 3. Average reading proficiency: 1996



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.*

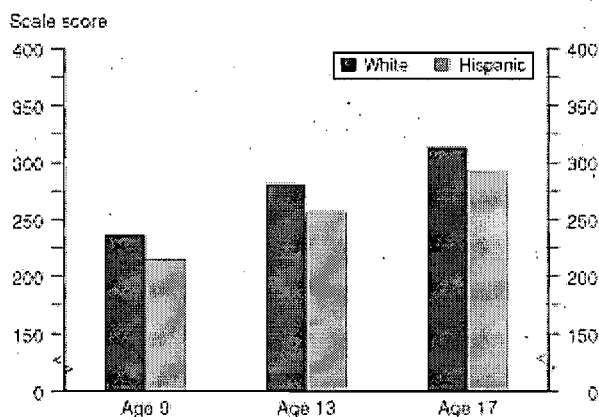
While Hispanics score at proficiency levels below those of white students at all ages, there was a slight improvement in the average reading proficiency scores of 9-year-old Hispanics between 1975 and 1996. However, there was no similar improvement for 13- and 17-year old Hispanics in reading proficiency (Indicator 16).

The NAEP writing proficiency scores of white and Hispanic 4th-, 8th-, and 11th-graders exhibited similar patterns as reading proficiency scores. In 1996, white 4th-grade students outperformed Hispanic 4th-grade students in writing proficiency by 25 scale points. As Hispanic and white students grew older, the writing scale scores of Hispanics remained lower than those of whites. Hispanic 11th-graders performed at a level similar to white students in 8th-graders, similar to the pattern with the reading proficiency scores. There have been no significant increases or decreases in performance on the NAEP writing proficiency scale for Hispanic or white 4th- or 8th-graders between 1984 and 1996 (Indicator 17). Again, students whose English proficiency is judged not appropriate for the NAEP tests are excluded from taking them.⁹

Figure 4. Average writing proficiency: 1996

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.*

Patterns in the NAEP mathematics proficiency scores were similar to the average reading and writing scores in 1996 in most, but not all, respects. White students outperformed Hispanic students at each age level (figure 5). The major difference is that unlike reading and writing, the average mathematics proficiency scores of both white and Hispanic students increased between 1973 and 1996 at all age levels. The scores of Hispanic 13- and 17-year-olds increased at a faster rate than those of white students, causing the performance gaps to narrow over this period.

Figure 5. Average mathematics proficiency: 1996

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.*

As in mathematics, the science proficiency scores of both Hispanic and white students increased between 1977 and 1996 at both ages 9 and 13 (Indicator 19). Unlike in mathematics, there was no improvement among 17-year-old whites or Hispanics. The gaps in science performance between Hispanics and whites also did not narrow between 1977 and 1996, and Hispanic-white differences at age 9 had not decreased by age 17.

Progress in school

- *Hispanics are taking more rigorous high school courses, and more Hispanic students are participating in the AP program than in the past.*

In the past Hispanic students have been commonly "tracked" into general high school courses that satisfied only the most basic requirements for earning a high school diploma, but did not prepare students to attend 4-year colleges or rigorous technical schools. This general high school curriculum also did not prepare students for good entry-level jobs in high-technology industries if the student chooses not to pursue a postsecondary education.¹⁰

In 1983, *A Nation at Risk* recommended that all high school students seeking a high school diploma take a more rigorous core curriculum called the "New Basics." This curriculum consists of 4 years of study in English, and 3 years each in mathematics, science, and social studies. In 1982, 7 percent of Hispanic high school graduates earned the units to meet this curriculum. By 1994, this percentage was six times higher, with 44 percent of Hispanic high school graduates earning the units for the "New Basics" curriculum. White graduates are still more likely to have met the course area requirements of the "New Basics" than Hispanics (Indicator 28, Condition 1996). However, Hispanics are just as likely as whites to have completed the more rigorous requirements recommended for college-bound students, which included foreign languages and computer science.¹¹

Another way to assess the rigor of a student's high school curriculum is to examine participation in the Advanced Placement (AP) program which offers college-level courses to high school students. Satisfactory performance on an AP examination (usually a score of 3 or higher on a 5 point scale) will often allow the examinee to earn college credit. Between 1984 and 1996, the number of Hispanic students who took AP examinations per 1,000 12th-graders increased from 24 to 74. For Hispanics, the rate of 74 students per 1,000 AP examination takers is about half the rate of 133 per 1,000 students for whites. Between 1984 and 1996, whites were more likely to take AP examinations than Hispanics, but the gap between the races has decreased. In 1996, Hispanics taking the AP examination were three times as likely as whites to take a foreign language AP examination (Indicator 27).

- *Hispanic students are less likely to complete high school than white students. The rates of not completing are highest among immigrants and those with limited English-language proficiency.*

The differences in high school completion between Hispanics and whites ages 16–24 are substantial. In 1996, the dropout rate for white young adults was 7 percent compared to 29 percent for Hispanic young adults.¹² Immigration and English language use and proficiency are all associated with this difference between the two groups.

Foreign-born Hispanic students are at a much greater risk of not completing high school than native-born students. The status dropout rate (defined as a proportion of young adults ages 16–24 who are not enrolled in school and do not have a high school credential) is about two times higher for Hispanic migrants than for Hispanic young adults born in the 50 states and DC (46 versus 18 percent). Many Hispanic youths migrating to the U.S. do not enroll in school, but seek employment instead. They may be deterred from enrolling by language, economic, and cultural differences.¹³ Those who never enroll in high school may account for about one-half of the higher dropout rate for Hispanics. In contrast, Hispanics who had ever enrolled in U.S. schools had a status dropout rate of 20 percent.¹⁴

Table 1. Percentage distribution of the 16- to 24-year-old population and percentage who were dropouts: 1995

Race/ethnicity and place of birth	Percentage of the population	Dropout rate
T I I	100	100
I	I	I
I	I	I
I I	I I	I I
I	I	I
I	I	I
I I	I	I
I	I	I
I I	I	I

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

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1995, unpublished data.

The likelihood of not completing high school is also related to language use in the home and English-language proficiency. In 1995, for example, the status dropout rate for Hispanics speaking Spanish at home, who were ever enrolled in U.S. schools, and who spoke English "well," was 19 percent compared to 33 percent for their peers who did not speak English "well."¹⁵

Due to immigration and the higher dropout rates for Hispanics born in the United States, the overall percentage of the Hispanic, young adult population, ages 25–29 who have completed high school through receiving a diploma or other certificate of high school equivalency is less than that of whites. These rates are 93 percent for whites and 62 percent for Hispanics in 1997. The high school completion rate for Hispanics shows no consistent trend since the early 1980s, while the high school completion rate for whites has increased (Indicator 22).

College enrollment

Total Hispanic enrollment in postsecondary education is increasing rapidly, primarily because of the growing proportion of Hispanics in the total population, rather than an increase in the rate at which Hispanic high school completers are entering college.

Enrollment in colleges and universities has become increasingly diverse since the mid-1970s as the total numbers of different minorities enrolling have increased faster than the enrollment of whites. Much of this increased diversity is due to the rapid growth of Hispanic enrollment, which nearly tripled between 1976 and 1995 from .4 to 1.1 million students (fall enrollment).¹⁶ Because of this growth, Hispanic enrollment rose from 4 percent of all students in 1976 in postsecondary education to 8 percent in 1995. As shown in table 2, more Hispanic students have enrolled in community colleges than in 4-year colleges by a substantial amount, and the proportion has increased since 1976.¹⁷

I I I	I	I	I I I I	I I I I
I	I			
I I I I	I	I	I I I I	I I I I
I I	I	I	I I I I	I I I I

Table 269.—Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976–77 to 1996–97

Year	Number of degrees conferred							Percentage distribution of degrees conferred to U.S. citizens					
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Total							Total					
1976-77 ¹	917,900	807,688	58,636	18,743	13,793	3,326	15,714	100.0	89.5	6.5	2.1	1.5	0.4
1978-79 ²	919,540	802,542	60,246	20,096	15,407	3,410	17,839	100.0	89.0	6.7	2.2	1.7	0.4
1980-81 ³	934,800	807,319	60,673	21,832	18,794	3,593	22,589	100.0	88.5	6.7	2.4	2.1	0.4
1984-85 ⁴	968,311	826,106	57,473	25,874	25,395	4,246	29,217	100.0	88.0	6.1	2.8	2.7	0.5
1986-87 ⁵	991,264	841,818	56,560	26,988	32,624	3,968	29,306	100.0	87.5	5.9	2.8	3.4	0.4
1988-89 ^{5,6}	1,016,350	859,703	58,078	29,918	37,674	3,951	27,026	100.0	86.9	5.9	3.0	3.8	0.4
1989-90 ^{5,7}	1,048,631	884,376	61,063	32,844	39,248	4,392	26,708	100.0	86.5	6.0	3.2	3.8	0.4
1990-91 ^{5,8}	1,081,280	904,062	65,341	36,612	41,618	4,513	29,134	100.0	85.9	6.2	3.5	4.0	0.4
1991-92 ^{5,9}	1,129,833	936,771	72,326	40,761	46,720	5,176	28,079	100.0	85.0	6.6	3.7	4.2	0.5
1992-93 ^{5,10}	1,159,931	947,309	77,872	45,376	51,463	5,671	32,240	100.0	84.0	6.9	4.0	4.6	0.5
1993-94 ^{5,11}	1,165,973	936,227	83,576	50,241	55,660	6,189	34,080	100.0	82.7	7.4	4.4	4.9	0.5
1994-95 ^{5,12}	1,158,788	913,377	87,203	54,201	60,478	6,606	36,923	100.0	81.4	7.8	4.8	5.4	0.6
1995-96 ^{5,13}	1,163,036	904,709	91,166	58,288	64,359	6,970	37,544	100.0	80.4	8.1	5.2	5.7	0.6
1996-97 ^{5,14}	1,168,023	898,224	94,053	61,941	67,969	7,409	38,427	100.0	79.5	8.3	5.5	6.0	0.7
	Men							Men					
1976-77 ¹	494,424	438,161	25,147	10,318	7,638	1,804	11,356	100.0	90.7	5.2	2.1	1.6	0.4
1978-79 ²	476,065	418,215	24,659	10,418	8,261	1,736	12,776	100.0	90.3	5.3	2.2	1.8	0.4
1980-81 ³	469,625	406,173	24,511	10,810	10,107	1,700	16,324	100.0	89.6	5.4	2.4	2.2	0.4
1984-85 ⁴	476,148	405,085	23,018	12,402	13,554	1,998	20,091	100.0	88.8	5.0	2.7	3.0	0.4
1986-87 ⁵	480,782	406,749	22,501	12,865	17,253	1,817	19,597	100.0	88.2	4.9	2.8	3.7	0.4
1988-89 ^{5,6}	481,946	407,154	22,370	13,950	19,260	1,730	17,482	100.0	87.7	4.8	3.0	4.1	0.4
1989-90 ^{5,7}	490,317	413,573	23,262	14,941	19,721	1,859	16,961	100.0	87.4	4.9	3.2	4.2	0.4
1990-91 ^{5,8}	496,424	415,505	24,328	16,158	20,678	1,901	17,854	100.0	86.8	5.1	3.4	4.3	0.4
1991-92 ^{5,9}	516,976	429,842	26,956	17,976	23,248	2,182	16,772	100.0	85.9	5.4	3.6	4.6	0.4
1992-93 ^{5,10}	530,541	435,084	28,883	19,865	25,293	2,449	18,967	100.0	85.0	5.6	3.9	4.9	0.5
1993-94 ^{5,11}	530,804	429,121	30,648	21,807	26,938	2,616	19,674	100.0	84.0	6.0	4.3	5.3	0.5
1994-95 ^{5,12}	525,174	417,006	31,775	23,600	28,973	2,736	21,084	100.0	82.7	6.3	4.7	5.7	0.5
1995-96 ^{5,13}	521,439	408,829	32,852	24,994	30,630	2,885	21,249	100.0	81.7	6.6	5.0	6.1	0.6
1996-97 ^{5,14}	517,901	401,878	33,509	26,007	32,111	2,988	21,408	100.0	80.9	6.7	5.2	6.5	0.6
	Women							Women					
1976-77 ¹	423,476	369,527	33,489	8,425	6,155	1,522	4,358	100.0	88.2	8.0	2.0	1.5	0.4
1978-79 ²	443,475	384,327	35,587	9,678	7,146	1,674	5,063	100.0	87.7	8.1	2.2	1.6	0.4
1980-81 ³	465,175	401,146	36,162	11,022	8,687	1,893	6,265	100.0	87.4	7.9	2.4	1.9	0.4
1984-85 ⁴	492,163	421,021	34,455	13,472	11,841	2,248	9,126	100.0	87.2	7.1	2.8	2.5	0.5
1986-87 ⁵	510,482	435,069	34,059	14,123	15,371	2,151	9,709	100.0	86.9	6.8	2.8	3.1	0.4
1988-89 ^{5,6}	534,404	452,549	35,708	15,968	18,414	2,221	9,544	100.0	86.2	6.8	3.0	3.5	0.4
1989-90 ^{5,7}	558,314	470,803	37,801	17,903	19,527	2,533	9,747	100.0	85.8	6.9	3.3	3.6	0.5
1990-91 ^{5,8}	584,856	488,557	41,013	20,454	20,940	2,612	11,280	100.0	85.2	7.2	3.6	3.7	0.5
1991-92 ^{5,9}	612,857	506,929	45,370	22,785	23,472	2,994	11,307	100.0	84.3	7.5	3.8	3.9	0.5
1992-93 ^{5,10}	629,390	512,225	48,989	25,511	26,170	3,222	13,273	100.0	83.1	8.0	4.1	4.2	0.5
1993-94 ^{5,11}	635,169	507,106	52,928	28,434	28,722	3,573	14,406	100.0	81.7	8.5	4.6	4.6	0.6
1994-95 ^{5,12}	633,614	496,371	55,428	30,601	31,505	3,870	15,839	100.0	80.3	9.0	5.0	5.1	0.6
1995-96 ^{5,13}	641,597	495,880	58,314	33,294	33,729	4,085	16,295	100.0	79.3	9.3	5.3	5.4	0.7
1996-97 ^{5,14}	650,122	496,346	60,544	35,934	35,858	4,421	17,019	100.0	78.4	9.6	5.7	5.7	0.7

¹ Excludes 1,121 men and 528 women whose racial/ethnic group was not available.² Excludes 1,279 men and 571 women whose racial/ethnic group was not available.³ Excludes 258 men and 82 women whose racial/ethnic group was not available.⁴ Excludes 6,380 men and 4,786 women whose racial/ethnic group was not available.⁵ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported.⁶ Excludes 1,400 men and 1,005 women whose racial/ethnic group and field of study were not available.⁷ Excludes 1,379 men and 1,334 women whose racial/ethnic group and field of study were not available.⁸ Excludes 7,621 men and 5,637 women whose racial/ethnic group and field of study were not available.⁹ Excludes 3,835 men and 2,885 women whose racial/ethnic group and field of study were not available.¹⁰ Excludes 2,340 men and 2,907 women whose racial/ethnic group and field of study were not available.¹¹ Excludes 1,618 men and 1,684 women whose racial/ethnic group and field of study were not available.¹² Excludes 957 men and 389 women whose racial/ethnic group and field of study were not available.¹³ Excludes 1,015 men and 741 women whose racial/ethnic group and field of study were not available.¹⁴ Excludes 2,614 men and 2,242 women whose racial/ethnic group and field of study were not available.

NOTE.—For years 1984–85 to 1996–97, reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Because of rounding, percents may not add to 100.0.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, and Integrated Postsecondary Education Data System (IPEDS), "Completions" surveys. (This table was prepared August 1999.)

Table 268.—Associate degrees conferred by institutions of higher education, by racial/ethnic group, major field of study, and sex of student: 1995–96

Major field of study	Total							Men							Women						
	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native	Non-resident alien
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
All fields, total ¹	553,625	425,028	51,672	38,163	23,091	5,556	10,115	218,977	168,858	17,854	15,700	10,204	1,989	4,372	334,648	256,170	33,818	22,463	12,887	3,567	5,743
Agriculture and natural resources	6,182	5,851	56	113	22	68	72	4,218	4,028	35	60	11	42	42	1,964	1,823	21	53	11	26	30
Architecture and related programs	256	219	3	20	5	3	6	40	32	1	4	1	1	1	216	187	2	16	4	2	5
Area, ethnic, and cultural studies	111	25	20	13	3	38	12	28	2	4	6	0	13	3	83	23	16	7	3	25	9
Biological sciences/life sciences	2,037	1,402	118	196	217	44	60	817	557	49	76	89	15	31	1,220	845	69	120	128	29	29
Business	107,168	78,779	12,620	7,611	4,585	938	2,635	32,323	24,059	3,405	2,142	1,500	206	1,011	74,845	54,720	9,215	5,469	3,085	732	1,624
Communications	2,187	1,678	201	148	101	11	48	1,077	836	104	82	41	4	10	1,110	842	97	66	60	7	38
Communications technologies	1,757	1,366	190	100	40	14	47	1,169	943	114	60	26	8	18	588	423	76	40	14	6	29
Computer and information sciences	9,658	6,727	1,242	717	563	165	244	4,954	3,605	483	351	313	67	135	4,704	3,122	759	366	250	98	109
Construction trades	2,141	1,832	85	68	116	27	13	2,035	1,748	80	62	108	24	13	106	84	5	6	8	3	0
Education	9,750	7,321	1,006	879	238	208	98	3,109	2,426	307	208	94	45	29	6,641	4,895	699	671	144	163	69
Engineering	2,197	1,692	155	119	149	12	70	1,914	1,481	126	100	135	10	62	283	211	29	19	14	2	8
Engineering-related technologies	33,002	25,646	2,929	2,481	1,406	245	295	28,871	22,566	2,392	2,212	1,254	204	243	4,131	3,080	537	269	152	41	52
English language and literature/letters	1,310	745	97	154	80	24	210	471	240	32	58	36	10	95	839	505	65	96	44	14	115
Foreign languages and literatures	607	417	11	101	26	1	51	163	114	2	28	9	0	10	444	303	9	73	17	1	41
Health professions and related sciences	101,872	84,750	8,302	4,143	3,169	823	685	17,295	13,684	1,363	1,050	893	142	163	84,577	71,066	6,939	3,093	2,276	681	522
Home economics and vocational home economics	8,192	5,791	1,089	716	328	87	181	757	475	93	61	96	9	23	7,435	5,316	996	655	232	78	158
Law and legal studies	9,106	7,217	1,041	620	133	65	30	1,119	779	170	113	33	16	8	7,987	6,438	871	507	100	49	22
Liberal arts and sciences, general studies, and humanities	174,970	131,859	15,401	13,754	8,307	1,815	3,834	67,994	51,496	5,351	5,313	3,410	657	1,767	106,976	80,363	10,050	8,441	4,897	1,158	2,067
Library science	94	75	4	4	11	0	0	13	9	1	1	2	0	0	81	66	3	3	9	0	0
Mathematics	758	449	37	110	105	9	48	463	268	27	68	62	7	31	295	181	10	42	43	2	17
Mechanics and repairers	12,524	9,974	870	737	661	137	145	11,723	9,396	781	683	615	122	126	801	578	89	54	46	15	19
Multi/interdisciplinary studies	8,611	6,637	901	511	400	72	90	4,212	3,215	461	265	191	33	47	4,399	3,422	440	246	209	39	43
Parks, recreation, leisure and fitness studies	936	734	101	54	20	7	20	545	418	63	33	15	4	12	391	316	38	21	5	3	8
Philosophy and religion	83	67	4	6	3	2	1	45	34	1	5	3	1	1	38	33	3	1	0	1	0
Physical sciences and science technologies	2,612	1,895	217	146	228	31	95	1,458	1,077	120	85	112	14	50	1,154	818	97	61	116	17	45
Precision production trades	10,217	8,315	455	771	509	89	78	8,119	6,615	356	639	374	75	60	2,098	1,700	99	132	135	14	18
Protective services	19,196	15,363	1,801	1,385	382	199	66	13,427	11,163	895	897	301	123	48	5,769	4,200	906	488	81	76	18
Psychology	1,583	1,117	150	182	59	43	32	406	272	43	52	21	6	12	1,177	845	107	130	38	37	20
Public administration and services	4,218	2,595	938	454	99	89	43	765	441	164	92	28	21	19	3,453	2,154	774	362	71	68	24
R.O.T.C. and military technologies	556	457	75	1	22	1	0	514	426	66	0	21	1	0	42	31	9	1	1	0	0
Social sciences and history	4,021	2,505	449	520	268	130	149	1,488	933	162	183	105	31	74	2,533	1,572	287	337	163	99	75
Theological studies and religious vocations	608	467	79	31	10	3	18	314	237	40	23	6	1	7	294	230	39	8	4	2	11
Transportation and material moving workers	1,571	1,269	132	58	60	5	47	1,325	1,083	104	55	46	5	32	246	186	28	3	14	0	15
Visual and performing arts	13,534	9,792	893	1,240	766	151	692	5,806	4,200	459	633	253	72	189	7,728	5,592	434	607	513	79	503

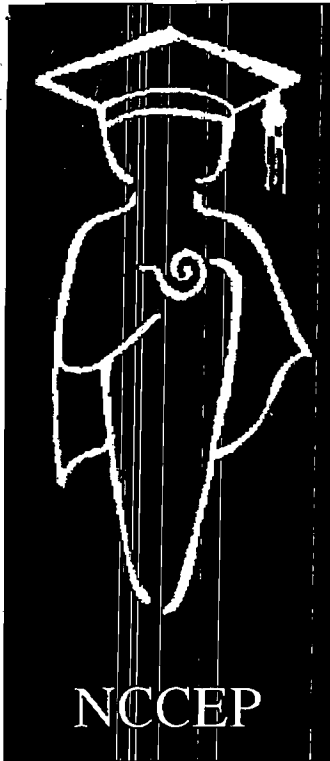
¹ Reported racial/ethnic distributions of students by level of degree, field of degree, and sex were used to estimate race/ethnicity for students whose race/ethnicity was not reported. Excludes 537 men and 1,054 women whose racial/ethnic group and field of study were not available.

NOTE.—To facilitate trend comparisons, certain aggregations have been made of the degree fields as reported in the IPEDS "Completions" survey: "Agriculture and natural resources" includes Agricultural business and production,

Agricultural sciences, and Conservation and renewable natural resources; and "Business" includes Business management and administrative services, Marketing operations/marketing and distribution, and Consumer and personal services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Completions" survey. (This table was prepared June 1998.)

Franklin D. Roosevelt - complete



**UPCOMING
EVENTS**

**ENLACE Networking
Meeting**
February 10-11, 2000
San Antonio, TX

**GEAR-UP Pre-Application
Technical Assistance
Workshops**

February 7, 2000
Phoenix, AZ

February 9, 2000
Kansas City, MO

February 16, 2000
Jackson, MS

February 18, 2000
Washington, DC

February 22, 2000
Edinburg, TX

**U.S. Department of Education
FY 2000 Postsecondary
Education Dialogue**
February 23, 2000
Edinburg, TX

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Pages: 12 (Including Cover Sheet)

☐ **URGENT**

Memo:

But let us look at the available data on the progress of minority students in education. In 1997, the latest year for which data are available, minority students of all ethnicities represented 26.0% of all students enrolled in postsecondary education. Let me say that again: 26.0%. Now let me break that down for you.

- African Americans represented 10.1% of enrollment at 4-year institutions and 11.7% of enrollment at 2-year institutions. They represented 11% of all undergraduates; 7.5% of all graduate students; and 7% of students at professional schools.
- Hispanics represented 6% of enrollment at 4-year institutions and 12.3% of enrollment at 2-year institutions. They represented 9% of all undergraduates; 4.5% of all graduate students; and 5% of students at professional schools.
- Asian Americans represented 5.8 % of enrollment at 4-year institutions and 6.1% of enrollment at 2-year institutions. They represented 6% of all undergraduates; 5% of all graduate students; and 11% of students at professional schools.
- Native Americans represented 0.8% of enrollment at 4-year institutions and 1.3% of enrollment at 2-year institutions. They represented 1% of all undergraduates; 0.5% of all graduate students; and 0.7% of students at professional schools.
- Whites represented 73% of enrollment at 4-lyear institutions and 67.3% at 2-year institutions. They represented 71% of all undergraduates; 72% of all graduate students; and 74% of students at professional schools.

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STUDENTS OF COLOR CONTINUE TO MAKE MODEST GAINS IN HIGHER EDUCATION ENROLLMENT AND DEGREE ATTAINMENT, ACE STUDY SHOWS

Washington, DC (February 9, 2000) – Students of color continue to make progress in higher education enrollment and degree attainment, states a report released by the American Council on Education (ACE). The report, *The Seventeenth Annual Status Report on Minorities in Higher Education*, shows a slight increase in the rate of growth in the enrollment of students of color. Between 1996 and 1997 (the last year for which data is available), the enrollment rate for students of color rose by 3.7 percent, slightly higher than the 3.2 percent increase recorded a year earlier and the 2.9 percent increase experienced between 1994-95.

Students of color also have made progress in the percentage of academic degrees they have earned. Between 1996-97, these students experienced an 8.6 percent increase in the percentage of associate degrees earned; a 4.8 percent in bachelor's degrees; a 6.4 percent increase at the master's degree level; and a 5 percent increase at the first-professional degree level.

In addition, modest progress has been experienced in the graduation rates of most students of color. According to statistics from Division I institutions, the graduation rate for Asian Americans rose by one percentage point to 65 percent and for African Americans by two points to 40 percent between 1996-97. Hispanics posted a 45 percent graduation rate—nearly the same level recorded during the past five years, while the rate for American Indians dipped one percentage point to 36 percent.

Status Report - 2

"Students of color are continuing to make gains in postsecondary education and that is good news," said ACE President Stanley O. Ikenberry. "This report shows that institutional efforts to increase the enrollment and academic success of students of color have been successful."

The *Status Report* provides data on high school completion, college participation, and educational attainment rates of whites, African Americans, and Hispanics. Similar data on Asian Americans and American Indians are not available. However, the report presents statistical information on enrollment and degree attainment for all four major ethnic minority groups. The report is based on data from the U.S. Department of Education, the U.S. Bureau of the Census, the U.S. Equal Employment Opportunity Commission, and other sources.

The report was written by Deborah J. Wilds, deputy director of ACE's Office of Minorities in Higher Education. The special focus section of this year's *Status Report* discusses research that reveals the benefits of racial and ethnic diversity in higher education. This section was written by Jeffrey F. Milem, assistant professor of Education at the University of Maryland College Park and Kenji Hakuta, professor, School of Education at Stanford University (CA). The publication of the report was made possible by a grant from The GE Fund.

Among the findings of the report:

High School Completion

- Although the high school completion rate for African Americans and Hispanics has increased during the past 20 years, significant gaps continue to exist in the rate at which these students complete high school compared with their white counterparts. The 1997 high school completion rate for African Americans was 74.7 percent, up from 67.5 percent in 1977; for Hispanics, 62 percent up from 54.7 percent 20 years earlier; and for whites, 82.7 percent, nearly the same as the 1977 level of 82.3 percent.

College Participation

- College participation rates are up for all racial and ethnic groups, with whites experiencing the largest gain. Since 1977, college participation rate for whites ages 18 to 24 has increased by more than 13 percentage points, from 32.2 percent to 45.3 percent.
- The college-going rate for African Americans declined during the 1980s, but that drop has been offset by a more than 10 percentage point increase during the past 10 years (largely fueled by gains made by African-American women). The college participation rate for African-American high school graduates was 31.5 percent in 1977 compared with nearly 40 percent in 1997.

Status Report - 3

- The college participation rate for Hispanic high school graduates rose by only 1 percentage point to 36 percent between 1996-97. However, since 1990 the college-going rate for Hispanics has increased by more than 9 percentage points. The 1990 rate was 29 percent, nearly the same as the 1980 rate of 29.8 percent, but less than the 1977 rate of 31.5 percent.

Educational Attainment

- The proportion of all adults ages 25 to 29 who have completed four or more years of high school has risen only slightly during the past 20 years (87.4 percent in 1997 compared with 85.4 percent in 1977), as has the proportion of adults who have completed four or more years of college (27.8 percent in 1997 compared with 24 percent in 1977).
- The percentages of African Americans and Hispanics who completed four years of high school held steady in 1997. The 1997 high school completion rate was 86.2 percent for African Americans—nearly the same as it was the previous two years—and 61.8 percent for Hispanics—nearly the same as a year earlier. The completion rate for whites remained at just slightly over 87 percent in 1997, as it had in the previous two years.
- African Americans and Hispanics continued to significantly trail whites in the percentage of adults ages 25 to 29 with a bachelor's degree or higher. Nearly 29 percent of whites in this age group had at least a bachelor's degree in 1997 (up from 24 percent in 1990 and 1980), compared with 14.4 percent of African Americans (up from 13.4 percent and 11.6 percent), and only 11 percent of Hispanics (up from 8.1 percent and 7.7 percent).

College Enrollment

- Students of color experienced enrollment gains at all postsecondary levels in 1997. The largest gain—8.9 percent—occurred in professional schools, followed by a 5.6 percent gain in graduate schools, and 3.5 percent at the undergraduate level.
- African Americans continued to experience the smallest postsecondary enrollment gain among the nation's four major ethnic minority groups in 1997. They posted a one-year gain of 3 percent between 1996-97, while Hispanics—for the second consecutive year—posted the largest one-year gain, 4.5 percent. Asian Americans posted a one-year gain of 3.7 percent, while American Indians experienced a 3.6 percent increase in enrollment.
- African Americans posted a five-year enrollment gain of 9.8 percent (between 1993 and 1997) compared with a 23.2 percent increase for Hispanics during this time period; an 18.6 percent increase for Asian Americans; and a 17 percent increase for American Indians.
- Between 1996-97, Asian Americans recorded a 9 percent enrollment gain at professional schools, more than double the 4.4 percent and 3.6 percent increases they attained at the graduate and undergraduate levels, respectively.
- African Americans experienced an impressive one-year enrollment gain of 10 percent between 1996-97 at the professional school level, reversing a previous decline in this category. The percentage of Hispanics enrolled in professional schools rose by 6 percent during this one-year period and by 8.1 percent in graduate schools.

Status Report - 4

- Although American Indians continued to make up only 1 percent of all college students, they have experienced a 54 percent increase in college enrollment between 1988 and 1997. Between 1996-97, enrollment by these students rose by 3.4 percent at the undergraduate level and by 5.4 percent at the graduate level.

Degrees Conferred

- The proportion of bachelor's degrees awarded to students of color increased from 12.1 percent in 1987 to 19.8 percent in 1997, while the percentage of first-professional degrees awarded to these students rose by 11.2 percent to 21 percent during the 10-year period. Despite these gains, however, students of color remained underrepresented at every degree level.
- African Americans experienced small to moderate increases in all degree categories between 1996-97, with a 6.9 percent increase at the associate degree level, 3.2 percent at the bachelor's level, 10.2 percent at the master's degree level, and 4.7 percent at the first-professional level. However, these students earned only 8.1 percent of all bachelor's degrees awarded in 1997, but represented more than 11.2 percent of all undergraduate students.
- Although Hispanics recorded gains at all degree levels between 1996-97, they remained underrepresented compared with their college enrollment rates. These students represented 9 percent of undergraduate students, but earned only 7.6 percent of associate degrees and 5.3 percent of bachelor's degrees. Hispanics made up 4.6 percent of graduate students and 4.7 percent of professional students, but earned only 3.7 percent of master's degrees and 4.6 percent of first-professional degrees.
- Asian Americans also experienced increases in all degree categories between 1996-97—a 7.5 percent gain at the associate degree level, 5.6 percent at the bachelor's degree level, 1.7 percent at the master's degree level, and 6.3 percent at the first-professional degree level. These students are only slightly underrepresented in degree awards as compared with their enrollment except at the graduate degree level.
- Although American Indians earned only a fraction of the first-professional degrees awarded nationwide in 1997, they experienced the largest increase (10.4 percent) over the previous year of all racial and ethnic groups at this level. In 1997, American Indians earned 6.7 percent more associate degrees than in 1996, 6.3 percent more bachelor's degrees, and 8.2 percent more master's degrees.
- After an unexpected one-year decrease in the number of doctorates earned by Asian Americans in 1996, the number of such degrees awarded to these students increased by an impressive 21.8 percent in 1997. In comparison, Hispanics experienced an 8.2 percent increase in the number of doctorate degrees earned, African Americans recorded only a 1.5 percent increase, and American Indians experienced a significant 20 percent drop in doctorate degrees earned during the one-year period.

ACE is a comprehensive association of the nation's colleges and universities dedicated to analysis of higher education issues and advocacy on behalf of quality higher education programs.

Status Report - 5

Counted among ACE's members are more than 1,800 accredited, degree-granting colleges and universities and higher education-related associations, organizations, and corporations.

The *Seventeenth Annual Status Report on Minorities in Higher Education* is available for \$24.95 plus \$3.50 shipping and handling, prepaid from the Publications Department, American Council on Education, P.O. Box 191, Washington, DC 20055-0191. For additional ordering information or to pay by credit card, call (301) 604-9073.

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DIVERSITY IN HIGHER EDUCATION BENEFITS INDIVIDUALS,
CAMPUSES, THE ECONOMY, AND SOCIETY,
NEW REPORT SHOWS

Washington, DC (February 9, 2000) – Recent legal challenges to affirmative action and increased public scrutiny regarding the use of race in college admissions now make it imperative that colleges and universities publicly relate how diversity benefits their campuses and helps fulfill their educational missions, states the special focus section of the American Council on Education's (ACE) *Seventeenth Annual Status Report on Minorities in Higher Education*.

The special focus section, "The Benefits of Racial and Ethnic Diversity in Higher Education," was written by Jeffrey F. Milem, assistant professor of Education at the University of Maryland College Park and Kenji Hakuta, professor at the School of Education at Stanford University (CA). It examines existing data that shows how diversity benefits students, campuses, and society. The section also calls on institutions to conduct and publicize research on their campuses that show how diversity benefits higher education.

According to Milem and Hakuta, many college and university representatives firmly believe that racial and ethnic diversity expands and enriches teaching and learning on campus, but the reasons for these beliefs have not been effectively articulated to the general public and policy makers. As a result, "more and more constraints are being placed on campus leaders' ability to ensure that diversity remains a part of their institutions, and these constraints could have a detrimental impact on the social and economic well-being of the nation in the not too distance future," Milem maintains.

"Affirmative action programs...were designed to undo the damage that has been done by discrimination in our society," the report states. However, "today, opponents of affirmative action

Special Focus - 2

criticize it for being inequitable and discriminatory, thus, reinforcing a number of myths about racial dynamics in higher education.” Misconceptions regarding affirmative action include a belief that past inequalities in access and opportunities for students of color have sufficiently been addressed; that tests scores alone define merit; and that diversity programs only benefit those students of color who participate in them. The report discusses existing research that dispels these myths.

In addition, the special focus section identifies three types of diversity and discusses how these elements impact student outcomes—*structural diversity*, which relates to the numerical representation of students from different racial and ethnic groups in the student body; *diversity-related initiatives*, which includes cultural awareness workshops, ethnic studies courses, and other campus activities; and *diverse interactions*, which relate to exchanges students have with diverse people and ideas.

The special focus section takes an extensive look at research that shows how diversity benefits individuals, higher education institutions, the economy and private sector, and society.

Benefits to Individuals: Research on diversity reveals that students who participate in racial and cultural awareness workshops or interact with diverse peers show measurable gains in their critical thinking skills, have a greater openness to diversity, have lower levels of ethnocentrism, and make appropriate distinctions between poverty and ethnicity as developmental risk factors. Other research has shown that socializing across racial lines and discussing racial/ethnic issues while in college have a positive effect on learning outcomes, social self-concept, and increases a student overall satisfaction with college, the report notes.

For example, a recent study of Harvard University and the University of Michigan law school students revealed that 90 percent of those surveyed reported that their exposure to racial and ethnic diversity at law school had positively impacted their educational experience. Additionally, two-thirds of those surveyed indicated that diversity improved in-class discussions, more than six in ten indicated that diversity improved their ability to work and get along with others, and eight in ten noted that discussions with students from different backgrounds significantly affected their views of the U.S. criminal justice system and their views regarding civil rights and conditions within various social and economic institutions.

Special Focus - 3

Despite claims by some opponents of affirmative action and diversity efforts that only students of color benefit from such policies, data show that white students have the most to gain by living and learning within a diverse environment—since these students are much more likely than others to have had little or no exposure to individuals from diverse backgrounds upon entering college, the report states.

Benefits to Campuses: Emerging research indicates that increased diversity on campus can have a “transformative effect on colleges and universities,” the report states. The transformational nature of diversity is evidenced by the ways in which scholarship in ethnic and women’s studies has changed the nature of what is studied and how it is studied on campuses.

In addition, research shows that a diverse faculty provide students with greater opportunity to be exposed and involved in readings and research that address the unique experiences of women and racial/ethnic groups. Study findings also suggest that faculty of color and women engage in service-related activities more often than male colleagues. Thus, the report states, students who attend institutions with higher proportions of diverse faculty are more likely to be exposed to faculty who are student-centered in their orientation to teaching and learning. The report concludes that a diverse faculty can help create a more democratic and equitable campus environment as well as enhance both teaching and learning.

Benefits to the Economy and Private Sector: The move toward globalism has changed the skills corporate leaders say they need from their workers. A survey of officials from multinational corporations and higher education institutions revealed that business leaders believe that too few college graduates enter the workplace without a knowledge of other cultures or the ability to effectively work and interact with individuals from diverse backgrounds. Therefore, “colleges must find ways for students to communicate regularly across communities of difference so they can develop the crosscultural competencies that are essential to organizations and global competitiveness,” the report states.

Other research shows that diversity in the work place improves team productivity and increases creativity and innovation because individuals from various backgrounds provide diverse ideas and strategies. Similarly, research findings suggest that work teams that include diverse members are more likely than homogeneous groups to generate higher levels of critical analysis in problem solving. More obvious, research shows that the use of affirmative action in employment has

Special Focus - 4

led to decreased job discrimination, decreased wage disparities, and decreased occupational segregation for women and people of color. However, the special focus section points out that little data exist to suggest that those who benefit from affirmative action suffer from self-stigmatization or that affirmative action results in reverse discrimination.

Societal Benefits: Higher education has long since acknowledged its role in helping to prepare students to meet the democratic, civic, and social needs of society and to become productive citizens.

Research findings show that persons exposed to diverse individuals are more accepting of those from other cultures and are more likely to participate in community service programs and in other areas of civic responsibility. Additionally, the report notes that diverse environments benefit society by diminishing racial stereotypes, lessening whites' fears of hostile reaction in interracial settings, and promoting racially and ethnically integrated work environments.

Finally, the report notes that society derives benefits from college-educated individuals of color—many of whom serve as leaders in society, representing the needs, interests, and perspectives of diverse communities. Several studies have shown that students of color are more likely than their white peers "to give back" to society once they graduate from college through involvement in community and civic organizations. An extensive research study on the medical profession highlights the benefits society receives when institutions graduate a diverse pool of doctors. The study found that physicians of color are significantly more likely than their white counterparts to address the medical needs of underserved people. Nearly one-third more physicians of color than white doctors choose primary care specialties and these doctors were twice as likely to practice in areas designated as health-manpower shortage areas, and more likely than whites to have Medicaid recipients as patients.

The report also notes that a majority of high school students report none or very little diversity in their elementary and secondary school experiences or in their communities. If individuals and the nation are to reap the benefits of diversity, the report says, opportunities and introduction to diverse ideas and people must be made available at the postsecondary level.

"The future wealth, health, and climate of our nation depends on increased, not diminished, opportunities for diverse interactions for our students," Milem stated.

Special Focus - 5

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LATINOS IN GRADUATE EDUCATION

A graduate education program generally requires 2 years of full-time college-level study beyond the bachelor's degree resulting in a master's, first professional or doctoral degree.

- While Hispanics have increased their enrollment in graduate education, they still are less represented than other groups. In 1996, Hispanics represented 5% of graduate students, while whites represented 86%, and blacks represented 9% of graduate students. In 1976, Hispanics represented only 2% of graduate students. [NCES, Digest of Education Statistics 1999, Table 207]
- In 1996, Latinos earned about 4% of all master's degrees. The four disciplines with the most master's degrees conferred to Hispanics were education, business, public administration and the health professions. [NCES, Digest of Education Statistics, 1998, Table 268]
- Latinos earned 2% of all doctoral degrees in 1996. The four disciplines with the most doctoral degrees conferred to Hispanics were education, psychology, biological/life sciences and social sciences/history. [NCES, Digest of Education Statistics, 1998, Table 268]
- In the past 20 years, Hispanic women have surpassed Hispanic men in graduate enrollment. In 1976, 55% of Hispanics enrolled were men. In 1996, 60% of Latinos enrolled in graduate education were women. [NCES, Digest of Education Statistics, 1998, Table 207]
- While their enrollment numbers are small, Hispanics in graduate education are more likely to enroll full-time than either whites or blacks. Of Hispanics in graduate education, 42% are full-time, compared with 37% of whites and 39% of blacks. [NCES, Digest of Education Statistics, 1998, Table 208]
- Hispanics studying for master's degrees receive less grant aid and work more than either white or black students. In 1995-96, just over 20% of Hispanics received grants, compared to over 30% of both whites and blacks. In tandem, 20% of Hispanics received assistantships, compared to 10% for blacks and 9% for whites. For "full-time" master's students, Hispanics receive even less aid. Only 65% of Hispanic students receive any aid, compared to 76% of whites and 90% of blacks. [NCES, "Student Financing of Graduate and First-Professional Education, 1995-96". May, 1998, Table 2.3a]
- Hispanic full-time master's degree and first professional students receive less aid than any other ethnic group. The average aid for Hispanic master's degree students is only \$8,729, compared to \$13,875 for blacks and \$12,566 for whites. For first professional students, the average aid for Hispanics is only \$16,766, compared to \$21,440 for blacks, \$18,182 for whites, and \$18,416 for Asian/Pacific Islanders. [NCES, "Student Financing of Graduate and First-Professional Education, 1995-96". May, 1998, Table 2.4]
- Of first professional students, a higher percentage of Hispanics borrow or work than either blacks or whites. In 1995-96, 73% of Hispanics had loans and 6% participated in work study, compared to whites with 70% and 5% and blacks with 71% and 4%. [NCES, "Student Financing of Graduate and First-Professional Education, 1995-96". May, 1998, Table 2.3a]
- Hispanics earned only 4.3% of their doctoral degrees at Hispanic-serving institutions (HSIs) in 1994; this is a slight increase from the 3.6% recorded in 1993. (American Council on Education, *Minorities in Higher Education Status Report*, 1996-97).

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Subject: Increasing Hispanic Participation in Higher Education

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Increasing Hispanic Participation in Higher Education: A Desirable Public Investment

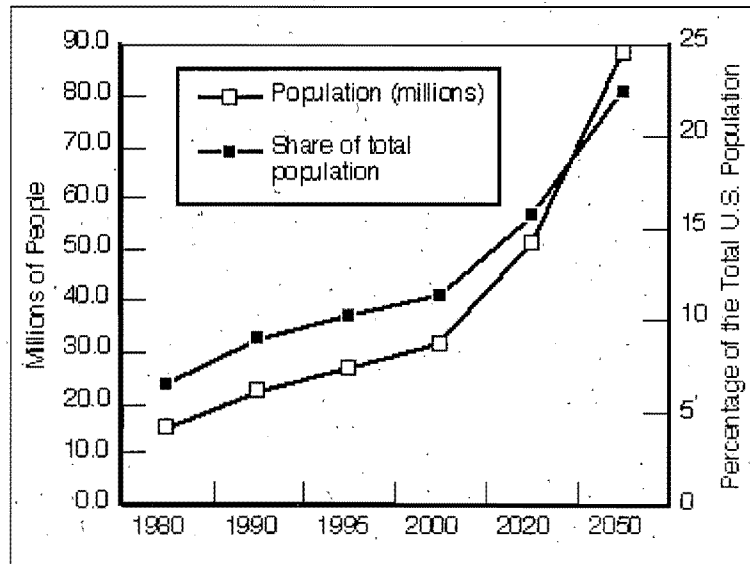
Stephen Sorensen, Dominic J. Brewer, Stephen J. Carroll, and Eugene Bryton

Hispanic youth represents the fastest growing segment of the U.S. population, and Hispanics now account for more than a quarter of all new entrants into the labor force. Education has historically been the path for upward occupational, economic, and social mobility in this country, but Hispanics complete college at much lower rates than other ethnic groups do and are much more likely to drop out of high school. What will it mean for the nation to have a growing, significant proportion of the population competing for low-skill jobs and locked in the lowest socioeconomic brackets?

The answers to this question will require a great deal more research than has yet been done on Hispanic education and its socioeconomic effects. There are surely benefits to society of closing the educational gap between Hispanics and other ethnic groups in terms of equity and social stability, though these benefits might be difficult to quantify. However, it is possible to estimate roughly what increasing Hispanic participation in higher education would mean for individuals' income and, thus, for the U.S. tax base and funding of social programs. In this paper, we present our estimates and conclude that, given the effects, increasing Hispanic education levels seems very much in the best economic interests of the country.

A Growing Population with Low Educational Attainment

The Hispanic population in the United States has grown remarkably. At more than 9 percent of the population in 1990 and with projected growth of about 3.5 percent every five years, Hispanics could account for 20 percent of the U.S. population by 2020 (see Figure 1). In addition, the age structure among Hispanics is pyramid-like, with nearly 40 percent below the age of 19, compared with 29 percent for the total population. Given this structure, the Hispanic share of the labor force is likely to increase even more.



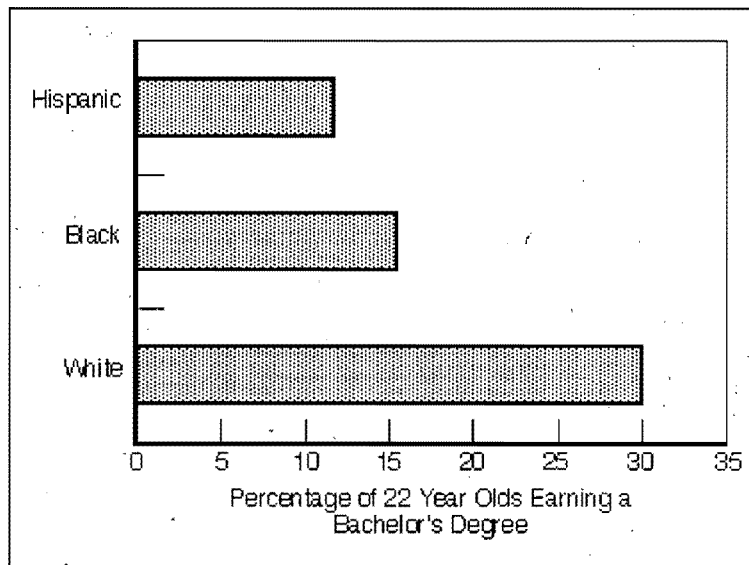
SOURCE: U.S. Bureau of the Census.

Figure 1--Hispanic Population Growth and Projections

The educational achievement of Hispanics has not kept pace with their increasing share of the population and the labor force. According to the 1990 U.S. Census, high school completion for Hispanics aged 22-24 was only 64 percent, compared with 91 and 84 percent for whites and blacks, respectively. Although this figure for all Hispanics partly reflects the entry into the United States of young adult immigrants with low levels of education, the high school completion rate of native-born Hispanics (78 percent) still remains significantly lower than for other groups. Even more alarming, the growth rate for Hispanic high school completion lags that for blacks and has been only slightly higher than that for whites.

Low high school graduation rates have obvious repercussions for Hispanic higher education. Since there is a much smaller pool of college-eligible students, one would expect Hispanic college participation to be lower than other groups' participation. In fact, Hispanics are among the most severely underrepresented groups in higher education.

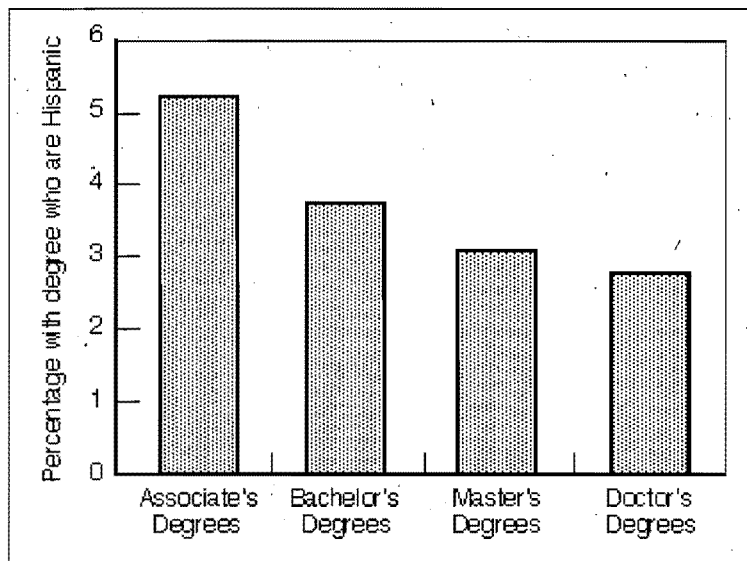
Using data from the National Center for Education Statistics' High School and Beyond database, Pelavin and Kane report that over 58 percent of white students attend some college within four years of high school graduation, compared with 45 percent of Hispanics (and 47 percent of blacks).^[1] Moreover, Hispanic degree attainment is much lower than that of whites, with only 12 percent of Hispanic 22 year olds earning bachelor's degrees (see Figure 2). This rate is four-fifths of the rate for blacks and less than half of the rate for whites.



SOURCE: National Center for Education Statistics.

Figure 2--Hispanics Are Less Likely to Complete Bachelor's Degrees

The effect of low academic attainment cascades through all levels of higher education. Figure 3 shows that the Hispanic share of the educated population dwindles as education levels increase. The disproportionately small percentage of Hispanics with bachelor's degrees necessarily means underrepresentation in professional and graduate schools, as well.



SOURCE: National Center for Education Statistics.

Figure 3--Hispanic Share Falls as Degree Level Rises

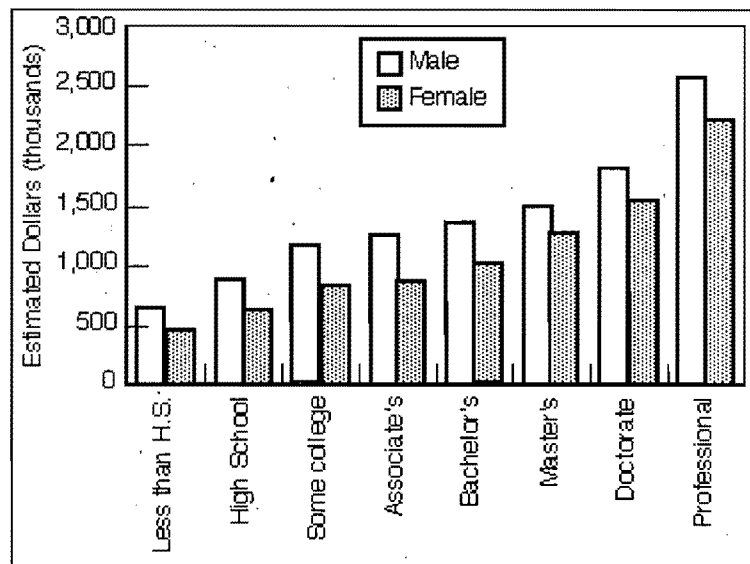
What Do Hispanics Lose from Low Participation in Higher Education?

A bumper sticker glibly asserts that "if you think education is expensive, you should try ignorance." This assertion is strongly supported by income statistics in the United States. Those with a bachelor's degree earn significantly

more than those with only a high school diploma. In fact, the U.S. Census Bureau estimates the premium for a bachelor's degree (over a high school degree) at about \$600,000, or 75 percent more in lifetime earnings.

Using the Census methodology, we estimated the lifetime premiums for higher education for the current cohort of Hispanic males and females. (We calculated lifetime income for an individual under a 40-year earning horizon. We then used the current mean earnings for four age groups--25-34, 35-44, 45-54, and 55-64--as estimates of the individual's income.) Reported earnings do not reflect discounting or inflation. For further explanation, see U.S. Bureau of the Census Statistical Brief, S/94-25, Washington, D.C., 1994.

As Figure 4 shows, the premium for a bachelor's degree over a high school diploma is about \$500,000 for Hispanic men and \$400,000 for Hispanic women. More striking, the premium for a Hispanic with a professional degree is about \$1.7 million, over 200 percent more in lifetime earnings.

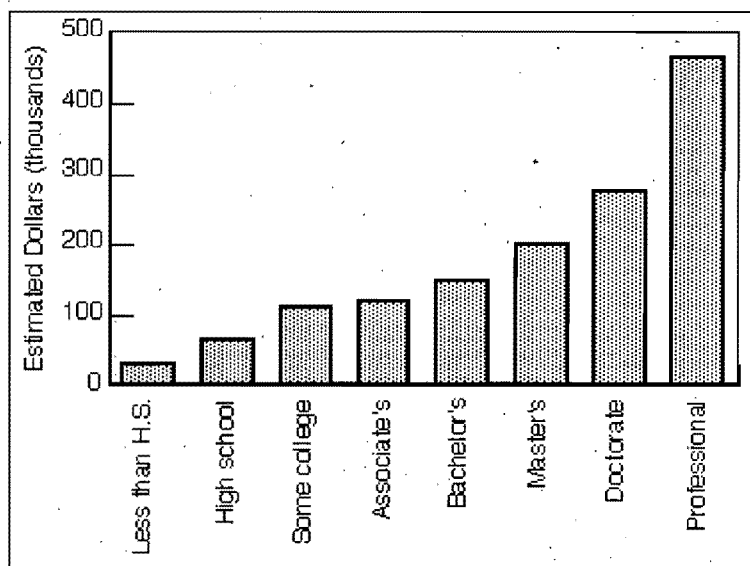


SOURCE: U.S. Bureau of the Census.

Figure 4--Hispanic Lifetime Earnings Rise with Education

What Does Society Lose?

Education pays off for individuals, but there are also payoffs to society. Over a lifetime, people who have college degrees (and concomitant higher earnings) pay significantly more in taxes than people who have only high school diplomas. Figure 5 shows estimated lifetime income tax payments based on the current tax schedule for Hispanic individuals with various educational levels. Hispanics with a bachelor's degree will pay more than twice as much in taxes as those with only a high school diploma, and Hispanics with a professional degree will pay an estimated three times as much as those with a bachelor's degree. These estimates were generated under the conservative assumptions that the wage gap between Hispanics and non-Hispanics would not be closed.



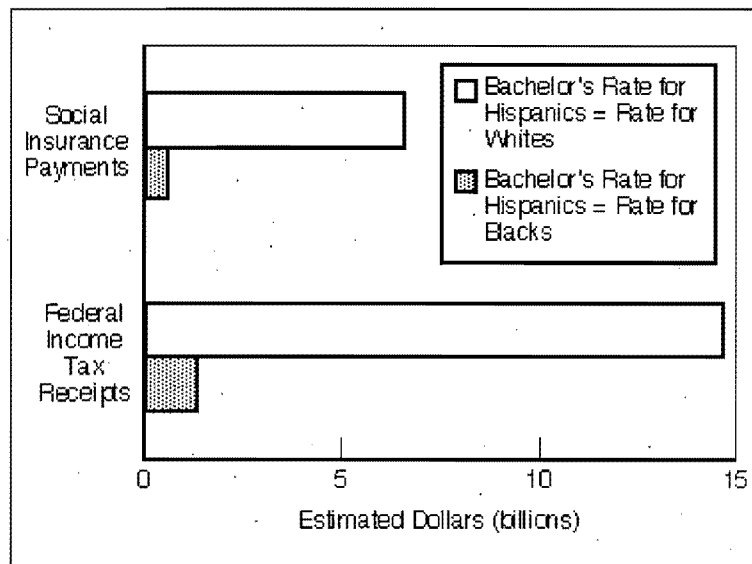
SOURCE: Authors' Calculations.

Figure 5--Estimated Lifetime Tax Payments for a Hispanic by Education Level

Increased Tax Revenues: Scenario One

With the caveats noted above in mind, we considered how raising Hispanic educational levels would affect tax revenues. The completion rate for bachelor's degrees is 12 percent for today's cohort of 18-year-old Hispanics. We estimated the effect of increasing Hispanic participation in higher education to either the current rate for blacks (15 percent) or the rate for whites (30 percent). Further, we assumed that the high school graduation rate for this cohort of Hispanics remained the same but that more went on to complete a bachelor's degree.

Figure 6 indicates the magnitude of the effect from raising Hispanic college participation levels. Boosting the college completion rate of that cohort to 15 percent would produce an estimated \$1 billion in federal tax payments, while raising the rate to 30 percent would generate about \$15 billion. In addition, the increased income levels would result in estimated increases in contributions to social insurance programs--Social Security and Medicare--of about \$600 million and \$6.6 billion at the rates for blacks and whites, respectively.



SOURCE: Authors' calculations.

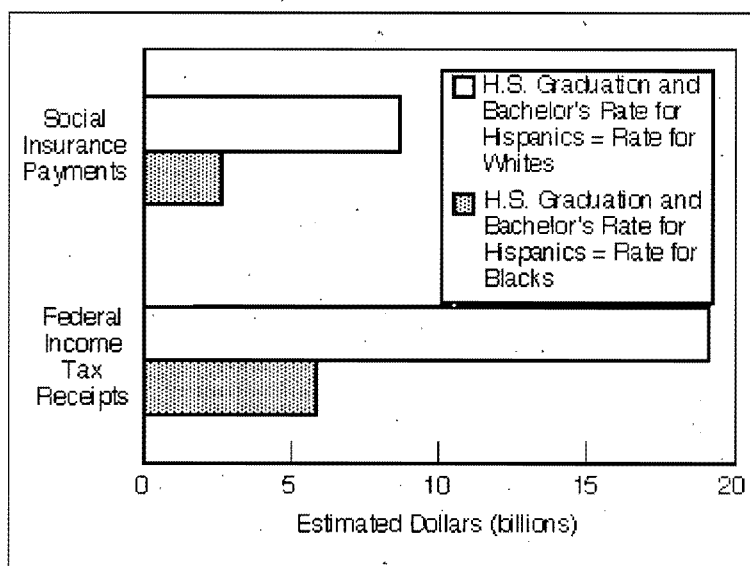
Figure 6--How Federal Revenues Might Increase with Hispanic College Education: Scenario 1

These numbers may seem small compared with the federal debt. However, these increases reflect the gross effects of increasing the college participation rate of only the current 18-year-old cohort of the Hispanic population. If we considered an entire generation, e.g., the cohort from birth to age 18, the increase in federal revenues from increasing Hispanics' college participation rates to those of whites would be on the order of \$10 billion in additional tax revenues *each* year.

Increased Tax Revenues: Scenario Two

Under Scenario One, we held high school completion rates for the cohort constant at the current rate. However, raising the level of Hispanic participation at the bachelor's level is likely to have positive effects at other educational levels: An increased rate of Hispanics completing college would increase motivation for Hispanic high school students to take academic subjects and complete high school. Raising the high school graduation rate would increase the pool of Hispanics eligible for college.

We tested the possible effects of increasing that pool by also raising the Hispanic rate of high school graduation to the levels of either blacks or whites (see Figure 7). With the rate for blacks (84 percent for high school graduation, 15 percent for college participation), the additional income tax revenue from Hispanics would be about \$6 billion. With the rate for whites (91 percent for high school graduation, 30 percent for college participation), the additional tax revenue would be about \$19 billion. These increases were for the 18-year-old cohort alone. Compounding such gains over multiple generations would generate increases exceeding \$13 billion each year.



SOURCE: Authors' calculations.

Figure 7--How Federal Revenues Might Rise with Increased Hispanic College and High School Graduation Rates: Scenario 2

Conclusions

Although these estimates suggest that increasing Hispanic participation in higher education would be a sound public investment, they should not be taken as predictive. A definitive conclusion about the magnitude of this increase for Hispanics is not possible given the present lack of research on how higher education affects their earnings specifically. Nevertheless, our calculations indicate that the effect is considerable enough that the continued undereducation of Hispanics will exact a high economic toll for individuals and for society. Given the experience of other undereducated groups, there are certainly concomitant human, social, and political costs. These estimates thus may serve as a lower bound of the benefits of increasing the bachelor degree attainment of Hispanics.

[1]Sol H. Pelavin and Michael B. Kane, *Minority Participation in Higher Education*, Washington, D.C.: Pelavin Associates, 1990.

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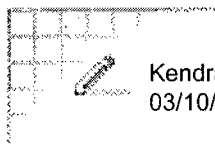
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Subject: The Condition of Education 1998 / Issues in Focus: The Educational Progress of Hispanic Students

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Issues in Focus

The Educational Progress of Hispanic Students

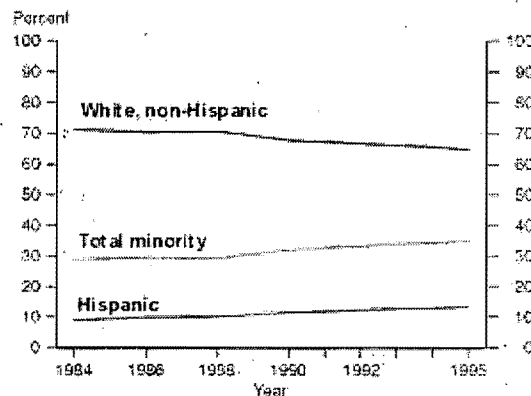
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In order to prepare American students for the types of jobs that will be available in the future, schools and parents need to work together to ensure that all students acquire the academic skills necessary to compete.¹ As the Hispanic population grows, the successful transition of Hispanic youth from school to work and active engagement in American society becomes more important for the Nation.

Racial and ethnic diversity in the United States has grown dramatically in recent years, and the growth of the Hispanic population has been a major contributor to this diversity. The Hispanic population has increased more rapidly than any other racial or ethnic group, growing from 9 percent of the child population in the United States in 1980 to 14 percent in 1996. Predictions indicate that by the year 2020, more than 20 percent of the children in the United States will be Hispanic.²

The increase in the Hispanic population in the United States, and the resulting rise in the enrollment of Hispanic students, has contributed to an 11 percentage point increase in minority enrollment in public elementary and secondary schools between 1976 and 1995. In 1976, Hispanic students made up 6 percent of the student population at public elementary and secondary schools. By 1995, the proportion of Hispanic students rose 8 percentage points, reaching 14 percent, the largest increase of any minority group (table 43-1).

Figure 1. Percentage distribution of enrollment in public elementary and secondary school: 1984-95



NOTE: Data for 1992-95 are from the Common Core of Data (CCD) survey.

SOURCE: U.S. Department of Education, Office for Civil Rights, Elementary and Secondary School Civil Rights Survey, 1984, 1986, 1988, and 1990; National Center for Education Statistics, Common Core of Data Survey, 1992; and Digest of Education Statistics, 1995 and 1996, table 44, and 1997, table 45.

In general, the educational achievement and attainment of Hispanics has been lower than that of whites. Since Hispanics account for a growing percentage of the general U.S. and public school population, it has become increasingly important to understand the educational experiences and transitions to the labor force of Hispanics. Understanding the differences in educational experiences between Hispanics and whites, and how these differences have changed over time, provides an overview of the educational progress of Hispanics in the United States.

It should be noted that although limited data availability often leads researchers to treat Hispanics as if they were a homogeneous group, the U.S. Hispanic population is diverse. The three largest Hispanic subgroups are Mexican Americans, Puerto Ricans, and Cubans. Recent immigrants from Central America and South America constitute other, smaller groups. These subgroups are concentrated in different parts of the United States, their economic circumstances vary, and the timing of the immigration differs. In this analysis, overall trends for the U.S. Hispanic population are provided, as data are usually not available for these subpopulations.

Family characteristics and parent's involvement in education

A child's family characteristics and home environment have implications for many aspects of a child's life, including academic experiences. Children who live in poverty, in single-parent homes, or whose parents have low levels of educational attainment are at greater risk for dropping out of high school, not achieving at higher levels, and not attending postsecondary institutions. As differences between whites and Hispanics in these family background characteristics change, the educational progress of Hispanics compared to whites can be expected to change.

° *Both the likelihood of living in poverty and with a single parent increased among Hispanic children.*

The number of Hispanic youth under age 18 living below 100 percent of the poverty line has increased from 33 percent in 1985 to 40 percent in 1996. In contrast, the percentage of white children living in poverty has decreased slightly from 12 percent in 1990 to 10 percent in 1996.³ The percentage of Hispanic 15- to 18-year-olds living with one parent increased from 23 percent in 1972 to 33 percent in 1997, while the percentage of whites in the same age range living with one parent increased from 12 to 22 percent (**Indicator 44**).

° *The levels of parental education among Hispanic children have increased.*

Higher levels of parent education are generally associated with positive educational outcomes and experiences, such as participation in preprimary education and not dropping out of high school. The parental education levels of Hispanic students ages 15 to 18 nearly doubled in the past 25 years. For example, in 1997, 45 percent of mothers and 46 percent of fathers of Hispanic 15- to 18-year olds had at least a high school diploma or GED, up from 24 percent of mothers and fathers in 1972. The increase for white students has been from 68 to 64 percent of mothers and fathers having a high school diploma or GED in 1972 to 92 and 90 percent, respectively, having these credentials in 1997 (**Indicator 44**).

° *Many parents of Hispanic children are actively involved in their children's educational activities.*

Parents' involvement in their children's education is another way through which the family influences educational experiences. Parent participation in their children's education is evidenced by their involvement in school-related issues and activities. In 1996, parents of Hispanic children were equally or more involved in education-related activities that directly influenced their children than were parents of white children. For example, parents of Hispanics were as likely as parents of whites to attend general school meetings, and more likely to help their children with homework during the week than parents of white children. However, parents of Hispanic children were less likely than parents of white children to participate in school activities that did not directly influence their child's education, such as attending a school event, acting as a volunteer, or serving on a committee (**Indicator 49**).

Issues of limited English proficiency

The ability to speak and read English, a problem which is not unique to the Hispanic population, is a concern for many. Spanish-speakers may have difficulty with English because they have had limited opportunities to use English. For example, Hispanic students may speak English only at school, while speaking Spanish at home and outside of school. Difficulties in speaking and reading English places students at risk for academic failure. In fact, Hispanic students who speak Spanish are more likely to drop out of high school than peers who speak only English.

Between 1979 and 1989, the percentage of Spanish speakers age 5 and older increased 65 percent in the United States. In 1989, more than 14 million people in the United States spoke Spanish. Of those who spoke languages other than English, 58 percent spoke Spanish. Of these Spanish speakers, almost half reported having difficulty speaking English.⁴

The limited English proficiency of many Hispanics is likely to serve as an important impediment to success in the educational careers and employment outcomes of Hispanic youths. Knowing the pervasiveness of this problem is important for understanding the differences that exist between Hispanics and other racial and ethnic groups in terms of educational participation, progress, and achievement.

Preprimary education

Research has shown that a quality preschool experience is an important indicator of student success. Preprimary education prepares children for school by teaching learning and socialization skills.⁵

° *The preprimary educational experiences of Hispanic children differ from those of whites. Hispanic 3- and 4-year-olds are less likely to participate in preprimary education than their white peers, and are less likely to participate in early literacy activities.*

One form of preprimary education is organized preprimary programs, such as Head Start or pre-kindergarten. In 1996, about 22 percent of Hispanic 3-year-olds were enrolled in such preprimary programs compared to 40 percent of whites. Among 4-year-olds, 45 percent of Hispanics and 59 percent of whites were enrolled. Among 5-year-olds of normal kindergarten age, these differences largely disappeared: Hispanic enrollment rates, including kindergarten enrollment, were similar to the enrollment rates of white 5-year-olds (**Indicator 1**).

Preprimary educational opportunities are fostered in the home environment as well as in preprimary programs. In 1996, Hispanic children, ages 3-5, were less likely to have been read to in the past week or to have visited a library in the past month than white children (figure 2 and **Indicator 2**). This lack of early reading experience can create learning deficits for Hispanic youngsters.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), 1996 (Parent and Family Involvement in Education File).

Academic performance of Hispanic students

° Hispanic students score lower than white students in national assessments of reading, writing, mathematics, and science proficiency, but their performance has improved in some areas since 1975.

Developing reading skills at an early stage is important to future educational success. Once behind in reading proficiency, a student risks having difficulty with other aspects of the curriculum, and a continued lag behind other peers in reading skills as the student gets older. In 1996, at age 9, Hispanic students had an average reading scale score of 194 while white students had an average score of 220 (**Indicator 16**).

There is evidence that the majority of reading skills are mastered by age 13, which is generally when reading is taught in school as an explicit subject for the most part.⁷ On average, the reading scores of all 13-year-old students in 1996 were about 50 points higher than their reading scores as 9-year-olds in 1992. In 1996, Hispanic reading scores differed by 46 points between ages 9 and 13, compared to 25 points between ages 13 and 17. The Hispanic-white differences in reading scores were about the same at all three age levels: 26 points at age 9, 27 points at age 13, and 30 points at age 17. At age 17, Hispanic students were reading at levels similar to white 13-year-olds (**Indicator 16**).

These scoring differences between Hispanics and whites mean that the average Hispanic score is below that of the average student by about 25 to 30 points. The extent to which these large differences may be attributable to recent immigration or language difficulties is unknown. Also, students whose English proficiency is judged not to be appropriate for the NAEP tests are excluded from taking them.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.*

While Hispanics score at proficiency levels below those of white students at all ages, there was a slight improvement in the average reading proficiency scores of 9-year-old Hispanics between 1975 and 1996. However, there was no similar improvement for 13- and 17-year old Hispanics in reading proficiency (**Indicator 16**).

The NAEP writing proficiency scores of white and Hispanic 4th-, 8th-, and 11th-graders exhibited similar patterns as reading proficiency scores. In 1996, white 4th-grade students outperformed Hispanic 4th-grade students in writing proficiency by 25 scale points. As Hispanic and white students grew older, the writing scale scores of Hispanics remained lower than those of whites. Hispanic 11th-graders performed at a level similar to white students in 8th-graders, similar to the pattern with the reading proficiency scores. There have been no significant increases or decreases in performance on the NAEP writing proficiency scale for Hispanic or white 4th- or 8th-graders between 1984 and 1996 (**Indicator 17**). Again, students whose English proficiency is judged not appropriate for the NAEP tests are excluded from taking them.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.

Patterns in the NAEP mathematics proficiency scores were similar to the average reading and writing scores in 1996 in most, but not all, respects. White students outperformed Hispanic students at each age level (figure 5). The major difference is that unlike reading and writing, the average mathematics proficiency scores of both white and Hispanic students increased between 1973 and 1996 at all age levels. The scores of Hispanic 13- and 17-year-olds increased at a faster rate than those of white students, causing the performance gaps to narrow over this period.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, Trends in Academic Progress: Achievement of U.S. Students in Science, 1969 to 1996; Mathematics, 1973 to 1996; Reading, 1971 to 1996; Writing, 1984 to 1996, 1997.

As in mathematics, the science proficiency scores of both Hispanic and white students increased between 1977 and 1996 at both ages 9 and 13 (**Indicator 19**). Unlike in mathematics, there was no improvement among 17-year-old whites or Hispanics. The gaps in science performance between Hispanics and whites also did not narrow between 1977 and 1996, and Hispanic-white differences at age 9 had not decreased by age 17.

Progress in school

° *Hispanics are taking more rigorous high school courses, and more Hispanic students are participating in the AP program than in the past.*

In the past Hispanic students have been commonly "tracked" into general high school courses that satisfied only the most basic requirements for earning a high school diploma, but did not prepare students to attend 4-year colleges or rigorous technical schools. This general high school curriculum also did not prepare students for good entry-level jobs in high-technology industries if the student chooses not to pursue a postsecondary education.10

In 1983, *A Nation at Risk* recommended that all high school students seeking a high school diploma take a more rigorous core curriculum called the "New Basics." This curriculum consists of 4 years of study in English, and 3 years each in mathematics, science, and social studies. In 1982, 7 percent of Hispanic high school graduates earned the units to meet this curriculum. By 1994, this percentage was six times higher, with 44 percent of Hispanic high school graduates earning the units for the "New Basics" curriculum. White graduates are still more likely to have met the course area requirements of the "New Basics" than Hispanics (**Indicator 28**, Condition 1996). However, Hispanics are just as likely as whites to have completed the more rigorous requirements recommended for college-bound students, which included foreign languages and computer science.11

Another way to assess the rigor of a student's high school curriculum is to examine participation in the Advanced Placement (AP) program which offers college-level courses to high school students. Satisfactory performance on an AP examination (usually a score of 3 or higher on a 5 point scale) will often allow the examinee to earn college credit. Between 1984 and 1996, the number of Hispanic students who took AP examinations per 1,000 12th-graders increased from 24 to 74. For Hispanics, the rate of 74 students per 1,000 AP examination takers is about half the rate of 133 per 1,000 students for whites. Between 1984 and 1996, whites were more likely to take AP examinations than Hispanics, but the gap between the races has decreased. In 1996, Hispanics taking the AP examination were three times as likely as whites to take a foreign language AP examination (**Indicator 27**).

° Hispanic students are less likely to complete high school than white students. The rates of not completing are highest among immigrants and those with limited English-language proficiency.

The differences in high school completion between Hispanics and whites ages 16–24 are substantial. In 1996, the dropout rate for white young adults was 7 percent compared to 29 percent for Hispanic young adults.¹² Immigration and English language use and proficiency are all associated with this difference between the two groups.

Foreign-born Hispanic students are at a much greater risk of not completing high school than native-born students. The status dropout rate (defined as a proportion of young adults ages 16–24 who are not enrolled in school and do not have a high school credential) is about two times higher for Hispanic migrants than for Hispanic young adults born in the 50 states and DC (46 versus 18 percent). Many Hispanic youths migrating to the U.S. do not enroll in school, but seek employment instead. They may be deterred from enrolling by language, economic, and cultural differences.¹³ Those who never enroll in high school may account for about one-half of the higher dropout rate for Hispanics. In contrast, Hispanics who had ever enrolled in U.S. schools had a status dropout rate of 20 percent.¹⁴

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

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1995, unpublished data.

The likelihood of not completing high school is also related to language use in the home and English-language proficiency. In 1995, for example, the status dropout rate for Hispanics speaking Spanish at home, who were ever enrolled in U.S. schools, and who spoke English "well," was 19 percent compared to 33 percent for their peers who did not speak English "well."¹⁵

Due to immigration and the higher dropout rates for Hispanics born in the United States, the overall percentage of the Hispanic, young adult population, ages 25–29 who have completed high school through receiving a diploma or other certificate of high school equivalency is less than that of whites. These rates are 93 percent for whites and 62 percent for Hispanics in 1997. The high school completion rate for Hispanics shows no consistent trend since the early 1980s, while the high school completion rate for whites has increased (Indicator 22).

College enrollment

° Total Hispanic enrollment in postsecondary education is increasing rapidly, primarily because of the growing proportion of Hispanics in the total population, rather than an increase in the rate at which Hispanic high school completers are entering college.

Enrollment in colleges and universities has become increasingly diverse since the mid-1970s as the total numbers of different minorities enrolling have increased faster than the enrollment of whites. Much of this increased diversity is due to the rapid growth of Hispanic enrollment, which nearly tripled between 1976 and 1995 from .4 to 1.1 million students (fall enrollment).¹⁶ Because of this growth, Hispanic enrollment rose from 4 percent of all students in 1976 in postsecondary education to 8 percent in 1995. As shown in table 2, more Hispanic students have enrolled in community colleges than in 4-year colleges by a substantial amount, and the proportion has increased since 1976.¹⁷

* Preliminary data.

NOTE: Details may not add to 100.0 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities" surveys; and

Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" surveys.

Nearly all of this growth in total Hispanic enrollments reflects rapid growth in the total numbers of Hispanic high school completers in the U.S. population and not increases in the rates at which Hispanic high school completers are continuing on into postsecondary education. The percentages of Hispanic high school completers ages 18–24 attending college has not changed since the early 1980s, while the rate for whites has grown. In 1996, 34 percent of Hispanic high school completers ages 18–24 were enrolled in college, compared to 45 percent of their white peers. In 1980, the enrollment rates were about the same, with 30 percent of Hispanics and 32 percent of whites enrolled (**Indicator 9**).

A large part of the growing gap between the percentages of Hispanics and white high school completers ages 18–24 who are enrolled in college reflects faster growth in the percentages of white high school completers who immediately enroll in college the following fall (**Indicator 7**). In 1996, 51 percent of Hispanic and 67 percent of white youth went to college immediately after completing high school, compared to 52 percent of Hispanics and 50 percent of whites in 1980 (**Indicator 7**).

° Hispanic students may be less prepared or qualified to attend a 4-year college than white students. Additionally, college-qualified Hispanics are less likely to take steps toward college admission and enrollment than whites.

Differences in college preparedness or qualifications may help to explain why Hispanics enroll in college at lower rates than their white peers. In order to have access to a 4-year college, students must complete a series of steps that will increase their chances for admission and enrollment. Students must be academically prepared to attend a 4-year college; this includes successfully following a rigorous high school curriculum and taking college admission tests such as the SAT. Students must also apply to college and enroll if accepted. In 1992, Hispanic high school graduates were less likely to be "college qualified" (as determined by a 4-year college qualification index, see the supplemental note to **Indicator 8**) than white high school graduates. Moreover, given that they were college-qualified, Hispanic high school graduates were less likely to take steps toward college admission or to enroll at a 4-year institution after high school than white high school graduates (**table 8-1** and **Indicator 8**).

Subject studied in college

Once enrolled in college, Hispanics to some extent pursue different courses of study than their white peers. The choice of a college major affects the types of jobs graduates are prepared to take once they complete their education. Now more than ever, college graduates need skills in science and technology to be competitive in the job market. Examining differences in the racial and ethnic distribution of bachelor's degrees conferred by field of study can be used to predict differences in employment and earnings between Hispanics and whites.

° Hispanics are more likely than whites to earn bachelor's degrees in business and in computer and information sciences.

In 1995, Hispanic students were more likely than white students to earn bachelor's degrees in humanities, the behavioral and social sciences, computer and information sciences, engineering, or business management. White students were more likely to major in natural sciences, engineering technologies, education, and health sciences. These patterns of degrees earned are evident in the Hispanic to white concentration ratios in the fields of business management and computer and information sciences (concentration ratios measure the extent to which the major fields of study differ between two population groups). The Hispanic to white concentration ratios increased to greater than 1.0 in these two fields between 1977 and 1995, indicating that Hispanics are increasingly more likely to earn degrees in these two fields than whites. In contrast, the Hispanic to white field concentration ratio decreased considerably in the education field (**Indicator 29**).

Postsecondary attainment

° *The postsecondary educational attainment of Hispanics has increased since the 1970s.*

Completion of postsecondary education has become increasingly important as the demand for education beyond the completion of high school has increased in the labor market.

The percentages of 25- to 29-year-old whites and Hispanic high school completers who have also finished some college or higher¹⁸ have increased between 1980 and 1997, as compared to no increase in the previous decade. In 1997, 68 percent of white high school completers and 54 percent of Hispanic completers had completed some college or higher, while in 1980 the corresponding figures were 54 percent of white and 40 percent of Hispanic completers (**Indicator 22** and figure 7).

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

The percentages of 25- to 29-year-old white and Hispanic high school completers who have finished 4 or more years of college have not increased as rapidly (see figure 8). The proportion of Hispanic high school completers finishing 4 years of college has increased from 13 percent in 1981 to 18 percent in 1997. For whites, the increase rose from 28 percent in 1980 to 35 percent in 1997. Thus, the rate at which Hispanic high school completers attain 4 or more years of postsecondary education relative to white high school completers remains about half the rate of the whites.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

As shown in figure 9, the rate of postsecondary attainment is substantially lower for Hispanics when computed on the basis of the entire Hispanic population, rather than on the number of high school completers. Among those ages 25–29, the rate of completing some college or higher declines from 54 percent of Hispanic high school completers to 33 percent of all Hispanics, while the rate of completing a bachelor's degree or more declines from 18 percent of high school completers to 11 percent of Hispanics.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

In summary, while there have been some gains in the percentages of Hispanics pursuing and completing higher education, they remain behind whites in attaining this level of education.

Relationship of education and labor market outcomes

Attaining higher levels of education increases one's employment opportunities by enhancing knowledge, ability to learn, work-related skills, and job readiness. Successful employment leads to better overall opportunities for young adults by giving them the opportunity to gain valuable work experience and on-the-job training¹⁹

° *With comparable levels of education, Hispanics generally are less likely to be employed and to earn less than whites.*

Among both high school completers not enrolled in college and high school dropouts, Hispanics are less likely to be employed than their white peers. For example, 1995, 71 percent of white high school graduates not enrolled in college and 43 percent of Hispanic high school graduates were employed. Among school dropouts, 52 percent of

whites and 44 percent of Hispanics were employed (Indicator 30):

However, these figures indicate, Hispanic high school dropouts were no more likely to be employed than high school graduates.

As shown in table 3, both Hispanic men and women earn less than white men and women at every level of educational attainment.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Summary

There has been some progress in education for Hispanics. More Hispanic students are taking rigorous high school course loads and there has been some increase in the rates at which Hispanic high school completers are completing some college or more. The educational levels of the parents of Hispanic students are rising and many parents of Hispanic students are actively involved in their children's education. However, Hispanic students in the United States are still at great risk for academic failure and the subsequent labor market outcomes associated with such failure.

In particular limited language skills are highly correlated to the high dropout rates for Hispanic youth. The extent to which these language skills impinge on Hispanic achievement test performance is largely unknown, but it is certainly a contributing factor to the test performance gaps. An indication of this is that students with low English proficiency are less likely to achieve basic levels of reading and mathematics than students of the same socioeconomic status with medium or high English proficiency.²⁰

The rates of high school completion among Hispanics remains much lower than that of both blacks and whites, reflecting the continued immigration of Hispanics to the United States. So far, the rigorous high school course loads being taken by Hispanic students have not translated into rising rates of college enrollment immediately following high school completion. Rates of completing at least some college within 10 years of leaving high school are rising among Hispanic high school completers and have reached three-quarters of the white rate, but rates of completing 4 or more years of college education remain only half the rate of whites.

When all Hispanics in the population are factored in, including those who have not completed high school, the percentages of Hispanics completing any level of postsecondary education fall considerably further behind the rates of whites, and are showing little improvement. These low rates of postsecondary completion mean continuing difficulties for the Hispanic population in fully participating in areas of the economy where higher levels of education are needed, employment is expanding, and wages are higher.

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Why Hispanic Students Need to Take the SAT®

By Donald M. Stewart

Few people know that the idea of testing students for college admission has Hispanic roots. It was in Madrid in 1575 that a scholar, Juan Huarte de San Juan, proposed that the king establish an examination board to determine university admission. In a book titled **Examen de los Ingenios para las Ciencias**, Huarte de San Juan argued that admission exams were necessary. "Otherwise, 'tis a pity to see a man break his head upon a thing impossible for him to accomplish."

A few hundred years later, in 1900, the College Board was born, perhaps unaware of its Hispanic heritage but certainly cognizant of the important task that it was taking on -- helping colleges and universities identify applicants who could succeed at their institutions. That task has continued to be the fundamental responsibility assumed by the College Board and its famous offspring, the SAT, although it was not until 1926 that the admission test as we know it was first administered.

Over the years, the SAT has become a rite of passage for high school students from all backgrounds -- not just the academically elite, who originally sat for the test. The rite now includes increasing numbers of students from racial and ethnic minority groups; such students accounted for a record 32 percent of SAT takers in the high school class of 1997. Eight percent of all SAT takers listed themselves as Mexican American, Puerto Rican, Hispanic, or Latino, up from 5 percent in 1987. Hispanic enrollment in higher education itself rose by more than 100 percent between 1974 and 1994.

Does that progress mean that the United States has an acceptable level of Hispanic enrollment in higher education? Should we reduce our efforts to expand access to college for Hispanic Americans? Of course not. Not only are Hispanics still underrepresented on our nation's campuses, making up only 6 percent of college students -- while Hispanics make up nearly 9 percent of the population -- but they also have an appallingly low college-completion rate. They earned only 4.3 percent of all bachelor's degrees awarded in 1995. That is why the College Board shares the desire expressed in the recent report of the University of California's Latino Eligibility Task Force: the number of Hispanic students on the university's campuses should be

increased.* But that is also why we believe that the task force's suggestion that the university eliminate the SAT as an admission requirement for Hispanic or any other applicants to improve their eligibility for college, is a simplistic solution to a complex problem.

Rather than consider the underlying reasons that Latino students do not do as well, on average, as white or Asian students on the SAT, the task force advocates that the university take the easy way out of a difficult situation. Its recommendation is like breaking the thermometer because you don't like the temperature it registers.

What is the thermometer telling us? SAT readings give us some objective information about Hispanic students. For example, Mexican-American students score, on average, 53 points lower than the national mean on the math portion of the test, and 54 points lower on the verbal portion. The SAT also provides sufficient background data to suggest what may be causing these problems. This thermometer is reflecting the continuing problems of poor academic opportunity, preparation, and achievement that are faced by too many of our Hispanic students.

Consider the following difficulties encountered by Hispanic students in our educational system.

- ° A disproportionate number of them are tracked into low-level academic courses or vocational programs, based on their presumed inability to handle more rigorous academic courses. Many Hispanic students with limited ability to speak English are even placed in special-education programs. Only 35 percent of Hispanic high school seniors are enrolled in college preparatory programs, compared with 50 percent of non-Hispanic white students.

- ° Many Hispanic students attend segregated schools with limited educational resources, inexperienced or underqualified teachers, and high percentages of students living in poverty. Between 1968 and 1992, the percentage of Hispanics attending schools whose enrollment was more than 90-percent minority increased from 23 to 34 percent.

- ° The overall academic preparation of Hispanic students is among the lowest of all minority groups. Even among SAT takers, who are the students aspiring to attend college, Hispanics lag far behind their peers. In fact, only 25 percent of Mexican-American students take 20 or more year-long courses in high school, compared with 46 percent of whites and 45 percent of Asians. Given these statistics, is it surprising that in 1995, fewer than 9 percent of Hispanics aged 25 to 29 had completed four or more years of college? We should be glad that more Hispanics have been getting into college in recent years, but we must also be concerned that more are not getting out with degrees.

- ° The number of Hispanic elementary and high school students with limited proficiency in English is expected to double to more than five million by 2020. Research shows that non-native speakers take three to six years to learn academic English, during which time many of them fall years behind in mastering other academic material. Without the extra help provided by programs designed to improve English skills without sacrificing curricular content or native-language abilities, those students will find it difficult to get a good job, much less go to college.

Dealing with the deep-seated educational problems that confront too many Hispanic students today requires a serious long-term commitment. But is there anything we can do in the short term to increase their eligibility for college? The Latino task force's report contains some interesting suggestions for improving the teaching and curricula offered to Hispanic students. I would like to encourage the following efforts:

- ° Four-year institutions should take a closer look at transfer students. Two-year public colleges enroll more than 50 percent of all Hispanic students, who make up nearly 10 percent of the enrollment at those schools. Many of them are motivated and well-qualified after attending community college for two or more years, and should be actively recruited by four-year institutions. Two initiatives of the College Board -- the annual roster of academically talented minority students who have graduated from two-year colleges, and the new Office of Community College Relations -- are already helping. Our National Hispanic Scholar Recognition Program also has been identifying outstanding high school students for college recruitment since 1984.

- ° College and state officials need to encourage programs that prepare Hispanic students to do well in school.

U.S. Education Secretary Richard W. Riley recently released national figures showing that 83 percent of high school students who took algebra and geometry went on to college. Yet many Hispanic students attend high schools that don't offer such classes or offer too few sections. Further, Hispanics represent 8 percent of all students who take the College Board's advanced placement courses, but high schools could enroll more AP® students if states provided more money to pay for course materials and to train teachers to conduct the classes. Witness the miracle that Jaime Escalante worked with Hispanic AP calculus students in East Los Angeles; that success can be repeated elsewhere with the right resources and commitment.

° Middle schools, high schools, and colleges should collaborate more to improve and expand communication with Hispanic families. Research has confirmed that the students who get the least information about college and the transition process from high school are the ones who need it the most -- primarily minority-group and disadvantaged students. Hispanic students and families need material, in English and Spanish, on academic preparation, the college application process, ways of financing college, possible careers, and other questions that can seem daunting to the uninitiated.

We also need to deal immediately with the fact that Hispanic students have the highest school-dropout rates of any major population group, with 28 percent of Hispanic 16-to-24-year-olds having dropped out of high school. This is twice the dropout rate of African Americans and more than three times that of non-Hispanic whites. We must find ways to keep more Hispanic students in school, and to help the best of them get into the college pipeline.

Dropping the SAT may seem to be an expedient, short-term solution to a long-term problem, but it is also very shortsighted. SAT scores provide a vital piece of information about a student's ability to perform college-level work. A 1993 study established that the SAT is a good predictor of college performance for all ethnic groups, including Hispanic students. An earlier study (1990), by Maria Pennock-Roman, a researcher at the Educational Testing Service, found that there was no evidence of less-accurate predictions for Hispanic students than for others; her results supported the use of SAT scores, in combination with high school records, for evaluating Hispanic-American students for admission to moderately and highly selective institutions. The SAT is a standard that has served the nation well for more than 70 years. We need to find ways to help more Hispanic students meet that standard.

A diverse population of college students is essential for a nation undergoing massive demographic change. Although it is crucial to maintain fairness near the end of the educational cycle in college admission, it is equally important to deal with the shameful unfairness that many children face at the beginning: years of tracking into dead-end educational programs, poor teaching, and inadequate spending on facilities, books, and other educational resources. Helping students get into college begins not at the college door, but at the schoolhouse door. It is unfortunate, as the new millennium approaches, that race, ethnic background, or family income can still limit students' educational future. Getting rid of the SAT or any other standard is not going to change that fundamental fact. Instead of smashing the thermometer, why not address the conditions that are causing the fever?



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① Congressional decision
April 15 - May 1

Hispanic Education National Meeting

Friday, March 24, 2000

OEGB Rm. 476

11:00 a.m.

Agenda

I. Developments Since Last Meeting:

A. Operations point person – *Maria Echaveste*

B. Efforts of stakeholders – *Initiative & Andy*

C. Outreach plan/efforts – *Brian*

D. Language proficiency/acquisition goal meeting -- *Andy*

→ commitments for funding for June mtg

HEC staff / Caucus staff ②
Commission ①
NHLE leadership / Caucus MOC ①
Education groups ④

II. Next Steps and Action Items

A. Status of Goals: 1-page summary

- Early Childhood Education – Ann O'Leary, Ruby Shamir
- Reducing Dropout Rate – J.B. Buxton, *Jackie*
- Eliminating the Achievement Gap – Andy Rotherham/Bethany Little
- English Language Proficiency – Andy Rotherham/Bethany Little
- Higher Education – Brian Kennedy, J.B. Buxton, *Jackie, Hector*

B. Structure and format of event

C. Event date

D. Commitments and Deliverables

— NAB, PIE (wed, 3/29 4 pm)

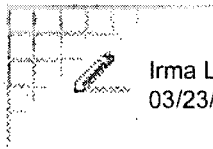
E. Status of participant's list (both invitees and presenters) – need for separate meeting?

F. Department of Education "report card" (suggestion from NCLR)

National Goals for Educational Excellence for Hispanic Americans

This draft is an attempt to articulate what the national goals may look like at this point, and elicit areas of confusion or disagreement. This is in no way a final product, and will not necessarily represent everyone's understanding of the goals. Strategies and indicators are still being developed for each of these goals and will be shared for comment when they have been drafted.

- 1) Ensure that all Hispanic American children have access to high quality early childhood education and development programs and enter school prepared to succeed by eliminating the gap between the Hispanic participation rate and the national participation rate in high quality programs by 2010.
- 2) Respecting the value of multilingualism, different learning styles, and different instructional approaches, by 2010 states and school districts will ensure that all students graduate from high school having demonstrated proficiency in English.
- 3) Eliminate the achievement gap between Hispanic students and other students on state assessments by 2010 by providing a high quality education with the resources and systems that ensure equal opportunities for all.
- 4) Eliminate the gap in the high school completion rate between Hispanic students and the national average by 2010.
- 5) Make progress towards eliminating the gap between the average rate of college completion for Hispanic Americans and the national average by 2010 by at least doubling both the percentage of Hispanic Americans who earn Associate's and the percentage of Hispanic Americans who earn Bachelor's degrees.



Irma L. Martinez
03/23/2000 06:53:20 PM

Record Type: Record

To: John B. Buxton/OPD/EOP@EOP
cc: See the distribution list at the bottom of this message
bcc:
Subject: Re: Reminder: Hispanic Education Working Group Meeting Tomorrow

There was a good piece on the ABC Nightly news on parent involvement in the school system. A few parents in the Sacramento school district felt their kids were being stereotyped by teachers, so the parents helped institute a program where teachers made house calls. You may want to check out the news transcript tomorrow.

John B. Buxton

John B. Buxton

03/23/2000 11:34:50 AM

Record Type: Record

To: Reynaldo Valencia/WHO/EOP
cc: See the distribution list at the bottom of this message
bcc:
Subject: Re: Reminder: Hispanic Education Working Group Meeting Tomorrow

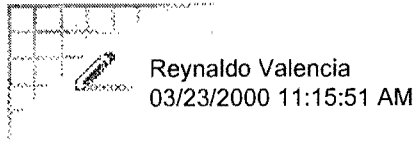
All,

Just came from another WH conference/strategy session meeting and it sparked me on the issues still left on the table for us with this conference. Some of you may already be thinking of/covering these issues. If so, great. If not, this is a start (in no particular order):

- **Funding.** Where are we getting money for the event (lunch, programs, possible satellite downlink)? Agencies? Foundations? Businesses? Who's the rainmaker?
- **Co-sponsors.** What Federal/agency cosponsors are we looking at for this event?
- **Satellites.** Do we want downlinks to the big event (the breakouts will be too hard to downlink) so that MOCs can participate from home districts and other interested parties? With whom do we contract to get that done (I know ED does this)?
- **Space.** Where are we headed for initial session and breakouts? Reagan building? ED? State? GSA conference room and WH con ctr?
- **Invitations.** I know we need a date to do invitations, how are we gathering names for invites--groups, electeds, grassroots (OPL/IGA no doubt are already down the road on this one).
- **Deliverables.** Where are we on business commitments? Timeline? responsibility?

- **Presenters for breakouts and lunch.** If we're doing the conference in April or May we need to get out invites to presenters pronto. The folks we want to have will likely be unavailable if we wait too long.
- **Paper.** What do we want in advance of this conference? White papers on goals done by DPC/ED policy folks? Commissioned papers? Existing papers/research?
- **Hill briefings.** When should we interface with MOCs? Relevant Cabinet secretaries?

Reynaldo Valencia



Record Type: Record

To: See the distribution list at the bottom of this message
cc: Marjorie Tarmey/WHO/EOP@EOP
Subject: Reminder: Hispanic Education Working Group Meeting Tomorrow

Hello, everyone:

Please remember that the weekly Hispanic Education Working Group will meet this **Friday, March 24, 2000** in **OEOP Rm. 476** at **11:00 a.m.** All those who are non-White House have been cleared.

See you there,

Thanks,

--Rey

Message Sent To: _____

Ann O'Leary/OPD/EOP@EOP
Brian V. Kennedy/OPD/EOP@EOP
Andy Rotherham/OPD/EOP@EOP
Bethany Little/OPD/EOP@EOP
John B. Buxton/OPD/EOP@EOP
Quirina J. Orozco/OMB/EOP@EOP
Brian A. Barreto/WHO/EOP@EOP
Jacqueline F. Lain/WHO/EOP@EOP
Mark D. Magana/WHO/EOP@EOP
Ruby Shamir/OPD/EOP@EOP
Laura D. Schwartz/WHO/EOP@EOP
Kendra L. Brooks/OPD/EOP@EOP
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brian a. barreto/who/eop@eop
jacqueline f. lain/who/eop@eop
mark d. magana/who/eop@eop
ruby shamir/opd/eop@eop
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quirina j. orozco/omb/eop@eop
brian a. barreto/who/eop@eop
jacqueline f. lain/who/eop@eop
mark d. magana/who/eop@eop
ruby shamir/opd/eop@eop
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marjorie tarmey/who/eop@eop

National Goals for Educational Excellence for Hispanic Americans

This draft is an attempt to articulate what the national goals may look like at this point, and elicit areas of confusion or disagreement. This is in no way a final product, and will not necessarily represent everyone's understanding of where we are with the goals. Following the goals are some possible strategies. We have not discussed how strategies will be addressed at the session, therefore the lists are not intended to be exhaustive or articulate. Instead, they are included to provide context for the goals and serve as a point of departure for discussion.

- 1) Ensure that all Hispanic American children have access to high quality early childhood education and development programs and enter school prepared to succeed by eliminating the gap between the Hispanic participation rate and the national participation rate in high quality programs by 2010.

Strategies to increase access and participation

- Community outreach
- Inclusion of parents and family in early childhood programs
- Make early childhood education affordable

Strategies to ensure high quality early childhood education programs

- Teacher training and teacher/child ratio
- Ensure providers are skilled in building language and literacy skills

- 2) With respect for the value of multilingualism; different learning styles, and different instructional approaches, by 2010 states and school districts will ensure that all students graduate from high school having demonstrated competence in English literacy. (By 2010, states and school districts will ensure that all students graduate from high school having demonstrated competence in English literacy while respecting the value of multilingualism, different learning styles and different instructional approaches.)

Strategies to...

- 3) Hispanic American students will receive a high quality education with the resources and systems that help students succeed, and the achievement gap between Hispanic Americans and other students as measured by state assessments will be eliminated by 2010. (Eliminate the achievement gap between Hispanic students and other students on state assessments by 2010 by providing opportunities for all

Strategies to improve education of Hispanic American students

- Examine distribution of resources, including technology
- Help teachers be culturally sensitive and have high expectations for all students
- Prepare all teachers with techniques for teaching LEP students
- Ensure Hispanic Americans are included in valid state assessments
- Involve parents in students' learning

- 4) Eliminate the gap in the high school completion rate between Hispanic students and the national average by 2010.

Strategies to keep kids in school

- Offer tutoring and mentoring
- Encourage high expectations
- Help students access counseling and social services

- 5) Make progress towards eliminating the gap between the average rate of college completion for Hispanic Americans and the national average by 2010 by at least doubling the percentage of Hispanic Americans who graduate from college (receive their Bachelor's degree?). Double the percentage of Hispanic Americans who graduate from college towards eliminating the achievement gap between the rate of college completion for Hispanic Americans and the national average.

Strategies to increase college access

- Counsel children early about their options
- Encourage students to begin by pursuing 2 year degrees or technical training if they are not prepared for college

Strategies to increase college completion

- Offer more financial aid and scholarships

- Increase support for HSIs

March 22, 2000

Lags in Minority Achievement Defy Traditional Explanations

By Debra Viadero
Education Week

Second in a four-part series

If the researchers studying the reasons why black and Hispanic students continue to trail non-Hispanic whites in academic achievement were pressed to say one thing for certain about their work, it might be this: The usual explanations aren't good enough.

✱ Poverty can't explain all of the achievement gap, they would say, because grade and test-score disparities crop up even in middle-class communities with integrated schools.

And peer pressure—fears that classmates will accuse fellow minority students of "acting white" for excelling in school—won't do it either. If that were the reason, why would learning differences show up even in kindergarten—when children of every color want nothing more than to please their teachers?

"We know what the causes aren't. We know what we thought were the causes weren't as important as some other things," said Meredith Phillips, a co-editor of *The Black-White Test Score Gap*, a 1998 book on the subject. "And the traditional liberal and conservative explanations don't explain much."

The lack of knowledge is surprising since the gap has been documented since at least the 1960s. Between 1970, when the National Assessment of Educational Progress first began taking the national pulse on student achievement, and 1980, black and Hispanic students made great strides in narrowing the gulf that once separated them from their white peers. But all of that progress seemed to grind to a halt beginning in 1988. Now, African-American and Latino high school seniors on average score at the same level as non-Hispanic white 8th graders on NAEP math and reading tests.

And, most troubling of all, the disparities are greatest at the high end of the achievement spectrum—the statistical pool where the nation's future leaders swim. Failure to close the gap could ultimately mean failure on the part of American society to integrate all of its institutions from the bottom to the top.

"This whole field of looking at achievement gaps has been under-researched because it's politically so touchy," said Ronald F. Ferguson, a Harvard University economist who has studied the issue. "But by avoiding it, we've done an injustice to African-Americans and

About This Series

Part 1 "Unmet Promise: Raising Minority Achievement," March 15, 2000: Despite decades of attention, gaps in the achievement of minority students remain one of the most pressing problems in education.

•Part 2 March 22, 2000: Why do the achievement gaps persist? Some blame it on teachers; others say parents need to be stronger advocates and cut down on TV time. In a Korean-American community, parents take no chances when it comes to their children's education.

Part 3 March 29, 2000: Schools run by the U.S. Department of Defense for children of military families may offer lessons on how to raise the achievement of low-income minority students.

Part 4 April 5, 2000: There are no sure answers, but some experts say better teaching, smaller classes, the right schoolwide improvement program, and fairer allocation of resources can shrink achievement gaps. A Houston-area district has some answers of its own.

Coverage of urban education is supported in part by a grant from the George Gund Foundation.

other children who might otherwise be achieving at high levels."

To some degree, that avoidance is changing now. What was once a verboten subject has become a top priority for states and school districts nationwide.

The change of heart has come in part because the nationwide move to institute stricter standards and related tests for students is illuminating some glaring disparities among racial and ethnic groups. Also, the backlash against the affirmative action policies that universities have used to increase minority enrollment has made test-score differences more important than ever. If minority students can't generate scores at least as high as their white counterparts', the door to higher education in several states might conceivably shut in their faces.

"I think a lot of people continued to think things were getting better," said Kati Haycock, the executive director of the Education Trust, a Washington organization that promotes high achievement for all students. "Now, we've seen 10 years of no progress and, in some subjects, a widening of the gap. There's too much evidence to ignore."

In all likelihood, no single explanation for the achievement gap will ever emerge. Experts say a multitude of factors—ranging from parenting practices to peer pressure—can influence academic achievement. The explanations advanced so far for lagging minority performance, some of which are more widely accepted than others, include:

Poverty

Even if poverty isn't the single most important cause of the minority-majority achievement gap, it's a major contributor. Data compiled for the College Board showed that in 1990, Hispanic children were twice as likely as white and Asian-American children to be raised in low-income families. African-Americans were nearly three times as likely to come from poor families.

Growing up poor often means getting inadequate health care and nutrition, having fewer educational resources in the home and in the neighborhood, and moving frequently—all factors known to depress school performance.

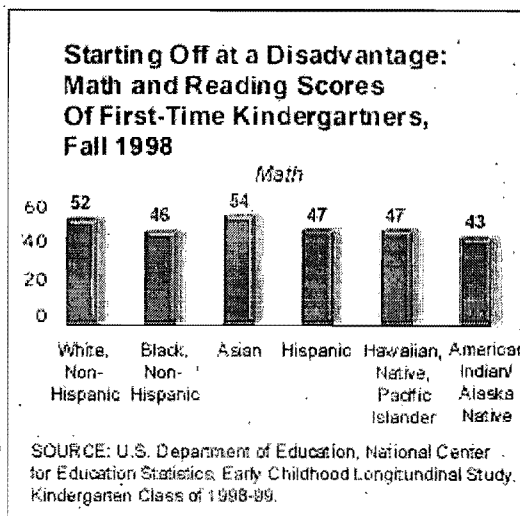
What's more, in schools with poverty rates of 25 percent or higher, both poor and better-off youngsters do less well academically. Growing evidence also suggests those schools get less funding than schools in more affluent communities.

The legacy of poverty can last for generations. Even when two families have the same income levels, chances are the child from the family whose affluence began more recently is worse off educationally.

"It's not only the education of your parents," said David Grissmer, a senior management scientist in Washington for the RAND Corp., a Santa Monica, Calif.-based think tank. "It really does depend on the education of your grandparents, because wealth does accumulate over time."

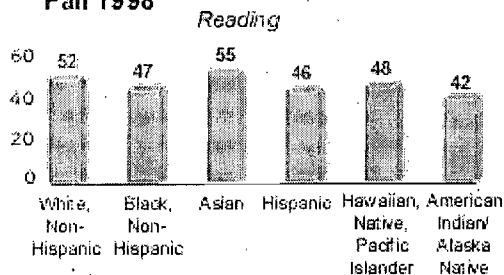
Academic Coursework

Study after study has shown that disproportionately fewer African-American and Hispanic



students than whites take challenging academic courses. The reasons vary. Some schools rigidly "track" students into such courses, using test scores or previous grades to winnow out those considered less able. Other schools open their tough academic courses to anyone, but minority students choose not to enroll.

**Starting Off at a Disadvantage:
Math and Reading Scores
Of First-Time Kindergartners,
Fall 1998**



SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Longitudinal Study, Kindergarten Class of 1998-99.

"A lot of times, I think blacks are discouraged from being in honors or AP classes because they see no one else in their race in those classes," said Imani Farley, an African-American 10th grader at Shaker Heights High School in Shaker Heights, Ohio. "And sometimes, counselors don't encourage you to challenge yourself."

What's more, the menu of Advanced Placement courses in some urban schools is just not as full as it is in many suburban schools.

Four Los Angeles teenagers, for example, sued the state of California last year, claiming they had been denied equal access to AP courses. Even though they constitute nearly half the student

population in California, blacks and Hispanics account for only 13 percent of AP test-takers in that state.

In answer to the problem, some districts are doing away with systems for tracking their students into higher- or lower-level coursework. But experts disagree over whether eliminating high-track classes would do minority students—or anyone else—much good.

New federal research, however, shows that the biggest factor determining whether young people earn bachelor's degrees is participation in a strong academic curriculum in high school. That means Advanced Placement courses, more than three years of English, mathematics beyond Algebra 2, and at least two years of laboratory sciences, foreign languages, and history.

"We should be trying to get more black students to take such classes, not trying to eliminate them as an option for whites, who will respond by sending their children elsewhere," Ms. Phillips and her co-editor, Christopher Jencks, write in their book.

Even more troubling to some are studies suggesting that all the courses in many poor, big-city schools serve up dumbed-down versions of the curriculum taught to students in affluent suburban schools. On national tests, one 1994 federal study found, A students in high-poverty schools scored about the same as C and D students in wealthier schools. Data from NAEP tests in reading and math also indicate that Hispanic and African-American students, compared with their white counterparts, are less likely to be taught reasoning skills and are more likely to be given worksheets—considered a low-level activity—in class.

Peer Pressure

In a widely noted 1986 study, researchers John Ogbu and Signithia Fordham described how a group of low-achieving black students in a District of Columbia high school had come to view academic success as "acting white." Since then, the phenomenon has been widely documented in racially mixed as well as all-black high schools like the one the researchers studied.

But the idea, always controversial, has more recently become the subject of even more heated debate, with some experts contending that the notion may be more of a symptom

AP #s

than a cause of the achievement gap.

"It sounds like a defense mechanism to me," said Roslyn Mack, the mother of two African-American students attending integrated schools in the Cleveland suburb of Shaker Heights. "It's 'because I'm not doing well, I'm going to make you feel badly because you're doing well.'"

But, Mr. Ferguson of Harvard says, even if that kind of social pressure does not create achievement gaps, it still can be an impediment to closing them up.

High Mobility

It's a well-known fact that student turnover is higher in schools with high concentrations of poor students, immigrants, or children from migrant-worker families. Obviously, it's hard for students to keep up when they move to a new school that may not even use the same textbook. One national study from 1998 suggests that moving even once between 8th and 12th grades can double a student's chances of failing to graduate on time.

But less obvious is the finding that high rates of mobility in a school can also slow the pace of instruction for students who don't move. In one 1996 study of Chicago schools with high student turnover, researchers found that by 5th grade the level of instruction in those schools was almost a year behind that of schools with more stable populations.

Teacher Quality

A growing body of research is beginning to show that students in schools with high concentrations of minority and poor students are more likely to be taught by underqualified teachers.

Those findings are emerging just as other studies are beginning to quantify the damage that an ineffective teacher can do. Research by William L. Sanders and his colleagues at the University of Tennessee suggest that the effects of three consecutive years of bad teachers can linger with students for years.

Parenting

At least half the academic gap between black and white students at the end of 12th grade is attributable to learning differences that are already present when they begin their school careers, said Ms. Phillips, who is also an assistant professor of policy studies at the University of California, Los Angeles.

In fact, the U.S. Department of Education released data last month showing that black and Hispanic kindergartners already trailed their white and Asian-American counterparts on tests of general knowledge and early reading and math skills. ("Kindergarten Study Taking Long View," Feb. 23, 2000.)

That suggests to some researchers that parenting practices could be a primary cause of those early differences.

The problem, however, is that researchers know very little about the ways in which parenting practices may—or may not—differ in early childhood.

"I suspect there are systematic differences in the degree to which parents negotiate with their children as toddlers," said Mr. Ferguson of Harvard. "Simply engaging a child in the kind of negotiation that has a child justify a request, or think through something for themselves, or do a calculation has to help."

As children grow older, black parents may also be less likely to push their children to earn better grades or take more challenging courses. In a 1996 study, researchers asked teenagers at nine high schools in Wisconsin and California: "What is the lowest grade you can get without your parents getting upset?" The answers varied by race and parents' educational levels.

Asian-American students whose parents were high school dropouts gave higher grade-level thresholds than white, black, or Hispanic students whose parents had bachelor's degrees. Black students whose parents were college graduates said their parents had grade standards similar to those of white students whose parents had never attended college.

Experts also point out that, regardless of color, middle- and upper-income parents, tend to take their children to museums more often, to hire tutors when their children are having problems in school, and to pay for test-preparation lessons for college-placement exams.

Preschool

Minority children have less access to good preschool and day-care programs. The New York City-based College Board, in its report "Reaching the Top," notes that only 63 percent of African-American and 36 percent of Hispanic parents with preschool-age youngsters enrolled their children in preschool in 1996.

Even programs such as Head Start, the popular federal preschool program for disadvantaged students, fail to reach large numbers of children who would otherwise qualify. Just as important, some evidence suggests that the preschool programs low-income students do attend tend to offer poorer-quality instruction.

'Stereotype Threat'

In the early 1990s, the Stanford University sociologist Claude M. Steele gave groups of white and black Stanford undergraduates standardized tests. He found that the black students performed worse on the tests when they were asked to identify their race. Mr. Steele theorized that the minority students scored low in those instances because they were anxious about fulfilling negative stereotypes about their own racial group, a phenomenon he tagged "stereotype threat." Once threatened, he said, minority students may go on to "disidentify" with the academic task at hand or to downplay its importance to them.

No one has yet tested that idea in precollegiate classes, but some experts say it could explain why black students are sometimes reluctant to take advanced academic classes and why their average scores are low on some standardized tests.

The 'Summer Effect'

Students from low-income families tend to lose ground academically over the summer, compared with peers who are better off, said Karl Alexander, a sociologist at Johns Hopkins University in Baltimore.

Mr. Alexander drew his conclusion from a long-term study of 800 Baltimore students who started 1st grade in 1982. During the school year, he and his colleagues found, poor and more affluent students seemed to learn at the same rate, judging by their scores on tests given in the fall and spring.

But the wealthier students tended to keep on learning over the summer—probably because they are more likely to go to summer camp, visit libraries, or take vacations of longer distances, Mr. Alexander said. The poorer students, in contrast, would tread water academically from June to August.

Over the course of several years, Mr. Alexander points out, slight differences each fall can add up to a significant disadvantage for the lower-income children. "When you add it all together you've got an environment for some children that helps them move ahead compared with an environment for other children that's not as enriching," he said.

Teacher Expectations

Teachers are taught to believe that all children can learn, but their own experiences may sometimes tell them otherwise. As a result, experts and minority parents say that at least some teachers, exposed to low-achieving minority pupils year after year, may come to expect less of them. They might not hold them to high standards or encourage them to take more advanced classes.

"If you don't expect something, you don't search for it," Mr. Ferguson said.

Research is thin, though, on whether teacher expectations create a kind of self-fulfilling prophecy for minority students.

"My bottom-line conclusion is that teachers' perceptions, expectations, and behaviors probably do help to sustain, and perhaps even to expand, the black-white tests-core gap," writes Mr. Ferguson in *The Black-White Test Score Gap*. But, he adds, "much remains on this research agenda."

Television

During a recent visit by a reporter to Shaker Heights Middle School, students talked about the differences between white students and black students. Brandon Cornelius, a plain-spoken, African-American 8th grader, told of overhearing two sets of girls, one all-white and one all-black, talking in his school. "The white girl, she was saying, 'On weeknights, I can't watch TV at all,'" he said. "Then in the hallway, I heard two black girls talking and saying, 'Did you see what was on TV last night?'" Brandon offered an explanation for the difference: "It's like we want to know what's going on so we can be in the know a little more."

His observation is one that researchers have confirmed. A study of more than 3,000 children released last year found that black and Hispanic children spent an average of three to four hours a day watching television, compared with an average of two hours and 22 minutes a day for white children. ("Report Shows Media Play Enormous Role in Children's Lives," Nov. 24, 1999.)

Test Bias

Are standardized tests inherently biased against African-Americans and other minority groups? Possibly, experts say, but the tests deserve a smaller share of the blame than researchers once thought. The SAT, in fact, has been shown to overpredict how successful African-Americans will be in college.

"If any parent is worried about the tests being biased and then gets a chance to see what's on the tests, most would say, 'This is stuff I would like my kids to know,'" Ms. Phillips of UCLA said.

Genetics

In 1994, a fiercely debated book, *The Bell Curve*, resurrected the explosive suggestion that achievement differences among racial groups stem from genetics. Since then, the notion has been widely refuted by scholars from a range of disciplines.

"If there are genetically determined IQ differences," University of Michigan researcher Richard E. Nisbett writes in *The Black-White Test-Score Gap*, "they are too small to show up with any regularity in studies covering a wide range of populations and using a wide range of methodologies."

Even now, six years after its publication, *The Bell Curve*, written by Charles Murray and the late Richard Herrnstein, casts a shadow over public discussions on the achievement gap. The fear is that all the talk could feed harmful stereotypes about the the nation's minority populations.

That's why it's important to keep in mind that the statistics researchers use to describe the achievement-gap problem are averages, Ms. Phillips stressed. Black, Hispanic, white, and Asian-American students can be found at the highest levels of academe as well as in General Educational Development classes.

In the end, she said, "focusing on the gap is not necessarily a good thing, unless people act to reduce it." The trick, she and many other experts agree, is to figure out how.

On the Web

Read "[America's Next Achievement Test: Closing the Black White Test Score Gap.](#)" by Christopher Jencks and Meredith Phillips, from *The American Prospect*, September-October 1998.

From the U.S. Department of Education: "[Average Reading Proficiency By Grade, Race/Ethnicity, and Reading Proficiency Percentile: 1992 and 1994.](#)"

The National Science Foundation is particularly concerned about the achievement gap between whites and minorities in the sciences. See its overview of [minority underrepresentation in the sciences](#), from "[Science & Engineering Indicators - 1993.](#)"

PHOTOS: Students walk home earlier this year from an elementary school in a poor District of Columbia neighborhood. Experts say poverty contributes to, but is not the only factor in, the persistent low performance of children from some racial and ethnic groups.

—Benjamin Tice Smith

Rasheda Daniel and Jorge Gutierrez are two of four Los Angeles high school students who have filed a lawsuit challenging inequities in access to Advanced Placement courses in California public schools.

—Ken Hively/Los Angeles Times

John B. Buxton

02/10/2000 04:31:17 PM

Record Type: Record

To: Kendra L. Brooks/OPD/EOP, Bethany Little/OPD/EOP@EOP, Andy Rotherham/OPD/EOP@EOP

cc:

Subject: do we have this report?--we should get it

Study: Black, Hispanic college
enrollment is up

By ARLENE LEVINSON
Associated Press

College enrollment for black and Hispanic high school graduates climbed steadily during the 1990s, according to a new report that also includes disquieting news about both groups.

The rate of blacks finishing high school fell in the late 1990s, and Hispanics lagged far behind whites and blacks in getting their high school diplomas, according to the report released today by the American Council on Education in Washington.

The study analyzed Census and Education Department figures for 1996-97, the latest available. The GE Fund, the charitable arm of General Electric Co., paid for the research.

College attendance at any time among all high school graduates ages 18 to 24 reached a record high of 45 percent in 1997. Among whites, the figure was 45 percent, up from 41 percent in 1991; blacks, a record 40 percent, up from 32 percent in 1991; Hispanics, 36 percent, vs. 33 percent in 1994.

Enrollment for blacks, Hispanics, Asian-Americans and American Indians rose 4 percent between 1996 and 1997, the study found. Between 1994 and 1995, their numbers climbed by just under 3 percent.

The number of minorities who went to college represents such a small part of the total that it had negligible effect on the overall figure of 45 percent, said Terry Hartle, the council's senior vice president.

The study was too soon to gauge the full effect of dropping affirmative action in college admissions in the two most populous states, California and Texas.

The University of California system did away with affirmative action beginning with the undergraduate class that entered in 1998. After a federal court ruling, Texas ended racial preferences at state schools beginning with students applying to enter in the fall of 1997. Washington state voters banned race and gender criteria

in admissions starting in 1999.

As for the high school graduation figures, the dropout rate represents "a very serious problem for African-Americans, for Latinos a catastrophe," said Gary Orfield, professor of education and social policy at Harvard University.

Nearly 83 percent of whites ages 18 to 24 had high school diplomas in 1997, compared with about 75 percent of blacks. In 1990, the rate among blacks was 77 percent.

Whites holding high school diplomas were 8 percentage points ahead of blacks in 1997, the widest gap since 1992.

The gulf between whites and Hispanics was far greater: Only 62 percent of Hispanics ages 18 to 24 had completed high school in 1997. That was some improvement, up from about 58 percent the year before.

Orfield blamed high-stakes testing -- "They don't pass the test. They get discouraged. They drop out." -- the push to end social promotion and poverty afflicting both schools and students. Among Hispanics the problem is also a lack of English among immigrants, he said.

Gwendolyn Cooke at the National Association of Secondary School Principals blamed teachers with low expectations and inadequate training.

"Teachers that lack the skills to be responsive, push kids away," Cooke said. Zero-tolerance policies that eject misbehaving students also take a toll, with blacks receiving the harshest punishment, she said.

Summary of Breakout Session Comments

Goal 1: Increasing Access to High Quality Early Childhood Education for Hispanic Students

The participants in the Goal 1 breakout session offered the following strategies, obstacles, and next steps for achieving the goal of *increasing access to high quality early childhood education for Hispanic students*. The comments have been organized by three areas of focus presented by the Vice President and reiterated by the Chair and Congressman Hinojosa – access, quality, and family literacy.

Item No.	Access-A	Comment
	Quality-Q	
	Family literacy-FL	
Strategies		
1.	Q	Easily understood performance standards for pre-K.
2.	A	Good information (profiles) on families, separated by culture and class.
3.	A	Reach Latino children wherever they are and not wait until they are in an organized program.
4.	Q	More funds. Ask foundations for money.
5.	FL	Culturally appropriate information for families.
6.	FL	Work with Hispanic Radio Network to promote the importance of parental role.
7.	A	Raise expectations of people, families to look for programs when children are 3 and 4.
8.	Q	Work with the medical community.
9.	Q	Need something besides text-based learning.
10.	A	More strategies to reach out to the Latino community.
11.	A	Community mapping – look to see what is going on, where Latino population is growing.
12.	A	Scholarships, grants to pre-K children.
13.	FL	Parents must be partners in the process.
14.	FL	Creating programs, such as Reading programs, around culturally specific events, days, etc. (ex: building on a holiday such as El Dia de Los Ninos).

Summary of Breakout Session Comments

Goal 1: Increasing Access to High Quality Early Childhood Education for Hispanic Students, continued

Item No.	Access-A Quality-Q Family Literacy-FL	Comment
Obstacles		
15.	Q	Culturally/linguistically diverse teachers.
16.	Q	Not all kids will come in with minimum standards.
17.	A	Do not have full access to children (only serving 10-15%)
18.	Q	Public does not understand, appreciate bilingual skills. People are intimidated by multilingual skills.
19.	Q	Lack of a sophisticated lobby for policy issues at local, state, and national levels.
20.	A	Research -- understanding sub-groups in Latino community.
21.	Q	Attracting, maintaining qualified staff. Creating a career ladder.
Next Steps		
22.	Q	A one-week conference to build on this strategy session.
23.	Q	Change public's view of funding early childhood education.
24.	Q	One size fits all funding doesn't work either.
25.	Q	Need an advocacy plan.
26.	Q	Cross reference spending money now versus spending it later.
27.	FL	Campaign to create home libraries.

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

Goal #3 Eliminating the Achievement Gap

Strategies	Barriers/Challenges	Solutions/Resources Needed	Other
1. More money	Use current resources better to close the gap. More targeted resources.	The more efficient use of resources, the more you can leverage.	Greater accountability.
2. Extended learning opportunities (see #23, 29)	Fix schools first while we build collaborations to extend the school days. Educational, professional culture has to open up.		
3. Appropriate instructional strategies	No focus, no consistency in curriculum. Teachers' knowledge is very shallow. Low expectations.	Improved teacher training and content knowledge.	Increase graduation requirements and provide supports for students.
4. Reducing the number of students/teacher ratio in the classroom	Cost. Short number of teachers and not highly trained students.	Benefit long-term seems to improve student performance.	
5. Improving technology skills (see #24)	Lack of equipment/training		Provide continued funding, not just start up \$.
6. Recruiting, retaining, and retraining qualified (bi-lingual, Latino) teachers (see #15)	Appropriate salaries	Latino students get their fair share of qualified teachers. More and different types of incentives.	Punish colleges with high failure rates on teacher exams.

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

7. Increase English language proficiency			
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White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

8. Provide information and guidance on what to do next (furthering education)			
9. Explore gender dynamics for intervention strategies	Patriarchy	Gender specific programs	
10. Combine overarching strategies with context based information	Difficult to manage and administer		
11. Talk to the teachers - find out what's happening, what works and what doesn't.	How do you make sense of the information?		
12. Create a strong parent education base to increase parent knowledge regarding early childhood education	Language, economics (some parents have 2 jobs and are not available for meetings), parents stop involvement after 5 th grade	Home visits, bilingual staff, paying for childcare and transportation, explain physical changes in youth and increased need for parental guidance	
13. Design access information for parents regarding school functioning and systems.			
14. Evaluate curriculum design - consider 'more of less'	State mandates, parent and community pushback, inexperienced teachers	Focus on core subjects (reading and math) in early years. Ongoing teacher training	Lack of good materials

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

15. Examine and evaluate staff development programs for teachers (see #6)	Time and cost	Adopt and use staff development standards. Pay for time out of class.	Need development for principals and other administrators
16. Develop and deliver cultural sensitivity training (learning styles, issues)	University prep program content inadequate	Include in pre- and in-service. Accountability for doing this. Board policy.	
17. Rework/improve physical plant of school buildings	Low local tax base. State and federal inaction. Fast growth. Education code for building regulations	"Marshall Plan" to rehab and build facilities. Principals held accountable for maintenance.	
18. Offer alternative programs for students (college bound, technical fields)	Parent knowledge, beliefs, access to appropriate guidance, history of voc ed	Create career pathways (standards based) for all kids. Articulation with community colleges and universities	Parent education. Teach career options and interest assessments.
19. Raise expectations (eliminate lesser than thinking and value all children equally) and provide resources accordingly. Examine school reforms (e.g. no social promotion, mandatory uniforms)			
20. Measure teacher's knowledge/preparedness. Set standards	Lack of articulation between school districts and colleges	Funds are needed to bring schools and colleges together	

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

21. Set and enforce minimum standards for skills/subjects (e.g. algebra requirements)	Lack of national standard of skills	Establish national standards	
22. Collect and utilize data to get a clear picture and move forward			
23. Work extended day issues by collaborating with community based organizations (see #2)			
24. Use technology to improve student learning	Teacher training	Earmark dollars for professional development. Incorporate at the university level - pre-service.	
25. Connect school to home (see #5)	Cost	Start a war between cable and telephone companies	
26. Identify and support gifted students.			
27. Develop appropriate gifted and talented content to offer.			
28. Talk to the school boards and administrators regarding kids' needs (see #11 - respect/expectations issue)			

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

29. Create community ownership - partnerships, eliminate deficit based expectations (see #23, 2)		Develop an awareness of justice issues, ownership of their lives, empowerment, etc. Teach life skills, get private money	
30. Incorporate Latino culture into the programs	Lack of qualified and well-trained Latino teachers. Lack of parent expertise and involvement.	Working with higher education and community organizations. Bring parents into the school. Communications campaigns to recruit and market "teaching".	
31. Develop political expertise and connections.			
32. Collect and publicize successes	No benchmarks. No clearinghouse.	Analyze information. Make the data user friendly and use it as a management tool for change. Implement a public relations campaign through local media	
33. Linking goals and resources to results (accountability of higher education)	No specific structure. Lack of data collection. Lack of follow-up.	Implementing measurement tools. Review committees (e.g. school leadership teams)	

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

34. Creating resiliency in children (youth development)	Schools (undergraduate) not being trained in this field. Unaware of what resiliency factors and core competencies are. Formalizing principles into school curriculum.	CBOs - involvement. Training for all school personnel and parents on core competencies and principles.	
35. Appropriately assessing children - using the right test to measure the right things.	Language barrier. Cultural barrier.	Reassess assessment measures to accommodate barriers.	
36. Address the 1 st generation peak of education issue.	No awareness of how education and schools help train for later in life	Strong school to work programs. Marketing the benefits of education.	
37. Connect/tie the desire for a better life on immigrants' part to greater achievement. Use Hispanic media to reach Latino parents in an active way.	No effort to integrate.	Think outside the box. Increase efforts on part of media. Start at home...1 st generation enthusiasm.	
38. Identify and support role models (students 4 grades ahead - high school and middle school)	School Districts don't do it	Emphasize the importance and successes of role models	
39. Create a closer connection between community colleges and 4 year colleges	Some don't even talk to each other.	Establish local relationships. Create a seamless system. Strong matriculation programs.	

White House Strategy Session: Improving Hispanic Student Achievement
Breakout Session #3: Eliminating the Achievement Gap

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White Strategy Session: Improving Hispanic Student Achievement
Breakout Session #4: Increasing the High School Completion Rate
Session Responses
June 15, 2000

Key Participants:

Honorable Louis Caldera, Secretary of the Army
 Mr. JB Buxton, White House Educational Team
 Thomas C. Bryant, Jr., Facilitator
 Patricia Gandara, Panelist / Educator
 Mr. Manuel Isquierdo, Panelist / Principal
 Leonard Shyrock, Panelist / Teacher

Question Responses

Question #1: What are the key strategies that need to be in place if we are to reach our goal of having 90% of Hispanic students complete high school by 2010?

- Creating supportive peer groups
- Using professional and peer mentoring
- Effective use of Title I resources in high schools
- Assessment of high stakes testing and its nexus to dropout and completion rates
- Consider multiple measures for graduation
- Assign every student to a school staff member for a weekly "focus session" to track progress
- Make high school classes smaller
- Reading skills must be stimulated by suggestions from reading experts
- Provide more student access to advancement placement courses
- Stimulate Hispanic parent involvement by designing a public relations model, that should include sending materials home in Spanish
- Set high expectations for students, teachers, and administration
- School boards must take a more strategic leadership role
- Improve research about schools that Hispanic-American students attend
- Have school officials become more cultural-sensitive around standardize test items
- Stress Hispanic participation from Pre-k to high school instruction
- Provide more access to technology (i.e. computer usage, internet)
- Make sure appropriate and effective resources are available when we "raise" the standards for graduation
- Include relevant social services for students (i.e. clinics, Title I programs)

- Make schools accountable for Hispanic inclusion and provide data to determine growth

Question #2: What are the major barriers to implementing the key strategies and achieving the goal?

- School officials need a new paradigm for cultural diversity
- Limited private partnerships that connect to jobs
- Federal Government not supporting proven strategies; process of receiving grants eliminates Hispanic applicants
- Differences of opinion hinder unified solutions
- Voting citizens want flow of funds go to new schools instead of existing ones
- Need to change paradigm to massive infusion of resources into educational system
- Lack of appreciation of Hispanic cultural
- Need access to government grant information in a timely manner to apply
- Lack of strong administrative support for day-to-day teacher-student involvement
- Expectations are not consistent for Hispanic students
- Placing least trained people in areas where the need is most
- Ineffective use of existing resources
- Greater pay for teachers to teach bilingual education
- Teachers are not aware of cultural context of students
- Teachers are not aware of test items that may place students at a disadvantage
- Low visibility of bi-cultural role models for students
- Limited time is given for students to reach standards

Question #3: What key actors and resources need to be involved in order to surmount the barriers and reach the goal?

- Solicit more private partnerships for the high schools that connect to job training
- Higher educational partnerships that focus on bilingual students
- National Association of Secondary School Principals, Teacher Unions, National School Board Association, and Parent Associations needs to stimulate staff development strategy sessions to enhance their member's awareness of inclusion and achievement for Hispanic students
- Create websites that provide a method of sharing instructional strategies and are sponsored/monitored by national educational organizations
- Teachers need to be trained to teach bilingual students
- School administration needs to use existing resources more effectively
- Increase the use of bi-lingual role-models for students

- Increase the pay for teachers who participate in bilingual staff development and become fluent in Spanish

Overview

The session was spirited and informative. Participants expressed deep concerns and possible solutions from their diverse professional and personal experiences. It became clear, that some educational issues varied in their importance geographically, for Hispanic students. These variables depended on:

1. the location's experience around bilingual education issues
2. level of parent and community involvement
3. awareness of elected civic and school officials
4. experiences with acquiring and effectively using funds,
5. providing appropriate staff development, and
6. measuring achievement for all students.

After the session, David Driscoll and Thomas Bryant, Jr. summarized our ideas for him to present to the President.

In conclusion, the participants agreed that there should be a follow-up session to "fine tune" this information for possible program design and implementation.

Hispanic Education Conference
June 16, 2000
Improving College Figures for Hispanics

Participants:

John Guerra	Juliet Garcia	Gustavo Roig	Cha Guzman (chairwoman)
Laura Rendon	Ana Fernandez-Haar	Tom Rivera	Frank G. Reyes
Victor Vasquez	Manuel Oliveres	Arturo Vargas	Charles Vela
Margarita Benitez	Carlos Rodriguez	Frankie Santos	Norma Cantu
George Munoz			

KEY ISSUES

1. Preparation for college
 2. Associate degree attainment
 3. Cooperation between community colleges and four year institutions
 4. College Retention
 5. Role of Hispanic Serving Institutions
 6. Advanced degrees
 7. Student Financial Aid
 8. Digital divide
 9. Undocumented students
 10. Legislative advocacy
- Meeting opens with congratulatory remarks by chairwoman. Introduction of panel of four. She is a senior advisor to Sec. Riley.
 - Issues that will be discussed were described in brief form via visualization: Imagine if non-whites had the same graduation rate from college as whites. In 1962, only 1.6% of given doctorates were going to Hispanics; Since then, the figure has only meagerly risen to 3.2%.
 - In fact, 1/3 of given doctorates go to foreigners.
 - These poor education statistics mean more than just some qualitative issue. These numbers mean a real loss in GNP. If Hispanic-Americans had the same education statistics as whites, \$118 billion would be added to GNP.
 - The future is more Hispanic and more female. CA will be the first state to have a minority majority, but will be followed shortly by FL and TX.
 - This growing population of students is a greater burden than the current higher education systems

in these states can handle. Unfortunately, they will probably follow the same path as the 1980s: In this period instead of increasing the number of schools the education system simply made it harder to access education.

- Instead of investing in more schools, states are building more prisons.
- There are three options for “our children”: Education, Welfare, and Jail.
- Often left out is the military. This organization can provide access to higher education and skills training which are valuable in our community.
- The new economy complicates this scenario. The new information workforce age has left the Hispanic population lagging behind. Hispanics are under-qualified for over 74% of these new jobs.
- Also to note is the Digital Divide. Simply put, the limited access to increasingly advanced technology will serve as a great obstacle to the Hispanic community advancing in a meaningful way.
- There are 195 Hispanic Serving Institutions in the USA. They are in 11 states and Puerto Rico.
- Gear Up focuses on the future. “Affirmative Action” for the 21st Century. This program focuses on need not race or ethnicity. Services everybody in a school or grade in Middle School or High School. It’s a partnership, more than a money grab/give. Seventh Grade is a key time for intervention. Higher expectations can develop into greater success.
- Funding is too limited for these programs. And, perhaps, these programs are too limited in their scope. What happens for the transition into college and the support needed during.
- Approximately 50% of Hispanic-American youth are in 2-year college – Associate degree programs. This presents many issues. First off, these students are impeded because not all of those credits transfer to four-year institutions.
- Prior to Dr. Rendon’s work, little research was done on retention. College Retention is inherently tied to K – 12 by preparation.
- Focus on Ph.D. We need to not only double AA and BA degrees awarded to Hispanic-Americans, but also advanced degrees. Let us double the number of Ph.D. awarded to Hispanic-Americans. Of the 43,000 Ph.D. awarded each year in the U.S.A. only 93 go to

Hispanics. Foreign nationals earned more Ph.D. than all minority groups combined.

- Students who leave for a year without at least one continuing course are very unlikely to return to their studies. Part-time retention is very low.
- Many Hispanic youth are the first in their family to attend college are entering an environment that is too foreign. They require extra support to ensure their success.
- The current labor shortage in the U.S.A. in the high tech industries is being met with supplies of foreign nationals. The Hispanic youth can act as a domestic answer to this crisis.