



Credentials and Competencies:

Demonstrating the Economic Value of Postsecondary Education

By Anthony P. Carnevale

The mission of American higher education is based on the widely shared conviction that, in a democratic society, education's primary mission is to allow people to live fully in their time. That mission endures, especially in postsecondary education, after students have learned the basic 3R's (Reading, Riting and Rithmetic) in grade school.

The higher education mission endures but times change. Before the 1980s, high school was enough to provide middle-class earnings for most American. But, the high school economy is gone and not coming back. Nowadays, you go nowhere after high school unless you get at least some college first. The only strategy more expensive than college is not going to college. More than 70 percent of workers only needed high school back in the 1970s. Now, more than 60 percent of jobs require postsecondary education and training.

The economic value of college education and training has added a new economic emphasis to the broader postsecondary mission. In a modern republic, the higher education mission is still human flourishing; to empower individuals to live fully in their time. But, the 21st century version of the college mission also requires that students live free from economic or public dependency.

Over the past four decades, we've seen a rise in the economic value of postsecondary education and training. In the 1970s, the

value of college degrees was declining, and economists were engaged in a serious debate over whether we were producing too many college graduates.

Then, after the 1981-82 recession, the economic value of college began to rise. In the 1980s and 1990s, the college wage premium increased from 40 percent to more than 80 percent, and has remained at that historically high level ever since. At the same time, the demand for college graduates relative to high school graduates was growing to a historically high level—the number college graduates quadrupled in the workforce. In other words, the supply of college talent quadrupled while the wage advantages of college graduates have doubled; a profound change in the demand for skilled workers in the labor market.

For individuals, the answer to the question of whether going to college is worth it has never been clearer. While the cost of a college education has gone up in recent decades, not going to college has a steeper price tag. Economic opportunities for less-educated Americans have dwindled, and the American economy is leaving people without college credentials behind.

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The college boom has also been good for employers and higher education institutions. Four-year college graduates make up 37 percent of the workforce and 57 percent of the labor value added in the economy. Today, more than 80 percent of college students say the primary reason they go to college is to have a successful career. In major part, the increasing economic demand for college has made college a big business. Since 1971, the number of college degrees has increased from 13 million to 71 million and the overall size of the industry is well above \$400 billion a year. Growth in the economic value of college has also been good for general education, the liberal arts, humanities, and social sciences. Every degree comes with general education requirements and electives. Somewhere between 60–70 percent of coursework for every degree has been in general education, including the liberal arts, humanities, and social sciences.

But the rise in the economic value of college has been bad news for the “have nots” and those left behind by economic change. Let’s look at a few numbers.

- » **Eighty percent** of the growth in inequality since 1983 is due to differences in access to and success in college.
- » **Eighty-two percent** of new white students since 1995 have gone to one of the 476 selective colleges, while 68 percent of African American and 72 percent of Hispanic students are going to one of the open-admission institutions.
- » **Seventy percent** of students at selective colleges are in the top socioeconomic status: eleven percent are in the 2nd quartile, 17 percent are in the 3rd and only 3 percent are in the bottom quartile.

However, as these data show, we’re not moving as many people through college

as market signals suggest we should—the response to the growing college wage premium has been muted, especially among less advantage students. The question is why, and economists commonly cite two explanations:

1. Students don’t have enough information or support. More than ever, students need sound information in their hands to guide their decisions. However, postsecondary education and training has become a Tower of Babel, with exponential growth in credentials and fields study. Educational pathways are largely disconnected from the job market, which inhibits students’ ability to see their future career pathways lucidly. Policymakers, postsecondary officials and students are not provided with data that keeps them informed.
2. The transition from schooling to the labor market has become more complex. As the labor market has evolved, and the number and kind of career field’s workers have access to have grown, the education system has struggled to keep up. As a result, students have struggled to navigate the complexities of the modern economy and its relationship to education.

It’s hard to overstate the complexity of the relationship between postsecondary institutions and modern economies. The growing economic value and the costs of postsecondary education have created an explosion in the kind and number and credentials. Some of this is driven by growing economic complexity. The number of occupations identified by U.S. Census Bureau has grown from 270 in 1950 to 840 in 2010. At the same time, the number of programs of study offered by colleges and universities grew from 460 in 1985 to 2,260 in 2010.

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Not surprisingly, as the relationship between education and jobs becomes more textured, the number of different credentials, including degrees, certificates, professional and industry-based certifications, occupational licenses, and badges has grown in number and diversity. Understandably, with no learning or earning data on postsecondary outcomes in place, there is growing uncertainty about quality and value of credentials and confusion about how they compare to and relate with each other. Meanwhile, the core unit of analysis in assessing value has shifted from the institutional brand and overall attainment levels to field of study. The next unit of value of interest on the horizon is already apparent in the cutting edge attempts to drill down below field-of-study to competencies.

The growing complexity in the relationship between education and the economy comes with more complicated rules.

Rule #1: More education still pays on average. Over a career, a high school diploma gets you \$1.3 million: a Bachelor's degree gets \$2.3 million, a Ph.D. gets \$3.3 million and a professional degree earns \$3.7 million over a career.

Rule #2: Averages are deceiving. What you make depends on what you take. A major in social work pays \$30,000 a year compared to \$120,000 a year for a major in petroleum engineering.

Rule #3: Sometimes, depending on your field of study, less education is worth more. More

than 40 percent of B.A.'s make more than the average postgraduate degree. More than 30 percent of Associate's degrees make more than the average B.A. A one year computer certificate earns up to \$72,000 a year compared with \$54,000 for the average B.A.

Some fear that the increasing economic value of college education may force a choice between narrow economic needs and broader educational goals, and that the result will be a "commodification" of college education. They make an important point.

As the economic value of education increases, we will need to remember that college education is about more than dollars and cents. Colleges should do more than provide foot soldiers for the American economy. Education has intrinsic as well as extrinsic value. Educators in both secondary and postsecondary institutions have cultural and political missions to ensure that there is an educated citizenry that can continue to defend and promote our democratic ideals. And postsecondary institutions are crucial as safe havens from governmental and economic power.

We need to aspire to a dual bottom line in college curriculums—a pragmatic balance between the college's growing economic role and its traditional cultural and political independence. Ultimately, however, the economic role of postsecondary education and training, especially its role in preparing American youth for work and helping adults stay abreast of economic change, is central. The inescapable reality is that ours is a society based on work. It's hard to live fully in your time if you are living under a bridge; it's hard to be a lifelong learner if you're not a lifelong earner. Those who are not equipped with the knowledge and skills necessary to get and keep good jobs are denied full social inclusion

and tend to disengage from the mainstream culture, polity, and economy. In the worst cases, they are drawn into alternative cultures, political movements, and economic activities that are a threat to mainstream American life.

If secondary and postsecondary educators cannot fulfill their economic mission to help grow the economy and help youths and adults become successful workers, they also will fail in their cultural and political missions to create good neighbors and good citizens. Increasing the economic relevance of college education should, if done properly, extend the educator's ability to empower Americans to do work on the world, rather than retreat from it. Hopefully the increasing relevance of postsecondary learning is an opportunity to democratize rather than commodify college.

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