

# Do Elite Colleges Lead to Higher Salaries? Only for Some Professions

A diploma from a highly selective college means higher pay in certain fields. In others, it makes almost no difference at all



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For all the thought that families put into choosing a college, very often the decision is dominated by a simple line of reasoning: The more prestigious the school you attend, the higher your salary will be after you graduate.

So, they focus their efforts on getting their children into the best possible college they can afford, figuring that even if they're paying more tuition now, they're maximizing earnings down the road.

But that formula doesn't always hold true. And following it blindly can leave graduates burdened with much more debt than necessary when they get out of school.

We reached that conclusion after analyzing a survey of thousands of college graduates and looking at what they were making a decade after they got out of school. What we found: Diplomas from prestigious schools boost future earnings only in certain fields, while in other fields they simply don't make a difference.

Specifically, for business and other liberal-arts majors, the prestige of the school has a major impact on future earnings expectations. But for fields like science, technology, education and math, it largely doesn't matter whether students go to a prestigious, expensive school or a low-priced one—expected earnings turn out the same. So, families may be wasting money by chasing an expensive diploma in those fields.

The question of prestige and future pay is complicated in other ways, too. Students may not actually be able to get into their desired major at a prestigious school, for one thing, further undermining the value of their choice. And some who do land their major of choice may face other concerns: It may take them longer to graduate than another major would—or they may not graduate at all, which would limit or erase the hoped-for salary advantage.

## **When prestige matters**

In our study, we looked at about 7,300 college graduates 10 years after graduation. We divided their majors into several categories: business, engineering, science, social science, humanities, education and other. And we used three broad classifications for college type: selective, which covers elite schools and other highly competitive institutions; midtier; and less selective, which covers schools with open enrollment.

What we found startled us. For STEM-related majors, average earnings don't vary much among the college categories. For example, we find no statistically significant differences in average earnings for science majors between selective schools and either midtier or less-selective schools. Likewise, there's no significant earnings difference between engineering graduates from selective and less-selective colleges, and only a marginally significant difference between selective and midtier colleges.

What's going on? For potential employers, the skills students learn in these fields appear to trump prestige—possibly because curriculums are relatively standardized and there's a commonly accepted body of knowledge students must absorb. So, a student may not need to attend the best possible school to ensure a good salary after graduation. (It's important to note that we controlled for numerous other factors that might influence postgraduation earnings, such as family income, race/ethnicity, gender, marital status, SAT score, postgraduate degree and age at graduation and more.)

Our findings are crucial for families to understand because chasing a prestigious STEM degree can leave students burdened with huge amounts of unnecessary debt. Financial aid can certainly help, but for many

families, the cost of education can still differ dramatically across schools. For example, if an engineering student chose to attend the University of Pennsylvania instead of Texas A&M, the average starting salary would differ by less than \$1,000, but the tuition difference would be over \$167,000. At that slightly higher salary, you'd have to work for more than 150 years before you make up for that vast tuition difference.

## What You'll Earn

Top-ranked schools by salary potential for selected majors

	Early-Career Median Pay	Mid-Career Median Pay
<b>BUSINESS</b>		
University of California-Berkeley	\$72,800	\$140,000
Georgetown University	60,500	136,000
Illinois Wesleyan University	51,000	128,000
Santa Clara University	64,700	124,000
<b>SOCIAL SCIENCE</b>		
University of Pennsylvania	\$58,400	\$140,000
Colgate University	55,400	138,000
Boston College	53,100	136,000
Harvard University	62,400	129,000
<b>ENGINEERING</b>		
Rice University	\$72,500	\$145,000
Manhattan College	60,900	140,000
Cooper Union	67,200	135,000
U.S. Naval Academy	78,000	134,000
<b>HUMANITIES</b>		
Tufts University	\$56,200	\$132,000
Duke University	55,400	109,000
University of Pennsylvania	49,200	105,000
Columbia University	56,100	103,000
<b>COMPUTER SCIENCE</b>		
University of California-Santa Barbara	\$71,700	\$147,000
Columbia University	98,900	145,000
University of California-Berkeley	96,400	145,000
University of Delaware	66,700	143,000

Source: PayScale 2015-2016 College Salary Report

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That said, the earnings picture is very different for other fields. Outside of STEM, it matters tremendously where a student receives a degree.

The starkest earnings differences are for business majors, where graduates from the selective institutions earn 12% more on average than midtier graduates and 18% more than graduates from less-selective colleges.

Likewise, social-science majors from selective colleges earn 11% more than their midtier counterparts and 14% more than those from less-selective schools.

For education majors, the differences are 6% and 9%, respectively. In humanities, graduates of selective schools earn 11% more than those from less-selective ones, although they don't earn more than those from midtier schools.

There are many possible explanations for the disparities. In business, more prestigious schools may offer better alumni networks and other connections with potential employers. In other fields of study, more prestigious schools may offer better peer connections, faculty, university resources and, at least in social science and the humanities, access to better graduate programs. Whatever the reason, parents and students may be justified in looking for a prestigious degree in these majors.

## **Digging into numbers**

The obvious, practical takeaway from all this is that families should really dig into the numbers. Because college is potentially one of the biggest investments a family will make, students and their parents should search out the information necessary to calculate the costs and expected future earnings associated with colleges and majors.

Colleges offer financial-aid calculators that let families figure out tuition costs, and sites like PayScale.com and College Scorecard offer information about median earnings by college or by major after graduation; PayScale, for one, also offers that information for specific majors at specific schools.

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## Job Hunt

The Class of 2015's employment expectations

### What students want

**93%** Personal growth opportunities

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**86%** Job security

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**80%** Good benefits package

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**\$40,547** Anticipated median starting salary

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### Who wants them

**63%** Student job applicants who received one job offer

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**27%** Student job applicants who received two job offers

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### Most popular fields

Health care and education

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### Fields with best job prospects

Accounting, computer science, engineering, finance

Note: Some percentages are rounded

Source: The Class of 2015 Executive Summary, by the National Association of Colleges and Employers

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Additionally, many academic departments keep track of their graduates' job placements, so families can find out, for instance, how many liberal-arts graduates from the University of Colorado ended up in management-trainee positions or teaching posts compared with graduates from Harvard University.

But the data can often be more nuanced than they appear. For one thing, there's the obvious point that all these numbers are averages: Any individual's actual salary may fall above or below those figures.

In addition, there's the question of opportunity costs. When choosing a major, families must consider how long it will take to complete it—because it might involve staying in school longer, driving up the cost of tuition and lowering potential earnings.

Consider a student who is deciding whether to major in engineering or economics, and suppose that it takes one year longer to complete an engineering degree. The starting salary for economics majors in 2015 is \$52,100, according to PayScale.com. So if it takes an extra year to complete a degree in engineering relative

to economics, then there is an opportunity cost of \$52,100 associated with engineering because the student entered the labor force a year later.

In practical terms, if engineering graduates make about \$10,000 per year more than economics grads, then it would be about five years before engineering students would make up the lost salary. It could be up to 10 years if you add in the direct costs of tuition and living expenses for that extra year if the student is at a selective university.

## **Beyond dollars and cents**

Families should also remember that even if students get into a chosen school, there's no guarantee they'll be able to pursue the major they want. At some universities, high-demand majors have limited enrollment, which means facing another selection process even after being admitted to the school. Grades in prerequisite courses are usually a big part of the admission process, so students should look at their record and consider the odds of being admitted to the program.

Additionally, many students pursue an undergraduate degree because of the option it gives them to pursue their desired graduate-school program. Someone may choose to study liberal arts because they believe it's good preparation for law school, and they aren't concerned with the potential earnings with an undergraduate degree in that field. In such a case, the student should seek information about graduate-school placements from their desired major at the schools they are considering.

Finally, it's important to bear in mind that the monetary costs and benefits are just one part of the burden that students will be carrying. There can also be psychic costs to consider. Most people find studying and being evaluated to be stressful. The more competitive the institution, the more academically able are the peers, and so many students who were at the top of their class in high school will find they are average or lower at a highly competitive institution or in a particularly challenging major. This can be a difficult adjustment.

On the other hand, the emotional *benefits* of a school—such as living alone for the first time, experiencing campus life and being around new peers—may be more important to some students than a cold calculation of financial rewards.

Ultimately, the decision on a college comes down to the student's aptitudes, interests and preferences. But families should be sure that choice is informed by realistic information about how college will affect a student's future.

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