

What is the Value of an Education?

by Rene Cantu

Education is defined as acquiring skills. There are many different ways to be educated and many subjects that can be studied. School is not the only place or setting in which we can learn or get an education. For some families, it means graduating from high school; others believe an education means receiving a bachelor's degree or certification from a good trade school. While there are many ways to define an education, most people agree that the more education a person achieves, the higher their wages, generally speaking. Has this changed in the last 10 years? If so, how much of a contrast in pay is there? What other aspects of employment are impacted by receiving an education? This article will attempt to answer these questions as well as provide further evidence of the importance of an education in today's economy. An education has always been important and now it is more valuable than ever. As we move into the 21st century, the economic rewards of an education remain as important to a person's economic success as it is to their employment success. The background for this article is provided by the 2002 American Community Survey (ACS) as well as other information related to educational attainment from the U.S. Census Bureau. It will examine and analyze information that continues to support the correlation between educational attainment and future employment success.

According to the ACS, approximately 83 percent of people aged 25-years and over had at least obtained a high school diploma (high school education or more), and 26 percent had earned a bachelor's degree or higher in 2002 (see figure 1). This is up from 20 percent in 1990. This is important because typically, wages tend to increase as educational attainment increases. Figure 2 demonstrates this point for the ten-year period 1991 to 2001. For each year during this period, median wages in the United States increased with educational attainment. There was a significant difference between the income of a high school graduate and someone who had a bachelor's degree or higher. The lowest wages for this decade were for individuals with some high school and no degree. The highest wages throughout the

decade were for individuals who had attained a professional degree. The educational levels whose median wages were the closest were Professional and Doctorate degrees. In fact, their median wages were the same in 1994.

Generally, median wages increased for all educational levels between 1991 and 2001. In addition, median wages rose more over the period as the level of education increased. Wages for individuals with a high school diploma or some high school increased nearly \$6,000 during this period. Wages for those with associate degrees and bachelor's degrees increased by \$19,000 during this period. Wages for individuals with master's degrees and higher increased between \$22,000 and \$23,000 from 1991 to 2001. Once again, the level of education directly impacts a person's potential to earn more money. Not only does someone with an advanced degree make more money at the beginning of their career, but the degree to which their wages increase is greater.

Figure 2

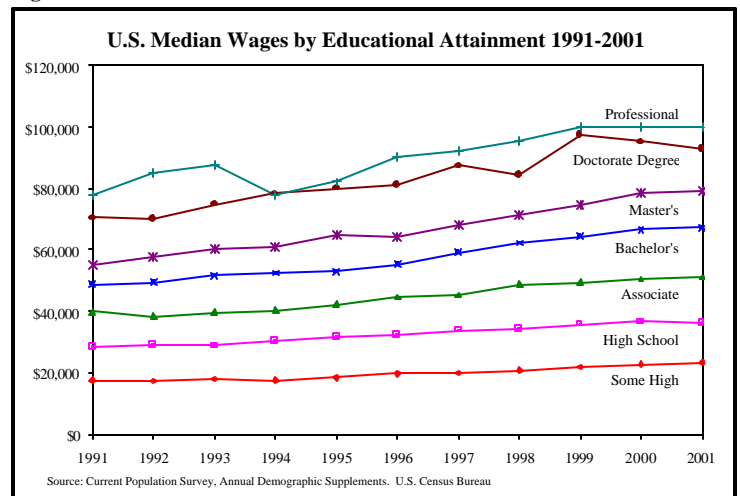
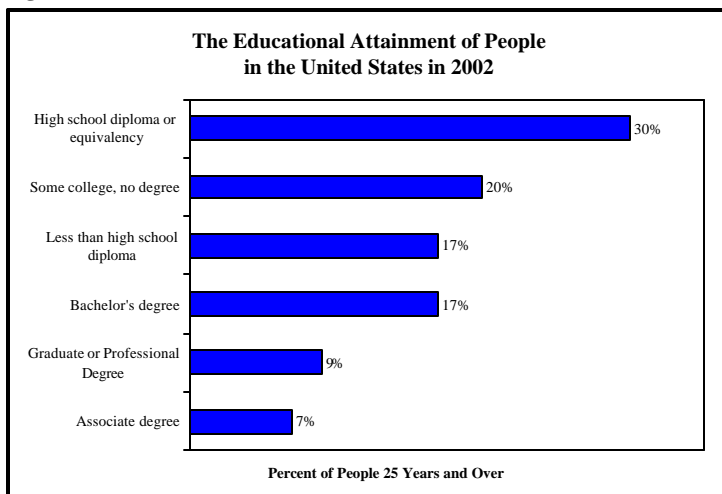


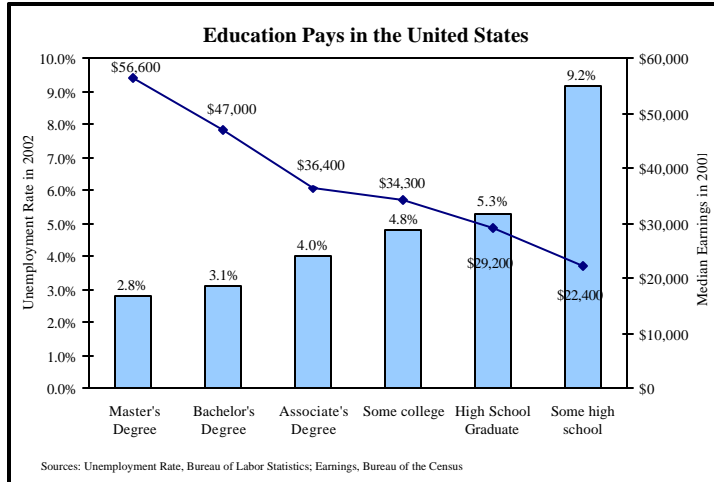
Figure 1



While median pay may be enough of an incentive for most people to seek more education, for others, job security may be more enticing. Figure 3 shows the median income and unemployment rate by education level. The 2001 median wage for someone with some high school is less than half of the median pay of someone with a master's degree. The median pay for a bachelor's degree is more than double that of someone without a high school diploma and almost \$18,000 more than someone with a high school diploma - further proof that income typically increases with education. The more noteworthy statistic is the fact that the less education a person receives, the more likely they will be unemployed. While more education does not guarantee employment, the higher the education level, the more competitive a person will be in the job market. Figure 3 shows that there may be a correlation between education and employment. This would make sense since the occupations that require on-the-job training are typically high-turnover jobs. The Bureau of Labor Statistics (BLS) defines short-term on-the-job training as skills that can be acquired during a short demonstration of job duties or during one month or less of on-the-job experience or instruction. Examples of occupations that require short-term on-the-job training are Cashiers, Fast Food Cooks, Dishwashers, and File Clerks. The most telling

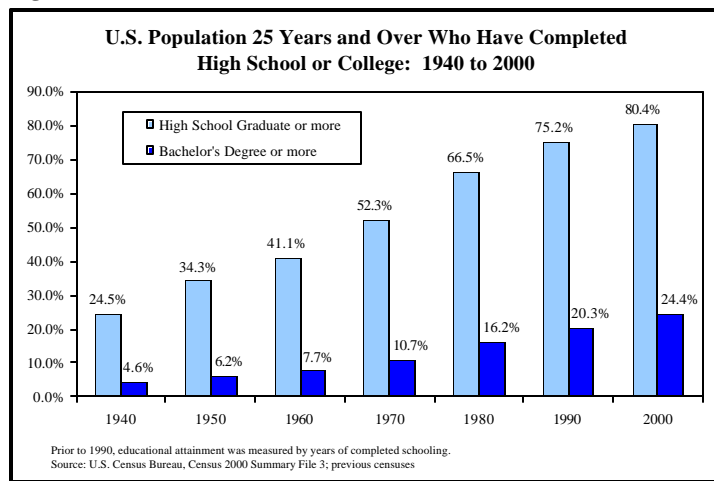
statistic is that unemployment rate for someone without a high school diploma is almost twice as high as someone with a high school diploma. The unemployment rate of someone with an associate's degree is less than half of someone without a high school diploma. The unemployment rate decreases with education. As stated before, education does not guarantee employment, but the picture that Figure 3 paints is compelling.

Figure 3



As Figure 4 shows people in the United States are staying in school. Since 1940, the percent of people graduating from high school has been increasing by approximately 10 percent each decade. The largest increase occurred between 1970 and 1980 when the percent of high school graduates grew from 52.3 percent to 66.5 percent. From 1940 to 1970, the percent of high school graduates more than doubled from 24.5 percent to 52.3 percent. The percent of individuals receiving bachelor's degrees also increased every decade over the period. From 1940 to 1970, the percentage of people receiving bachelor's degrees

Figure 4



or higher doubled from 4.6 percent to 10.7 percent. From 1970 to 2000, the percentage of people receiving a bachelor's degree or higher more than doubled from 10.7 percent to 24.4 percent.

Education in the United States appears to be at an all time high. As the economic rewards of an education continue to increase, so will the number of people seeking those rewards. As the job market has become more competitive with each passing decade, the number of people with bachelor's degrees or higher has increased. This bodes well for the U.S. labor force and the employers who are looking for educated employees to fill ever increasingly technical positions.

While it is generally understood that there is a positive correlation between education and earnings, Table 5 shows the difference education can make to lifetime earnings. It is easy to see the difference more education makes in annual and hourly wages, but the difference in lifetime earnings is even more dramatic. The table considers a full-time worker will average 83,200 hours in a lifetime of work (40 hours a week x 52 weeks = 2,080 hours per year x 40 years, the average work life). This chart is important because it shows the difference in lifetime earnings by levels of education. Someone with a Bachelor's degree will make \$711,280 more over their lifetime than an individual with a high school diploma.

Figure 5

Lifetime Earnings By Education in the United States

Education Level	Estimated Lifetime Hours	2001 Hourly Earnings*	Estimated Work Life Earnings
Less than 9th Grade	83,200	\$9.46	\$787,400
9th to 12th non grad	83,200	\$10.75	\$894,000
High School Grad	83,200	\$14.03	\$1,167,480
Some College No degree	83,200	\$16.51	\$1,373,600
Associate Degree	83,200	\$17.50	\$1,455,960
Bachelor's Degree	83,200	\$22.58	\$1,878,760
Master's Degree	83,200	\$27.21	\$2,263,560
Professional Degree	83,200	\$39.63	\$3,296,840
Doctorate Degree	83,200	\$36.15	\$3,007,280

Source: 2002 Current Population Survey

*Divided annual median earnings by 2080 hours.

To summarize, available data shows that over the last several decades, more and more people have sought higher levels of education. There are many reasons for this, including better job opportunities, higher wages, greater job security, and a sense of accomplishment. We have seen that over the last ten years, people with more education generally have earned higher median wages. Individuals who do not seek more education or training are typically paid less and have a higher unemployment rate. While an education is a big investment in time and money, this investment indeed pays off in the long run.

The information for this article is available on the U.S. Census Bureau website: <http://www.census.gov/>. The statistics are a result of Census 2000 and the 2002 American Community Survey.