

## **Invest in Education**

By Scott Niederjohn

### **Education as Human Capital**

Investment takes many forms. One form is the development of human capital—the knowledge, skills, health, and values that individuals possess. People develop their human capital through formal and informal education. To obtain education, people give up something in the short run (time, effort, or money, for example) in order to gain larger returns (such as a good job) in the future. This sort of exchange—giving up something now in order to realize gains later—is true of all investment behavior, whether it involves putting money into a mutual fund or putting resources into education.

There are many ways for you to invest in your own human capital. These ways certainly include formal education (like earning a bachelor's or master's degree from a college or university). Other ways of increasing human capital include work experience, on-the-job training, specialized training courses, and certifications in specific areas. By undertaking any of these activities, you can increase your human capital and your productivity. Increases in human capital are generally associated with higher incomes. The possibility of earning a higher income acts as an incentive that causes many people to pursue higher education.

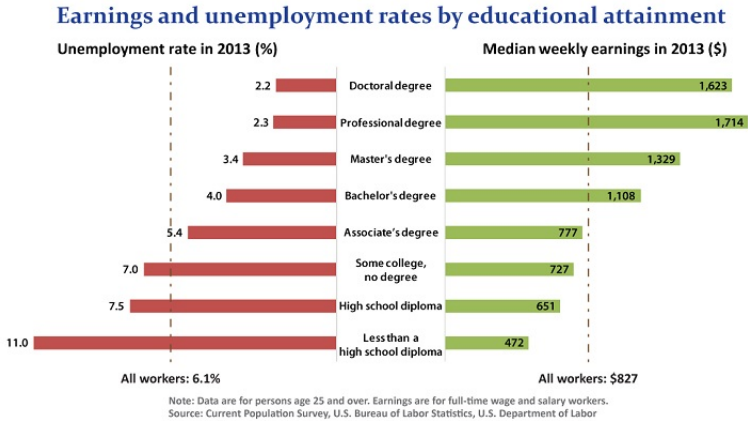
### **Education and Earnings**

The relationship between educational attainment, earnings, and the unemployment rate is strong, as demonstrated by Exhibit 1. Those with a bachelor's degree can expect to earn almost \$24,000 per year more than those with a high school diploma. This translates into more than a million dollars over the course of an average person's working life. In addition, college graduates experience lower unemployment. The unemployment advantage is

## Invest in Education

almost four percentage points relative to high school graduates and seven points relative to those who do not complete high school.

Exhibit 1: Earnings and Unemployment Rates by Educational Attainment



Source: Current Population Survey, U.S. Bureau of Labor Statistics, U.S. Department of Labor, available online: [http://www.bls.gov/emp/ep\\_chart\\_001.htm](http://www.bls.gov/emp/ep_chart_001.htm). Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

### Determining “the right” next steps in your future education

As the prior section pointed out, there is a clear link between education and earnings. Those that achieve higher levels of educational attainment, on average, earn more income over their careers and experience fewer episodes of unemployment. However, let’s take a step back as you consider whether college is the right choice.

Throughout most students’ years of schooling, they hear about the benefits of education—and particularly college education—from their teachers, parents, guidance counselors,

## Invest in Education

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family, friends, and other adults who care about them. These adults understand this relationship between earnings and education, and therefore are trying to provide useful advice to students. However, while it is true that a four-year college degree is valuable for many students, it isn't necessarily the best choice for every student.

The decision to pursue higher education is an important one. The direct costs of tuition, books, and living expenses in college can be high; however, the time (or opportunity cost) associated with full-time study after high school also represents a significant and real cost. These costs raise the stakes of this decision and add to the importance of making a good choice about your education.

As the next section explains, there are many options for further education after high school. Two year, four year, and career colleges are all examples. Nearly all high school students (academically excellent, average, or poor) can likely find a four-year college willing to accept them. However, keep in mind that if you have generally been an academically poor-performing high school student and did not enjoy your classes, you are likely to be a poor college student and not enjoy those classes either. The difference, of course, is that the college courses come at a high cost in both tuition and time. A worst case scenario is that a student spends a couple of years' worth of tuition and time on college and then drops out without a diploma. Your earnings will not be increased much by this decision and you will have foregone valuable time in the process. According to the Department of Education, the average four-year graduation rate at American colleges and universities is under forty percent and it only rises to about fifty eight percent after six years.

It is important to be realistic with yourself. If college is not for you and you know it, it can nonetheless be hard to resist the pressure from friends and parents to attend. Keep in mind that there are other options. It might make sense to enter a trade or apprenticeship program, join the military, begin a career, or think about starting a small business. One final point to consider: Life is

## Invest in Education

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not a ranking in which people with the most education are somehow the “best.” If you bring an aptitude for making cars run like new, then being a great mechanic is a major contribution to your fellow men and women—and the marketplace will reward you with a good salary. As *Common Sense Economics* (Part 4: Element 1) says: “Discover your comparative advantage.”

### Types of Higher Educational Institutions

There are a number of different kinds of colleges and universities that operate in the United States. The differences across categories are important:

*Public vs. Private Schools:* Public schools are operated or funded by state and local governments. Private schools are not affiliated with a government organization. They may be nonprofit colleges, such as those run by private foundations or religious denominations. Or, they may be for-profit businesses, such as many career, online, or technical schools.

Since private schools receive less (or no) money from state and local governments, they usually charge the same tuition whether you live in or outside of the state. This cost is often higher than the cost of attending a public school in your state.

Because costs can vary significantly from school to school, you should make sure to research the schools in which you are interested. Any school that participates in the federal student aid programs is required to provide information on the cost of attendance on its website.

*Four-year Colleges and Universities:* Students who attend a four-year college or university typically earn a bachelor’s degree once they have successfully completed a program of study, which usually takes about four years.

A college usually offers a four-year bachelor’s degree in the arts (such as English, history, drama) or sciences (such as biology, computer science, and engineering). Some colleges also offer

## Invest in Education

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advanced degrees, such as a master's or other graduate degree, after you have earned your bachelor's degree.

Universities offer bachelor's, master's, and doctorate degrees, and sometimes have professional schools such as a law school or medical school. Universities tend to be larger than colleges, may have larger class sizes, and often focus on scholarly or scientific research.

*Two-year Colleges (Community and Junior Colleges):* Community colleges and junior colleges award associate degrees to students who successfully complete a two-year course of study. Some two-year colleges grant diplomas or certificates of completion to students who are ready to practice in their career fields, such as nursing. Community and junior colleges are similar, except that a junior college is often a private school.

Because costs are often lower and admission is more open at two-year colleges, many students begin their college careers here. If you plan to start at a community or junior college and later transfer to a four-year college, you should make sure your community college courses will transfer to those colleges you are interested in and that your courses will count toward your bachelor's degree. Many community colleges have "articulation agreements" with four-year colleges under which the course work taken at the community college transfers into the four-year degree program. Be sure to ask about the types of articulation agreements the community college has, with whom, and for what programs of study.

*Career schools:* Career schools, also known as technical, vocational, or trade schools may be public or private, although many are for-profit businesses; they typically offer programs that are two years or less, and provide students with formal classes and hands-on experience related to their future career interests, from welding to cosmetology to medical imaging.

Technical schools teach the science behind the occupation, while vocational schools focus on hands-on application of skills

## Invest in Education

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needed to do the job. You may earn a diploma or a certificate, prepare for a licensing exam, or study to begin work as an apprentice or journeyman in a skilled trade at one of these institutions.

### **Paying for Education: The Financial Aid Process**

Higher education in the United States is expensive and costs in this sector have risen much faster than the rate of inflation in recent years. In addition, the actual price students pay for colleges or universities varies and most students do not pay the “sticker price” that is advertised in university brochures. Instead they pay the “net price,” defined as cost of attendance minus grant and scholarship aid. All schools that receive federal student aid are required to include a net price calculator on their website. This calculator estimates the net price a student will pay, based on school data and on what similar students paid in a previous year.

The first step in the financial aid process involves filling out the FAFSA, a form that will be required from each school you are interested in attending. Using FAFSA information, the government determines your level of “need,” defined as the total cost of attendance not covered by the family’s expected contribution or outside grants and scholarships. A Student Aid Report (SAR) tells you how much aid you are eligible to receive and from where the aid will come. The FAFSA can be completed in paper form and then mailed in, or completed online at <https://fafsa.ed.gov/>.

Whether you are eligible for certain financial aid awards will be determined from your FAFSA by your intended college’s financial aid administrator. That financial aid administrator will be the best source of information for you if you have questions specific to your aid package or about a campus-based award program.

### Grants and Loans

Students can help finance their college tuition costs through a number of ways. Grants and scholarships are an important source of money and need not be repaid. Most colleges and universities award both need- and merit-based scholarships. Students can also consider loans for college or work-study opportunities. A list of the most popular federal grant and loan programs is presented below.

- *Federal Pell Grants:* Federal Pell Grants are the most popular federal grant program. Your eligibility is determined based on the results of your FAFSA, and you must prove a high level of financial need to be considered for the award. While the grants are typically given to undergraduate students, those pursuing certain teaching programs at the post-undergraduate level may also be eligible.
- *Campus-Based Aid Programs:* Campus-based aid programs are administered directly by the financial aid office of your intended college. Federal programs such as the Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loan, and Federal Work-Study programs are considered campus-based aid programs because those awards are disbursed by college financial aid administrators at participating schools. Your eligibility for this funding will be determined by the results of your FAFSA and not all schools offer these programs.
- *Federal Stafford Loans:* Federal Stafford Loans are the most popular student loans guaranteed by the federal government because of the low interest rates they offer and their flexible repayment options. The loan may be subsidized or unsubsidized. Subsidized loans are awarded based on financial need, and the government pays the interest while the student is in school, in deferment, and during the grace period before repayment begins.

## Invest in Education

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Unsubsidized loans are not awarded based on income, and the borrower is responsible for any interest accrued while the student is in school, in deferment, and during the grace period before repayment begins.

Taking out a student loan is a serious and potentially high-cost decision. There is an important difference between student loans and other loans (such as for a car or a house): filing for bankruptcy does not remove your obligation to repay a student loan.

### **Researching Colleges, Universities, and Degree Programs**

Due to the high cost of higher education, it makes sense to do a significant amount of research before choosing a school. Net price is important, but prospective students should also look at graduation rates (to assess their own chances of finishing a degree) and accreditation status (to judge how independent agencies rate a school's programs). Many other characteristics such as enrollment, financial aid, admissions, retention and graduation rates, majors, and athletic programs can be found on this website provided by the National Center for Education Statistics: <http://nces.ed.gov/collegenavigator/>.

Further, students need to carefully consider their choice of major. This is particularly true when student loans are involved. Borrowing heavily to acquire a degree in a high-paying occupation like engineering, medicine, or law may make economic sense; however, such debt is less likely to be prudent should the student choose to pursue less lucrative areas such as the liberal arts.

Potential salaries in different fields of study are also important to research. As an example, a recent survey by the National Association of Colleges and Employers found that for 2013 college graduates, eight of the top ten best paying majors were engineering related. The same survey reports the following salary data (Exhibit 2) by broad area of study.



## Invest in Education

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### Exhibit 2: Salary Data by Area of Study

<u>Broad Area of Study</u>	<u>2013 Average Starting Salary</u>
Engineering	\$62,100
Computer Science	\$58,500
Business	\$55,600
Communications	\$43,800
Math and Sciences	\$42,700
Education	\$40,300
Humanities and Social Services	\$37,800

Source: National Association of Colleges and Employers, NACE Salary Survey. <http://www.naceweb.org/salary-survey-data>

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