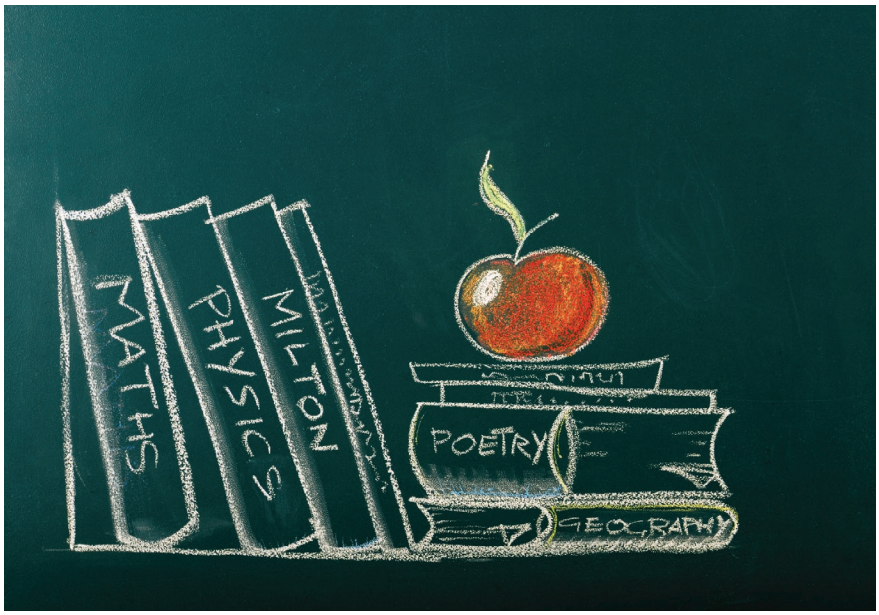
Making Smarter Decisions about Higher Education

Stephanie Owen and Isabel Sawhill
BROOKINGS INSTITUTION



Decisions about higher education are among the most important that young people make, but many students need better information if they are to match their choices to their aspirations.

For the past few decades, it has been widely argued that a college degree is a prerequisite to entering the middle class. On average, college graduates make significantly more money over their lifetimes than those with only a high school education.

However, the value of attending a four-year school depends on many factors, including institution attended, field of study, whether a student graduates, and postgraduation occupation. Many students—particularly lower-income students who are not knowledgeable about higher education—would benefit from more information about what is available and what they can expect from each of the options.

Variations in Educational Returns

The so-called *return to education* refers to the increase in earnings associated with additional schooling. The best economic research suggests that the return is 10 percent to 15 percent per extra year of education, which translates into hundreds of thousands of dollars over a lifetime for a four-year degree.[1]

Knowing that, on average, a college degree is a good investment can cause students to overlook important differences in what they can expect from college. The school you choose, what you major in, the field you work in after graduating—all affect your likelihood of employment and your future earnings. For example, psychology majors make only a little more than half of what engineering majors do over a lifetime.[2]

If you break down what college graduates earn by occupation, regardless of major, the differences are even more striking. The earnings premium for college graduates who go into architecture and engineering is 150 percent higher than the lifetime earnings of a high school graduate. For college graduates who work in service jobs, the premium is only about 25 percent.

The major that is chosen also affects the likelihood of finding a job. Though they don't get paid as well, education majors have an easier time finding work than architecture majors, experiencing an unemployment rate of 5.4 percent versus 13.9 percent in 2009–2010.[3]

3 Major Variations in Educational Returns

The school you choose, what you major in, the field you work in after graduating—all affect your likelihood of employment and your future earnings.

① Picking a Major

Psychology majors make half of what engineering majors do over a lifetime.

Picking the school Many low-income students don't realize that no matter how smart they are, choosing schools beneath their ability makes them less likely to do well.

Lifetime Earnings
of those who go into architecture and engineering are

150%

higher

than the lifetime earnings of a **high school graduate**

② Likelihood of Finding a Job

Education majors have an easier time finding work than architecture majors.

Unemployment Rate
in 2009–2010

5.4%	13.9%
Education majors	Architecture majors

③ Cost of Education

Research has shown an economic benefit to attending a more selective school, particularly for minority students and students whose parents have less education. Public institutions usually offer a higher return on investment than private ones, mostly because they cost less.

And research has shown an economic benefit to attending a more selective school, particularly for minority students and students whose parents have less education.[4] Public institutions usually offer a higher return on investment than private ones, mostly because they cost less.[5]

Comparisons of the returns by highest degree attained include only people who actually complete college. Students who fail to obtain a degree incur some or all of the costs of a bachelor's without the payoff. That has implications for inequalities of income and wealth. The students least likely to graduate—lower-income students—are also the most likely to take on debt to finance their education. Fewer than 60 percent of students entering four-year schools finish within six years, and among students whose families earn less than $32,000, fewer than half do.[6]

The more selective the school, the more likely it is to graduate its students. That is to be expected, but even within selectivity levels, there are wide differences in graduation rates. Students should look for a school with a good track record for their ability level.[7]

The Information Gap

Many low-income students don't realize that no matter how smart they are, choosing schools beneath their ability makes them less likely to do well and more likely to drop out.[8] Finding the right fit is essential but can be a struggle for poor families overwhelmed by choices.

Recent evidence by Caroline Hoxby of Stanford and Christopher Avery of Harvard shows that most high-achieving, low-income students never apply to the schools they are qualified to attend, where they would be eligible for generous financial aid.[9] There is clearly room for policies that improve the matching of students to schools.

Attaching strings to grant aid can improve college persistence and completion.

Solutions may be as simple as providing targeted brochures to bright low-income students.[10] Many such students forgo attending more selective schools because they are intimidated by high sticker prices. They frequently underestimate how much aid they are eligible for and fail to claim the tax incentives that would save money.[11] For families not familiar with the process, the financial-aid system is overwhelmingly complex.

Since 2009, the Obama administration has worked to simplify the form that families fill out to receive federal aid. It also has created a Financial Aid Shopping Sheet—a personalized letter designed to "help students better understand the type and amount of aid they qualify for and easily compare aid packages."[12]

The new College Scorecard is being developed to increase transparency in the application process. A prospective student can type in a college and learn its average net price, graduation rate, loan default rate, and median borrowed amount. The Department of Education will soon add information about the earnings of each school's graduates. A multidimensional search feature allows users to find schools by location, size, and degrees and majors offered. The Student Right to Know Before You Go Act also aims to expand the data available on costs and benefits of individual schools, as well as programs and majors.

Many low-income students don't realize that no matter how smart they are, choosing schools beneath their ability makes them less likely to do well.

Most recently, plans for a rating system to identify which colleges offer the best value were announced, with a school's rating intended to influence the federal dollars it receives. The ratings would consider the factors included on the College Scorecard, with a particular emphasis on low-income students. Developing a meaningful metric of college value won't be easy, but moving beyond the black box is a good step.

Ultimately, colleges need to improve graduation rates, particularly for lower-income students, who struggle most. Currently, the country spends over $100 billion on Pell Grants and federal loans, despite any evidence that the money leads to higher graduation rates. Research on programs like Georgia's HOPE scholarships or West Virginia's PROMISE scholarships suggests that attaching strings to grant aid can improve college persistence and completion.

A student with poor grades who is on the fence about enrolling in a four-year program may find the most bang for the buck in a vocationally oriented associate's degree or some career-specific technical training. Indeed, there are well-paid job openings going unfilled because employers can't find workers with skills accessible through training programs, apprenticeships, vocational certification, or associate's degrees.

Policymakers should encourage alternatives, focusing on high-demand occupations and high-growth sectors. If the default for many lower-achieving students were a career-focused training path rather than a path that involves dropping out of college, their job prospects might improve. After all, high schools organized around an occupational focus in partnership with local employers and col-

leges have been shown to increase wages, hours worked, and employment stability, particularly for men at high risk of dropping out.

§

Information about the monetary return to education is not a prescription. There are important benefits to certain schools, majors, and jobs that can't be measured in dollars. But students have the right to realistic expectations. The decision about what type of postsecondary education or training to pursue should be an informed one, based on the attributes of schools and the availability of financial aid, as well as individual preferences and strengths.

Stephanie Owen, *a research associate at the Urban Institute, worked on this study when a senior research assistant at the Washington-based Brookings Institution.* **Isabel Sawhill** *is a senior fellow and co-director of the Center on Children and Families at the Brookings Institution. Contact the authors at sowen@urban.org.*

Endnotes

[1] Philip Oreopoulos and Uros Petronijevic, "Making College Worth It: A Review of the Returns to Higher Education," *Future of Children* 23, no. 1 (2013).

[2] Tiffany Julian, "Work-Life Earnings by Field of Degree and Occupation for People with a Bachelor's Degree: 2011" (U.S. Census Bureau, 2012).

[3] Anthony P. Carnevale, Ban Cheah, and Jeff Strohl, "College Majors, Unemployment and Earnings: Not All College Degrees Are Created Equal" (Georgetown University Center for Education and the Workforce, Washington, DC, 2012).

[4] Stacy Dale and Alan B. Krueger, "Estimating the Return to College Selectivity over the Career Using Administrative Earnings Data" (working paper, National Bureau of Economic Research, Cambridge, Massachusetts, 2011); and Mark Hoekstra, "The Effect of Attending the Flagship State University on Earnings: A Discontinuity-Based Approach," *Review of Economics and Statistics* 91, no. 4 (2009).

[5] Mark Schneider, "Is College Worth the Investment?" (report, American Enterprise Institute, Washington, DC, 2010).

[6] Alexandria Walton Radford, et al., "Persistence and Attainment of 2003–2004 Beginning Postsecondary Students: After Six Years" (National Center for Education Statistics, 2010).

[7] Frederick M. Hess, et al., "Diplomas and Dropouts: Which Colleges Actually Graduate Their Students (and Which Don't)" (report, American Enterprise Institute, Washington, DC, 2009).

[8] William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public Universities* (Washington, DC: Princeton University Press, 2011).

[9] Caroline M. Hoxby and Christopher Avery, "The Missing 'One-Offs': The Hidden Supply of High-Achieving, Low-Income Students" (working paper, National Bureau of Economic Research, Cambridge, 2013).

[10] Caroline Hoxby and Sarah Turner, "Expanding College Opportunities for High-Achieving, Low-Income Students," (Stanford Institute for Economic Policy Research, Stanford, California, 2013).

[11] Susan Dynarski and Judith Scott-Clayton, "Financial Aid Policy: Lessons from Research," *Future of Children* 23, no. 1 (2013).

[12] See http://www.whitehouse.gov/issues/education/higher-education.