

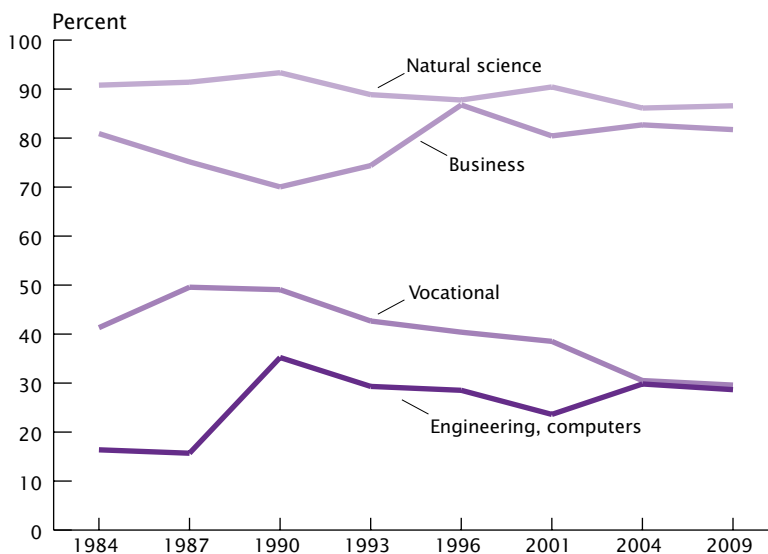
At the associate's, bachelor's, and advanced degree levels, people working in related occupations earned more than people working in unrelated occupations. For example, the median monthly earnings for adults with a bachelor's degree were \$4,750 for those working in related occupations and \$4,167 for those working in unrelated occupations. This payoff for working in a related occupation is also found for specific fields of training, including business, engineering and computer science, and the arts and sciences at the associate's, bachelor's, and advanced degree levels. There were not significant payoffs for working in a related occupation for education majors at any degree level.

At the vocational certificate level, only adults with degrees in engineering and computers earned more working in a related occupation than in an unrelated occupation.

DIFFERENCES BETWEEN MEN AND WOMEN

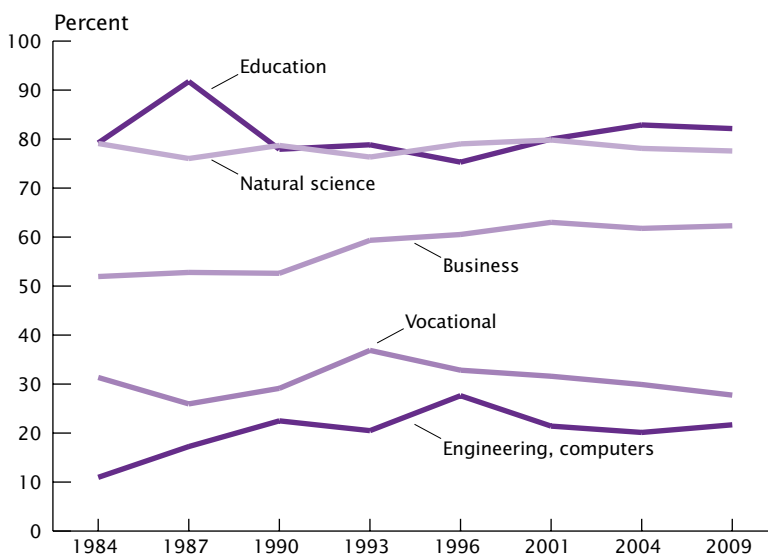
Over time, women and men have concentrated in different fields of training. In every panel between 1984 and 2009, a high proportion of adults with an education degree were women while a high proportion of adults with an engineering and computer science degree were men (Figures 4a–4d). In every panel between 1984 and 2009, women held 75 percent or more of associate's and bachelor's degrees in education and 60 percent or more of advanced degrees in education. In contrast, women held 25 percent or less of bachelor's and advanced degrees in engineering fields and less than 35 percent of associate's and vocational certificates in engineering during the same period.

Figure 4a.
Percentage Female for Selected Fields: 1984–2009
Vocational Certificate
(Population aged 18 and older with a vocational certificate)



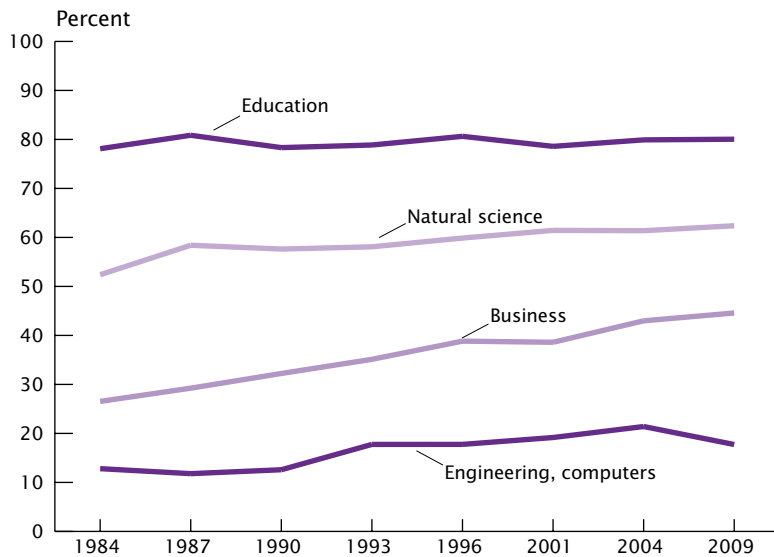
Note: Only selected fields displayed.
Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1987, 1990, 1993, 1996, 2001, 2004, and 2008 Panels.

Figure 4b.
Percentage Female for Selected Fields: 1984–2009
Associate's Degree
(Population aged 18 and older with an associate's degree)



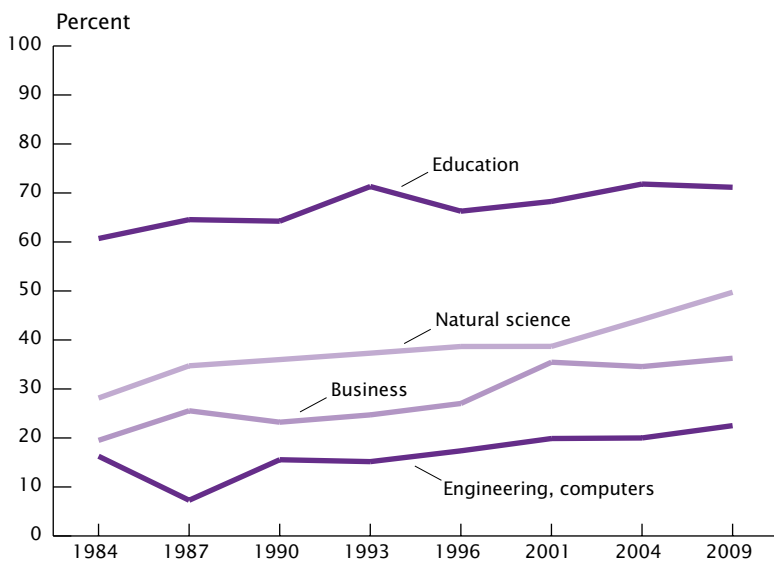
Note: Only selected fields displayed.
Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1987, 1990, 1993, 1996, 2001, 2004, and 2008 Panels.

Figure 4c.
Percentage Female for Selected Fields: 1984–2009
Bachelor's Degree
 (Population aged 18 and older with a bachelor's degree)



Note: Only selected fields displayed.
 Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1987, 1990, 1993, 1996, 2001, 2004, and 2008 Panels.

Figure 4d.
Percentage Female for Selected Fields: 1984–2009
Advanced Degree
 (Population aged 18 and older with an advanced degree)



Note: Only selected fields displayed.
 Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1987, 1990, 1993, 1996, 2001, 2004, and 2008 Panels.

The proportion of women in some fields grew from 1984 to 2009, with similar trends at the associate's, bachelor's, and advanced degree levels. For example, the proportion of women with a degree in business increased during this period for those with an associate's, bachelor's, and advanced degree.

At the vocational certificate level, women held around 80 percent of degrees in business at the beginning and end of this period, reflecting women's concentration in clerical occupations over time. Similarly, women held around 90 percent of vocational certificates in the natural sciences in 1984 and 87 percent of these certificates in 2009, reflecting women's continued concentration in the field of nursing.¹¹

In 2009, men continued to earn more than women. Men's overall median monthly earnings were \$3,750 and women's earnings were \$2,917 (Table 8). Women earned less per month than men at every degree level. For example, at the advanced degree level, women's median monthly earnings were \$5,000 while men's were \$6,667. Furthermore, women earned less than men in most fields of training, including business and education. However, in the natural sciences, men's and women's median monthly earnings did not significantly differ at the associate's and bachelor's degree levels, while women earned significantly less than men at the advanced degree level. Therefore, women with degrees in a natural science field have reduced the earnings gap at the associate's and bachelor's degree levels but still lag behind men at the advanced degree level. Women still earn considerably less

¹¹ The change from 90 percent to 87 percent is not statistically different.

than men, and any overall improvement is likely due to their increased relative levels of educational attainment.¹²

HIGH SCHOOL EQUIVALENCY

Further disparities in educational and occupational outcomes exist by mode of high school completion. There are several avenues for high school completion, including earning a traditional high school diploma or passing the GED test. Most states and many federal programs consider the GED to be formally equivalent to a high school diploma. In recent years, almost 800,000 people have taken at least part of the GED exam each year, with the majority passing and receiving certification.¹³

In 2009, 16.9 million adults with a high school certification completed it via a GED (Table 9). While 73 percent of those who received a high school diploma went on to complete at least some postsecondary education, less than half (43 percent) of GED recipients pursued postsecondary schooling. Only 5 percent earned a bachelor's degree or higher. In contrast, of high school diploma holders, 33 percent earned a bachelor's degree or higher.

GED holders earned less than high school diploma recipients at all education levels and across sex, race and ethnicity, and age. Overall, high school diploma holders earned approximately \$4,700 in mean monthly earnings compared with GED holders who earned \$3,100. This difference in earnings is only

¹² See Sarah Crissey, *Educational Attainment in the United States: 2007*, Current Population Reports, P20-560, Washington, DC, U.S. Census Bureau, 2009.

¹³ See American Council on Education, *The 2009 GED Testing Program Statistical Report*, Washington, DC, American Council on Education, 2010.

Table 8.

Median Monthly Earnings by Educational Attainment, Sex, and Field of Training Among the Population Aged 18 and Older With Earnings: 2009

(Earnings in dollars. Earners have been employed full-time for the 4 months before the survey)

Level and field	Median earnings	
	Men	Women
Total	3,750	*2,917
Vocational certificate	3,464	*2,468
Business	3,168	*2,678
Computers	3,507	*2,631
Engineering	4,000	(B)
Social science	(B)	(B)
Natural science	3,000	*2,417
Education	(B)	(B)
Vocational studies	3,464	*2,097
Other	3,583	*2,400
Associate's degree	4,000	*3,048
Business	4,000	*2,808
Computers	4,167	(B)
Engineering	4,273	(B)
Liberal arts	4,155	*2,750
Social science	3,933	(B)
Natural science	3,528	3,500
Education	(B)	2,511
Vocational studies	3,500	(B)
Other	4,250	*3,000
Bachelor's degree	5,117	*3,750
Business	5,000	*4,000
Computers	5,833	4,900
Engineering	6,250	(B)
Liberal arts	4,600	*3,599
Social science	4,314	3,417
Natural science	4,583	4,200
Education	3,984	*3,333
Other	5,000	*4,000
Advanced degree	6,667	*5,000
Business	7,250	*5,833
Computers	8,333	(B)
Engineering	7,794	(B)
Liberal arts	5,000	4,500
Social science	7,416	*5,400
Natural science	8,334	*5,724
Education	5,167	*4,642
Other	6,250	*5,000

(B) Base <200,000.

* Denotes significant difference at the .10 level.

Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008.

Table 9.

Pathways to High School Completion and Characteristics of GED and High School Diploma Holders Among the Population Aged 18 and Older: 2009

(Numbers in thousands. Earnings in dollars. Earners have been employed full-time for the 4 months before the survey)

Characteristic	GED holders			High school diploma holders		
	Number	Percent	Mean monthly earnings	Number	Percent	Mean monthly earnings
Total	16,885	100	3,149	177,181	100	4,690
Education						
High school completion	9,669	57.3	2,922	48,210	27.2	3,222
Some college	6,409	38.0	3,192	70,146	39.6	3,794
Bachelor's degree or higher	807	4.8	4,852	58,825	33.2	6,305
Sex						
Male	8,775	52.0	3,481	84,133	47.5	5,439
Female	8,111	48.0	2,672	93,048	52.5	3,770
Race and Hispanic Origin						
White	13,296	78.7	3,160	145,644	82.2	4,837
White, non-Hispanic	10,784	63.9	3,315	130,501	73.7	5,009
Black	2,336	13.8	2,729	19,419	11.0	3,579
Hispanic (any race)	2,850	16.9	2,659	16,603	9.4	3,487
Age						
18 to 29 years	3,882	23.0	2,496	38,069	21.5	3,088
30 to 49 years	6,525	38.6	3,317	66,698	37.6	4,957
50 years and older	6,479	38.4	3,316	72,414	40.9	5,210

Note: Table excludes those with some college or more but no recorded high school completion.

Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008.

partly due to the lower levels of educational attainment of those who earned a GED rather than a high school diploma. Among adults who attained a bachelor's degree or higher, the mean earnings of those who earned a high school diploma were approximately \$6,300 while the earnings of those who earned a GED were approximately \$4,900.

TIME SPENT COMPLETING DEGREES

The process of earning a postsecondary degree is lengthy, and people on average took longer than the target number of years to complete a degree or certificate. On average, people completed vocational certificates (typically 1-year programs) in slightly less than 2 years and took over 4 years to complete associate's degrees, which are typically 2-year programs (Figure 5). People spent

over 5 years earning bachelor's and advanced degrees.¹⁴ People spent the longest amount of time completing doctorate degrees, in an average of 9.3 years.¹⁵ People often take longer than the target amount of time to complete a degree when they take time off or enroll part-time in order to balance work, family, and other responsibilities.

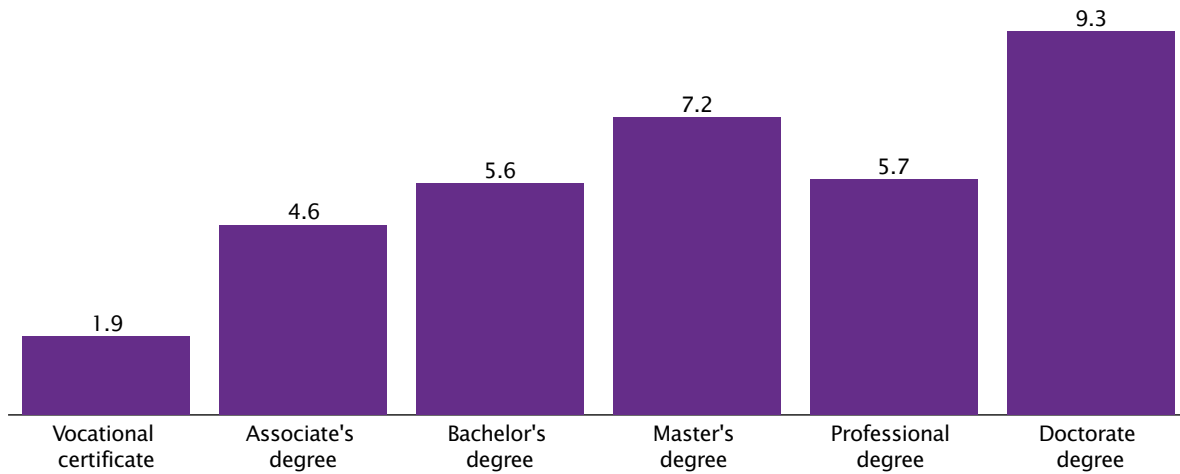
¹⁴ For additional information on the number of adults who completed bachelor's degrees in 4 years or less, please see the detailed tables for "What It's Worth: Field of Training and Economic Status in 2009" available on the Census Bureau's Web site at <www.census.gov/hhes/socdemo/education/data/sipp/index.html>.

¹⁵ The years taken to complete advanced degrees are measured as the number of years between bachelor's degree completion and advanced degree completion. Therefore, the mean of 7 years taken to complete master's degrees also reflects adults who worked for several years after completing their undergraduate degrees before returning to school to earn a master's degree.

ACCURACY OF THE DATA

Statistics from surveys are subject to sampling and nonsampling error. All comparisons presented in this report have taken sampling error into account and are statistically significant at the 90 percent confidence level unless otherwise noted. This means the 90 percent confidence interval for the difference between the estimates being compared does not include zero. Nonsampling errors in surveys may be attributed to a variety of sources, such as how the survey is designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately the answers are coded and classified. The U.S. Census Bureau employs quality control procedures throughout the production process, including the overall design of

Figure 5.
Mean Years to Complete Postsecondary Certification and Degrees: 2009
 (In years. Population aged 18 and older with a postsecondary degree)



Note: Years to completion measured as years from start of postsecondary education to degree for vocational, associate's, and bachelor's degrees, and as years from bachelor's degree to graduate degree completion for advanced degrees.
 Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel.

surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports to minimize these errors.

The SIPP weighting procedure uses ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.

For further information on statistical standards and the computation and use of standard errors, go to www.census.gov/sipp/source.html or contact Evan Wong of the Census Bureau's Demographic Statistical Methods Division via e-mail at Evan.Wong@census.gov.

MORE INFORMATION

A detailed set of tables has been prepared showing income, earnings, occupation, and time to degree by highest degree, field of training, and various social and demographic characteristics. The table package is available on the Census Bureau's Web site at www.census.gov/hhes/socdemo/education/data/sipp/index.html.

See also these SIPP Web sites for additional information:

SIPP Home Page:
www.census.gov/sipp/

SIPP Quality Profile:
www.census.gov/sipp/workpaper/wp230.pdf

SIPP User's Guide:
www.census.gov/sipp/usrguide.html

CONTACTS

Contact the U.S. Census Bureau Customer Services Center at 1-800-923-8282 (toll free) or visit ask.census.gov for further information.

For additional questions or comments, contact Stephanie Ewert at 301-763-2464 or via e-mail at Stephanie.Ewert@census.gov.

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