Education Pays presents detailed evidence of the private and public benefits of higher education. It also sheds light on the distribution of these benefits by examining both the increases and the persistent disparities in college participation and completion.

In the three years since we published Education Pays 2007, median earnings for four-year college graduates have increased more rapidly than those of high school graduates. The 2.3 percentage point difference between the unemployment rates for high school graduates and bachelor's degree recipients we reported for 2006 increased to 5.1 percentage points in 2009. Yet, questions have intensified about whether going to college is worthwhile, and whether it is appropriate to encourage young people who are on the fence about continuing their education after high school to attend college.

It is both reasonable and constructive to ask whether and for whom the expense of postsecondary education is a good investment. Published college tuition rates have been rising rapidly, but many students receive grant aid that helps them pay these prices. Comparing the median cumulative earnings of high school graduates to those of college graduates, we find that by about age 33 — after 11 years of work — higher earnings compensate not only for four years out of the labor force, but also for average tuition and fee payments at a public four-year university funded fully by student loans. The earnings of associate degree recipients lead to a crossover at about the same age — after more years of work despite the lower tuition payments — because of the smaller earnings premium. Modifying the assumptions underlying these calculations might slightly lengthen or shorten the time required to make up the investment. The key point is that for the typical student, the investment pays off very well over the course of a lifetime — even considering the expense.

Perhaps even more important, increased earnings are by no means the only positive outcome of higher education. The knowledge, fulfillment, self-awareness, and broadening of horizons associated with education transform the lives of students and of those with whom they live and work. The difficulty in quantifying these outcomes or translating them into dollars and cents should not lead us to neglect these contributions from higher education. Our society would become immeasurably poorer if financial pressures were to lead us to think of higher education as synonymous with job training.

The following pages highlight the basic ideas supported by the data in Education Pays.

Evidence vs. Anecdote

Too often, colorful anecdotes about individuals who have had unfortunate experiences capture the spotlight and lead to inaccurate generalizations about the dangers of making this major life investment. Journalists tell compelling stories of students who borrow large sums of money only to find that they are ill-equipped to complete their studies, or who graduate from college and are unable to find appropriate employment. It is no
The surprise that these stories exist; they are real and they are painful. But frequently, these stories are used to convey the notion that the costs of a postsecondary degree outweigh the benefits, and for most people this simply is not true. Although 14% of male high school graduates earned as much as or more than the median earnings of male four-year college graduates in 2008 ($65,800), 86% earned less. About 20% of male four-year college graduates earned less than the median earnings of high school graduates ($39,000), while 80% earned more. The unemployment rate for college graduates rose sharply, from 2.6% to 4.6%, between 2008 and 2009. But the unemployment rate for high school graduates rose from 5.7% to 9.7% at the same time. The data may not be as colorful as the anecdotes, but they tell a more realistic story. They also allow for a better understanding of which students and which circumstances are the most likely to create the stories of the outliers who attract so much attention.

The Benefits of Higher Education

- Individuals with higher levels of education earn more and are more likely than others to be employed.

The financial return associated with additional years of schooling beyond high school and the gaps in earnings by education level have increased over time.

- Federal, state, and local governments enjoy increased tax revenues from college graduates and spend less on income support programs for them, providing a direct financial return from investments in postsecondary education.

- College-educated adults are more likely than others to receive health insurance and pension benefits from their employers and to be satisfied with their jobs.

- Adults with higher levels of education are more engaged citizens than others.

- College education leads to healthier lifestyles, reducing health care costs for individuals and for society.

- College-educated parents engage in more educational activities with their children, who are better-prepared for school than other children.
College Completion

Another reason for doubts about the benefits of higher education is that increasing college enrollment rates over time have been accompanied by persistently low degree-completion rates, and the gaps in completion rates by family income, parental education level, and race/ethnicity are large. Unfortunately, this very real problem has led some observers to the unwarranted conclusion that people who do not have strong academic preparation, who do not have the required financial resources, or who are unfamiliar with the expectations and requirements of colleges and universities should not pursue postsecondary education.

Research tells us otherwise. Numerous economic analyses indicate that students whose demographic characteristics and academic experiences make them likely to hesitate to go to college stand to benefit the most from a postsecondary degree. The children of affluent — or even middle-class — college graduates who choose not to enroll in college have usually actively considered and rejected the option. But for too many low-income and first-generation students, financial and logistical barriers loom so large that the possibility never seems realistic. Many of these students, who would likely benefit from appropriate postsecondary educational opportunities, lack the information needed to make the best choices when they do enroll in college. Many enroll in colleges that are less selective and less challenging than those to which they would likely be admitted based on their academic qualifications, reducing the probability that they will earn bachelor’s degrees.

Although the payoff for earning a college credential is highest, the median return for each additional year of postsecondary schooling is significant, even for students who do not earn a degree. The solution is not to advise students to forgo college because they might not graduate. It is to provide better information and advice — and more generous financial support — that will increase their chances of success. And of primary importance, all students need and deserve higher-quality academic preparation before they reach the college decision stage.

Solid evidence indicates that our main focus should be on providing opportunities for postsecondary preparation and access, and on supporting more students in making choices that will allow them to maximize their postsecondary education success.
Participation and Success in Higher Education

- Although college enrollment rates continue to rise, large gaps persist across demographic groups.

![Postsecondary Enrollment Rates of Recent High School Graduates by Family Income, 1984–2008](chart)

*In 2008, 55% of high school graduates from the lowest-income families enrolled immediately in college, compared to 80% of those from the highest-income families.*

- Students from different family backgrounds tend to attend different types of institutions and have different enrollment patterns.
- College completion rates differ considerably by family income, parental education level, and type of institution attended.

Understanding the Evidence

Correlations between education levels and life experiences do not necessarily reveal causation and are best interpreted as providing broad-gauged evidence of the powerful role that higher education plays in the lives of individuals and in society. That said, a growing body of evidence points to the direct impact of higher education not only on specific job-related skills, but also on the attitudes and behavior patterns of students. Education enables people to better adapt to change. It also makes them more likely to take responsibility for their health, to take responsibility for the society in which they live, and to parent in ways that improve the prospects for their own children.

The evidence is overwhelming that higher education improves people’s lives, makes our economy more efficient, and contributes to a more equitable society. The existing gaps in participation and success are detrimental not only to individual lives, but also to society as a whole. Different paths are appropriate for different individuals, and our challenge is to make the most promising paths readily available to students from all backgrounds.