Does the U.S. Need More College Graduates to Remain a World Class Economic Power?

William Zumeta, Professor, Daniel J. Evans School of Public Affairs and College of Education, University of Washington

Introduction
The world is “getting smaller,” that is, we live in an interconnected, interdependent, global society and economy that is increasingly dependent upon knowledge-driven technology and innovation. Change – technological, economic and social – seems to occur ever more rapidly. Most observers think that these developments have important implications for education, including higher education, in the 21st century. President Barack Obama has apparently endorsed this view by calling for a major effort to increase the nation’s output of graduates with college degrees so that the U.S. once again leads the world in the proportion of our labor force with such degrees by 2020. Others, on both the left and the right sides of the political and ideological spectrum, read the evidence quite differently and, for varying reasons, reject the prescription of the President and others. This debate puts the claims about the need for more college graduates to the test. In the present paper I seek to provide relevant background and evidence pertinent to the issues at stake as well as to summarize the major arguments made on both sides of the question in light of this evidence.

1 The invaluable research assistance of Shannon Matson is gratefully acknowledged.
Background
The emergence of the global, knowledge- and technology-based economy in recent decades suggests that job-relevant advanced skills may be at a premium in the labor market. Economists who study economic growth have long seen worker skills as a key component of growth and have considered the level of education, and job-relevant training, of the labor force as the best available proxy for the aggregate amount of “human capital” (job relevant skills) in it. Skills – broadly defined to include relevant knowledge, perspectives, and the ability to bring them to bear as appropriate – are seen as needed to innovate in the development of new technologies, to adapt them as needed in use and as markets change, and to design and cope with the organizational and social changes that often accompany technological change. Moreover, in an interdependent world marked by global spillover effects of economic processes (e.g., pollution, mass migrations) and where markets and collaborators are often global, one might also argue that advanced skills and perspectives are needed to effectively cope with the effects of these spillovers and to manage intercultural relationships.

Globalization has also been a major factor in the decline of U.S. jobs in routine manufacturing, a traditional source in the 20th century of well-paying jobs that did not generally require more than a high school education. Jobs in the “trades,” such as construction and many others, have rapidly become more complex and technology-influenced and there are now many jobs primarily involving work with computers and complex electronics. At the same time, the share of all jobs in the broad category of “services” has increased, with some of these in high-paying professional and business services with a substantial technology and skills component, while many more are low-paying, relatively low-skill services jobs in such areas as food service, landscaping, home cleaning, and in-home care. Demand for these types of services has been growing as fewer families have an adult at home with the time to do necessary chores and as the number of aged citizens needing home health and other care grows. Thus, the implications of these various shifts for the skill mix needed for the modern economy are subject to debate.

6 See http://www.bls.gov/oco/oco1006.htm for a full list of service occupations – Bureau of Labor Statistics Occupational outlook handbook, 2010-2011 edition. The BLS classifies the types of high level business and professional services jobs mentioned above within other categories, reserving its “services occupations” category for lower end services jobs.
In large part based on the “increased skills are needed” line of argument, many analysts and interested observers call for a determined supply response – a serious effort to increase the degree output of the nation’s colleges and universities. In addition, they point to evidence of rapid recent gains in educational attainment rates (degrees divided by the relevant work force or age group) by competitor nations such as Canada, Japan, South Korea, and several European countries. The concern is that these competitors – not to mention China and India, for whom comparable data are not available – will be in a better position than the U.S. in the knowledge-based global economic competition by virtue of their apparently better-educated workforces. Within the call for ramping up the supply of college graduates, there is often a particular emphasis on improving this nation’s output of workers in science, technology, engineering, and mathematics, or STEM, fields, which are held to have particular relevance for the contemporary global economic competition. These pro-college views are often advocated by business and industry leaders and advocates for science-oriented groups and industries. They are also popular with advocates for minority population groups who have long been underrepresented in higher education and the upper reaches of the labor force and whose share of the young population is growing fast. Finally, at the extreme are advocates of something resembling “college for all,” or at least accessible opportunities for all comers, since a college education is seen by them as so valuable.

Others, however, think that the case for more college is substantially exaggerated. These skeptics come from different vantage points. One view, which originates largely from the left, holds that the rate of growth of demand for college graduates is generally inflated and that the current modest pace of growth in degree output, roughly tracking population growth in the youth cohort, is sufficient to meet the economy’s needs as it has been in the past. They would prefer to see additional human capital investments go mainly toward improving elementary and secondary education for the poor and disadvantaged and into social and labor policies designed to improve employability and earnings of these groups.

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7 See note 1.
From the conservative side, skeptics also question the estimates of demand for college graduates, arguing that a better rate of return will accrue to preparing well-trained people for the skilled trades.\(^{12}\) They also point forcefully to failings in the schools and in society generally that affect whether many more students, or even the current numbers, can be realistically prepared for college, citing high remediation and dropout rates at the college level as well as disinterested students and diluted curricula. One prominent skeptic even goes so far as to question how broadly distributed in the population are the basic intellectual talents and inclinations that would permit a young person to benefit from a college education.\(^{13}\)

These lines of argument are fleshed out in the Pro and Con sections below and pertinent data are provided.

**Pro: The U.S. Should Seek to Again Lead the World in College Degree Holders in the Labor Force.**

As sketched above, the fundamental argument here rests on the idea that the economy has shifted in recent decades so as to require higher level skills from a larger slice of the workforce. Recently, economic historians Claudia Goldin and Lawrence Katz have demonstrated that there was a close relationship in the U.S. economy during the 20th century between the introduction of new technology and the demand for worker skills.\(^{14}\) They show that the earnings advantage of the more educated was particularly large in periods of industrial transformation, such as the several decades surrounding the turn of the 20th century when there were large changes in manufacturing technology and a revolution in office work made possible by the introduction of the typewriter. These changes required more highly skilled workers and the “office revolution” attracted women into the workforce after encouraging them to complete a high school education in order to be able to perform competently.


The resulting earnings advantage of high school graduates over the less educated gradually declined over the decades of the 20th century, though, as the supply of such graduates grew. College graduates meanwhile, few (though growing) in numbers for many decades, generally attracted a significant earnings premium until their numbers skyrocketed during the early 1970s at the same time that the economy turned sluggish.\(^{15}\) Since that time, the rate of growth in numbers of college graduates has slackened, from about 3.77 percent per annum over the period 1960-1980 to just 2.0 percent from 1980 through 2000\(^ {16}\) even as the economy has become more rewarding of skills. The implication is that strong efforts should be made to relieve supply side constraints on the growth of labor inputs (skills) that economic signals –

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\(^{15}\) This historically unique phenomenon was documented by Richard B. Freeman, 1976. *The overeducated American*. New York: Academic Press.

\(^{16}\) Goldin and Katz, op. cit., 303.
represented by the wage premiums earned by college graduates – indicate the economy needs. Figures 1 (for males) and 2 (for females) depict trends in the earnings of college graduates and those with higher degrees compared to people with less education that seem to be consistent with the notion that advanced skills are in high demand now. In short, the annual “earnings premium” for a college graduate compared to a high school graduate grew from about 50 percent in 1978 to about 89 percent in 2008, a dramatic change.\(^\text{18, 19}\)

Table 1:

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15-2900 Professional and related occupations(^2)</td>
<td>23,197</td>
<td>23,913</td>
<td>24,101</td>
<td>24,236</td>
<td>24,427</td>
<td>25,203</td>
<td>25,530</td>
<td>26,111</td>
<td>26,680</td>
<td>27,355</td>
<td>4,128</td>
</tr>
<tr>
<td>41-0000 Sales and related occupations</td>
<td>12,958</td>
<td>13,507</td>
<td>13,418</td>
<td>13,340</td>
<td>13,534</td>
<td>13,714</td>
<td>13,930</td>
<td>14,313</td>
<td>14,332</td>
<td>14,399</td>
<td>1,399</td>
</tr>
<tr>
<td>47-0000 Construction and extraction occupations</td>
<td>5,939</td>
<td>6,187</td>
<td>6,239</td>
<td>6,123</td>
<td>6,085</td>
<td>6,035</td>
<td>6,070</td>
<td>6,061</td>
<td>6,708</td>
<td>6,549</td>
<td>610</td>
</tr>
<tr>
<td>43-0000 Office and administrative support occupations</td>
<td>22,562</td>
<td>22,755</td>
<td>22,719</td>
<td>22,755</td>
<td>22,678</td>
<td>22,621</td>
<td>22,784</td>
<td>23,077</td>
<td>23,270</td>
<td>23,323</td>
<td>670</td>
</tr>
<tr>
<td>49-0000 Installation, maintenance, and repair occupations</td>
<td>5,140</td>
<td>5,318</td>
<td>5,323</td>
<td>5,216</td>
<td>5,216</td>
<td>5,247</td>
<td>5,305</td>
<td>5,352</td>
<td>5,390</td>
<td>5,374</td>
<td>234</td>
</tr>
<tr>
<td>53-0000 Transportation and material moving occupations</td>
<td>9,338</td>
<td>9,593</td>
<td>9,411</td>
<td>9,395</td>
<td>9,415</td>
<td>9,597</td>
<td>9,594</td>
<td>9,648</td>
<td>9,629</td>
<td>9,509</td>
<td>-30</td>
</tr>
<tr>
<td>45-0000 Farming, fishing, and forestry occupations</td>
<td>463</td>
<td>453</td>
<td>453</td>
<td>451</td>
<td>462</td>
<td>445</td>
<td>443</td>
<td>450</td>
<td>448</td>
<td>438</td>
<td>-25</td>
</tr>
<tr>
<td>11-1300 Management, business, and financial occupations(^3)</td>
<td>12,425</td>
<td>12,402</td>
<td>11,889</td>
<td>11,865</td>
<td>11,578</td>
<td>11,339</td>
<td>11,371</td>
<td>11,719</td>
<td>12,019</td>
<td>12,289</td>
<td>-136</td>
</tr>
<tr>
<td>51-0000 Production occupations</td>
<td>12,621</td>
<td>12,400</td>
<td>11,270</td>
<td>10,727</td>
<td>10,488</td>
<td>10,194</td>
<td>10,249</td>
<td>10,268</td>
<td>10,146</td>
<td>9,919</td>
<td>-2,702</td>
</tr>
</tbody>
</table>

\(^{1}\) Major occupational groups 11-0000 through 13-0000 in the 2000 Standard Occupational Classification
\(^{2}\) Major occupational groups 15-0000 through 29-0000 in the 2000 Standard Occupational Classification
\(^{3}\) Major occupational groups 31-0000 through 39-0000 in the 2000 Standard Occupational Classification

Recent government labor force data also appear consistent with this line of thinking about the growing emphasis on education in the contemporary economy. Table 1 from the Department of Labor’s Bureau of Labor Statistics shows that, for 1999-2008 (similar to earlier patterns), the largest growth in jobs in the labor force was in two major categories that represent its most and least education-intensive segments: “Professional and related occupations,” including engineers, business consultants, doctors, lawyers, and the like; and “Services occupations,”

\(^1\) Such constraints include inadequate financial aid and access to credit (including credible information about aid and credit availability); inadequate student preparation for college and knowledge about how to prepare; and, some would argue, volatile and basically stagnant support of higher education by states and consequent high tuition prices.


\(^3\) A recent analysis by Mark Schneider, former commissioner of the National Center for Education Statistics, has shown that claims for the true economic advantage of a bachelor’s degree, once college costs and the discounting effect of time on future earnings are taken into account, are considerably smaller than have sometimes been claimed by higher education advocacy groups. Nonetheless, he concludes that college remains a good investment. See M. Schneider, May 2009. How much is that bachelor’s degree really worth? The million dollar misunderstanding. American Enterprise Institute for Public Policy Research Outlook, No. 5.
including jobs in food preparation, janitorial services, protective services, and allied health. These two broad categories are the largest of the ten into which the BLS divides the labor force and grew by approaching three times the growth rate of all jobs (which was just 6.2 percent over 1998-2008). Meanwhile, production jobs decreased during this period by a striking 21 percent and several other categories also declined or grew sluggishly. For the next ten years, 2008-2018, BLS projections show the professional and related occupations category growing the most and the fastest (5.2 million net new jobs, or 17.8 percent growth) with services occupations next (4.1 million net new jobs, or 13.8 percent), while the other categories trail far behind in numbers of new jobs expected (Table 2).

Table 2:

<table>
<thead>
<tr>
<th>National Employment Matrix code and title</th>
<th>Employment number 2008</th>
<th>Percent Distribution</th>
<th>Change, 2008-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, All Occupations</td>
<td>150,932</td>
<td>100</td>
<td>15,274</td>
</tr>
<tr>
<td>Professional and related occupations</td>
<td>31,054</td>
<td>20.6</td>
<td>5,227</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>29,576</td>
<td>19.6</td>
<td>4,069</td>
</tr>
<tr>
<td>Management, business, and financial occupations</td>
<td>15,747</td>
<td>10.4</td>
<td>1,664</td>
</tr>
<tr>
<td>Office and administrative support occupations</td>
<td>24,101</td>
<td>16.0</td>
<td>1,842</td>
</tr>
<tr>
<td>Installations, maintenance, and repair occupations</td>
<td>5,798</td>
<td>3.8</td>
<td>440</td>
</tr>
<tr>
<td>Sales and related occupations</td>
<td>15,903</td>
<td>10.5</td>
<td>980</td>
</tr>
<tr>
<td>Transportation and material moving occupations</td>
<td>9,826</td>
<td>6.5</td>
<td>391</td>
</tr>
<tr>
<td>Production occupations</td>
<td>10,083</td>
<td>6.7</td>
<td>349</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>1,035</td>
<td>0.7</td>
<td>-9</td>
</tr>
</tbody>
</table>

There is no question that there will continue to be lots of jobs in the economy that do not generally call for a college education, but the proportion that does call for such education seems to be growing, at least according to the labor economists at the BLS. Table 3, from the 2008-2018 BLS employment projections, shows the growth expected in jobs in the economy by the education level reported by most incumbents. As can be seen, the largest percentage growth rates in employment (data column 6) are expected to be in those holding associate’s degrees (+19.1 percent), master’s degrees (+18.3 percent), and first professional degrees (+17.6 percent), followed by bachelor’s degrees and doctoral degrees (both at +16.6 percent), and “postsecondary vocational awards” (+13.2 percent). All the other, less education intensive categories have projected growth rates below the 10.1 percent gain expected for employment as a whole. All the employed postsecondary degree-holders (associate’s degree and up) in aggregate are expected to increase by 15.7 percent compared to 7.8 percent – about half as much – for those with only work experience or on-the-job training as credentials, with postsecondary vocational awards (short of degrees) in between at 13.2 percent. Thus, according to these

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20 Absolute numbers of net new jobs in the various categories are more important for the purpose of understanding the dimensions of the need for graduates than are rates of growth although this point is often confused in discussions of the topic.
projections, the higher education intensity of the labor force’s credentials will continue to increase.

Table 3:

<table>
<thead>
<tr>
<th>Employment and total job openings, by education and training category, 2008 and projected 2018 [numbers in thousands]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most significant source of education and training</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Total, all occupations</td>
</tr>
<tr>
<td>First professional degree</td>
</tr>
<tr>
<td>Doctoral degree</td>
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<tr>
<td>Master’s degree</td>
</tr>
<tr>
<td>Bachelor’s or higher degree, plus work experience</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Associate degree</td>
</tr>
<tr>
<td>Postsecondary vocational award</td>
</tr>
<tr>
<td>Work experience in a related occupation</td>
</tr>
<tr>
<td>Long term on the job training</td>
</tr>
<tr>
<td>Moderate-term on the job training</td>
</tr>
<tr>
<td>Short-term on the job training</td>
</tr>
</tbody>
</table>


Georgetown University economist Anthony Carnevale goes further, arguing that current trends portend a large shortfall in college graduates entering the labor force. He bases this claim on the BLS data but adds an important statistical adjustment that the BLS does not make. He takes into account statistically historical trends in “upskilling” – increases in the educational credentials of job-holders – within occupational categories whereas BLS considers only effects of shifts in the occupational mix among job categories (e.g., more jobs over time in education-intensive categories) to arrive at more expansive projections of the assumed future need of the economy for workers with higher educational credentials. Table 4 shows Carnevale’s projections relative to (an earlier version of) the BLS projections. Note that he foresees a need for about 2.9 million more bachelor’s degree holders than the BLS by 2012 and a remarkable 7.75 million more graduate degree holders while projecting decreases in all the lower educational credential categories. Of course, Carnevale’s projections are heavily dependent on his historically-based assumptions about continued upskilling trends.

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22 It might be noted that both the BLS and Carnevale’s figures include estimates of the replacement demand created by retirements of well-educated “baby boomers.”
Miller Center of Public Affairs – National Discussion and Debate Series
White Paper: “Does the U.S. Need More College Graduates to Remain a World Class Economic Power?”
by William Zumeta

Table 4:

| Differences between official projections of jobs in 2012 and projections assuming historical rates of upskilling in educational credentials |
|---|---|---|---|---|---|---|
| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 |
| Actual jobs and education levels in 2002 | Official projection of jobs in 2012 holding educational attainment constant by occupation | Difference between 2002 actual jobs and 2012 official projection | Projections of job increases or decreases to 2012 based on historical increases in postsecondary education requirements | Difference in number of jobs between 2002 and projected 2012 | Difference between corrected and official projections |
| Less-than-high-school jobs | 16,482,666 | 18,069,367 | 1,586,701 | 12,068,287 | (4,414,379) | (6,001,080) |
| Jobs that require high school | 44,698,388 | 51,612,592 | 6,914,204 | 50,256,976 | 5,558,579 | (1,355,616) |
| Jobs that require some college | 27,559,941 | 30,187,249 | 2,627,308 | 28,930,825 | 1,370,884 | (1,256,424) |
| Associate’s degree | 12,327,598 | 16,912,134 | 4,584,536 | 15,044,029 | 2,716,431 | (1,868,105) |
| Bachelor’s degree | 26,406,079 | 33,295,247 | 6,889,168 | 36,204,861 | 9,798,782 | 2,909,614 |
| Graduate degree | 12,809,023 | 15,225,880 | 2,416,857 | 22,979,341 | 10,170,318 | 7,753,461 |
| Total civilian jobs | 140,286,000 | 165,302,000 | 25,018,774 | 165,483,000 | 25,200,615 | 25,200,615 |


Those who are concerned about the competitiveness of the U.S. economy in a knowledge-driven global competition also point to striking trend data showing strong recent growth in the educational attainment of U.S. competitors’ workforces. Goldin and Katz argue that much of the U.S.'s economic success in the 20th century was due to its big lead – its first mover advantage – in educating its workforce. But Figure 3, from the Organization for Economic Cooperation and Development (OECD), shows that several other nations have now caught up or surpassed the U.S. in the share of the workforce holding associate’s or higher college degrees. Of particular concern are the dramatic gains the depicted countries have made in educating their younger workers whereas the U.S. bars in the graphs are no higher for younger workers than for soon-to-retire baby boomers. This would seem to bode ill for the future of U.S. global competitiveness and these comparisons do not include China and India on which reliable data are not available. Yet, these emerging giants certainly have the potential to eventually produce huge numbers of well-educated workers for their economies.

23 Methodological questions too complex to go into here have been raised about how comparable the OECD data are across countries, especially in comparison to the U.S. See Clifford Adelman, 2009. The spaces between the numbers: Getting international data on higher education straight. Washington: Institute for Higher Education Policy. In short, Adelman does not portray the U.S.’s comparative position as negatively as does the OECD data.

24 It should be noted that the increased education levels of other nations’ workforces is not all bad news for the United States. Educated people can cross borders and, more importantly, their ideas and technological innovations can do so at relatively low cost to the U.S. Moreover, more educated populations abroad are likely to provide expanded markets for our exports. For an argument along these lines, see Richard B. Freeman, 2009. What does global expansion of higher education mean for the U.S.? National Bureau of Economic Research Working Paper 14962. http://www.nber.org/papers/w14962
College graduates also appear to enjoy greater job stability in times of economic decline. With a national unemployment rate of 9.7 percent overall in January 2010 (nearly double the rate of two years prior) and 8.2 percent for those 25 and older, unemployment for baccalaureate-educated individuals in the U.S. age 25 and older is below 5 percent.\(^{25}\) By comparison, high school graduates with no college education are experiencing unemployment at 10.1 percent and high school dropouts at 15.2 percent. Occupationally, the same split is apparent, with unemployment rates of management and professional occupations at 5 percent, sales and office occupations at 9.5 percent, and construction occupations at 24.6 percent.\(^{26}\) Data from the post-recession periods of the early 2000s and early 1990s reveal similar advantages for college-educated workers.\(^{27}\)

Another important line of argument in support of increasing college output connects to the rapidly changing demographics of the American workforce, especially its younger members. The U.S. workforce is in the midst of a sweeping demographic transformation. According to the U.S. Census Bureau, the proportion of the working age population (ages 25-64) that is white decreased from 82 percent in 1980 to 72 percent in 2000 and is projected to fall to 63 percent by 2020.\(^{28}\) Correspondingly, the aggregate share of workers from other population groups is


\(^{27}\) Data are from the Bureau of Labor Statistics http://data.bls.gov:8080/PDQ/ outside.jsp?survey=ln

expected to more than double over this period to 37 percent by 2020. In states with especially large minority populations, the workforce change is particularly remarkable - California’s non-white workforce share will jump from 29 percent to 61 percent from 1980 to 2020. New Mexico and Texas are also projected to shift to a majority non-white workforce by 2020. Also, decades of growing income inequality and sluggish growth at the middle and bottom of the income ladder mean that more potential students will be of modest means.

Historically, these population groups have generally fared much less well than Caucasians and the well off in terms of high school graduation, college attendance, and particularly college graduation.\(^\text{29}\) If one buys the basic argument that the nation needs more college graduates to be competitive, it follows that a major effort will be needed to find ways to improve the educational success rates of population groups that have not fared well in the past. In a sense, this argument goes, our increasingly diverse nation has little choice if it is to remain prosperous in a knowledge-based world economic competition.

**Con:** Seeking to dramatically increase college graduate numbers is unrealistic or, at best, a poor use of resources.

Skeptics of the need for more college graduates generally do not deny that the economy is rewarding skills to a greater degree than in the past, but they do question how dramatic the increase is.\(^\text{30}\) Using the BLS's historical trend data, they argue that the rate of increase in educational credentials in the labor force has not in the past grown faster than the higher education system’s capacity to supply them.\(^\text{31}\) These skeptics also point to underemployment of some college graduates as an indication of the limits of the growth rate of meaningful economic demand for skills at this level. In a huge economy, one finds many thousands of college graduates (even before the current recession) in jobs that do not in any meaningful sense require this level of education and the earnings distributions of college graduates and those with less education overlap to a considerable degree.\(^\text{32}\) A more fundamental theoretical point is that the generally strong average labor market returns to higher education may not fully, or even mostly, represent returns to skills expensively developed in schools and colleges but rather include a substantial element of mere signaling to employers as to who likely has the attitudes and intellect to succeed in work because they showed they could succeed in school.\(^\text{33}\)

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\(^{30}\) Handel, op. cit.; Grubb and Lazerson, op. cit.


\(^{32}\) That is, some high school graduates earn more than the lower group of those with some college or an associate’s degree, some in the latter group outpace the lower-earning baccalaureate graduates, and so on.

Moreover, it is well known that, when labor is plentiful, employers tend to ramp up the requirements for jobs in a phenomenon called credential inflation, arguably beyond that which is strictly required for jobs.  Even when labor market conditions shift, the higher credentialing requirements tend to persist. The implication is that much of this pattern unnecessarily encourages costly investments in higher education when more direct employer screening – at employers’ not taxpayers’ expense presumably – would do (perhaps better) to identify the most qualified employees.

Another line of argument raised by skeptics of the priority of expanding higher education points to the failings of the nation’s elementary and secondary schools and to pervasive social conditions that are held to relate to these failings. High school dropout rates have long been in the 25 percent range and, even among those who make it to college, the proportions that must take remedial (pre-college) classes are strikingly high (as high as 50 percent for community college students and those attending nonselective baccalaureate institutions). Students who begin in pre-college classes are relatively unlikely to complete a college degree. Given such inputs to the higher education system, how is a program to increase the number of graduates as a proportion of all youth realistically possible, at least until school performance can be greatly improved? Of course, decades of school reform efforts since this problem came squarely to public attention with the publication of the 1983 A Nation at Risk report have shown that significantly improved performance has been devilishly difficult to achieve.

Finally, analysts and observers on various sides of the debate about the need for more college graduates note that college completion rates in the U.S. are low, declining, and well below those of competitor nations. While poor preparation may be one reason – and, arguably stagnant public funding is another – yet another factor is that colleges and universities have up to now

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38 Arthur M. Hauptman and Young Kim, Fall 2009. International strategies for increasing attainment. International Higher Education 57, 8-9. See also http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number57/p8_Hauptman&Kim.htm
had few incentives to focus on student degree completion. Colleges are paid in tuition and, in
the case of public institutions, state funding dollars for enrolling students not graduating
them.\(^\text{39}\) Student retention programs are generally expensive to run while recruiting additional
new enrollees is more cost-effective for colleges, so it is not surprising that schools have, by and
large, not given great attention to student retention and completion. Unless this can be changed
across the fifty states (without degrading quality), why support more students to enter a system
that “processes” them inefficiently?

On the left, skeptics of the need to focus on college graduate numbers emphasize addressing
poverty and inequality as the fundamental policy priority. They argue that chronic urban and
rural poverty and associated unfavorable neighborhood conditions, together with low and
stagnant worker earnings in the lower end of the labor market and unequal public school
resources disfavoring the less well off, are the fundamental culprits in poor school performance.
For them, attacking these chronic social problems while also paying effective teachers more to
work and stay in the highest need schools are the most logical routes to improving the nation’s
human capital over the long haul. This perspective tends to favor increased need-based student
aid for postsecondary schooling to the extent aid is focused on those among the truly needy
who manage to graduate from high school, but it generally does not prioritize higher education
per se. To the extent these critics focus on higher education, it is usually on maintaining the
accessibility of community colleges, which serve a disproportionate share of low-income and
minority students.\(^\text{40}\)

Conservative skeptics build on many of the same “facts” and come to similar conclusions about
expanding college output, but of course their priorities are ultimately different. While they
generally agree that the modern economy places a higher premium than in the past on worker
skills, like the skeptics on the left they are dubious that the demand is as strong as education
advocates claim. They tend to focus on the demands for workers with technical skills of the
types created by some community college and for-profit sector vocational programs and on-the-
job training. Some even argue that secondary school vocational education could be made
sufficient for many students’ needs.\(^\text{41}\) And, they emphasize the chronic problems with
secondary school preparation just mentioned, although their favored solutions lie in efforts to
improve school and social conditions by emphasizing standards, discipline and traditional
family values rather than by means of large-scale social or redistributive programs.

\(^\text{39}\) For an empirical analysis of how these incentives work in one large public colleges system, see Nancy
Shulock and Colleen Moore, February 2007. Rules of the game: How state policy creates barriers to degree
completion and impedes student success in the California Community Colleges. Institute for Higher Education
Leadership and Policy, California State University, Sacramento.

\(^\text{40}\) For a clear statement of this perspective see Grubb and Lazerson, op. cit., chapter 8.

\(^\text{41}\) Leef, op. cit.
No discussion of conservative skeptics would be complete without mentioning the arguments of Charles Murray. In *Real Education: Four Simple Truths for Bringing America’s Schools Back to Reality* (2008, op. cit.), Murray goes well beyond other analysts who find fault with schools and society. He claims that only a relatively small elite in the population will ever be capable of benefiting from a serious college education, which he sees as one emphasizing classic liberal arts and intellectual discipline as training for societal leadership. He decries the vocationalizing of colleges coincident with expanded enrollments, a development he feels has been corrosive of their capability to provide a true college education. Students, employers, and society would be better served, he argues, by radically reducing the size and scope of the baccalaureate collegiate enterprise in favor of explicitly vocation-oriented postsecondary schools and a much better developed system of testing for entry into occupations and professions. Such a system would not necessarily mandate formal schooling credentials. Thus, in Murray’s view, the total societal investment in postsecondary education should be sharply reduced rather than increased, and should be dramatically redirected.

**Conclusion**

There is considerable agreement on many of the “facts” and trends relevant to this debate but, as would be expected, the two sides draw different implications from them. First, it is generally agreed that the modern economy is more demanding of worker skills than in the past, although there are plenty of differences of view about the pace of change. Most, though not all, would agree that advanced schooling builds work relevant skills and that getting a larger share of the population to some type of postsecondary credential valued in the labor market is a desirable goal. Also, there is wide agreement that the country needs to increase high school graduation rates and the quality of preparation of many graduates so that they are well prepared for work or postsecondary education. There is sharp disagreement however on the need for more bachelor’s degree graduates and thus on what “college” means exactly. One side tends to emphasize the demand side of the issue, pointing first to the evidence of strong recent returns to bachelor’s and graduate degrees (to which the bachelor’s degree is the gateway) and to the record in 20th century U.S. economic history of strong economic payoff from an educated population, especially in times of rapid technological change. It fears that competitor nations are passing us in educating their workforces and that our educational system is failing to respond adequately. The conclusion that follows is, generally, to invest in greater system capacity and student financial wherewithal to attend.

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42 He is the author of *Losing Ground*, 1984, New York: Basic Books, a treatise on values and welfare policy that is credited with being a significant influence on the federal welfare reforms of 1996; and also, with Richard J. Herrnstein, of *The Bell Curve*, 1994, New York: Free Press Paperbacks, which held that there are demonstrable racial differences in the distribution of intelligence.

43 This last builds on the theoretical argument mentioned earlier holding that higher education serves a too-expensive signaling function that could be more cost-effectively accomplished in other ways.
The other side questions expansive forecasts of the rate of growth in demand for educated workers, but tends to focus more on the supply side of the issue. It questions whether any significant number of additional students – or, for Charles Murray, even the current number – can be educated at the baccalaureate level given the low degree completion rates of the many poorly prepared students currently and the lack of incentives for colleges to worry about this. Both sides may be partially right – the economy could benefit from some more college (or, some would say, postsecondary) graduates, but we do not seem to have the preconditions in place, including properly prepared entering students, to produce them at an affordable cost. This might imply different foci for priority policy attention but that is a subject for a different debate.