WASHINGTON -- The United States economy is in serious danger from a growing mismatch between the skills that will be needed for jobs being created and the educational backgrounds (or lack thereof) of would-be workers. That is the conclusion of a mammoth analysis of jobs data being released today by the Georgetown University Center on Education and the Workforce.

The new report says that the United States is "on a collision course with the future" since far too few Americans complete college. Specifically, the report says that by 2018, the economy will have jobs for 22 million new workers with college degrees, but, based on current projections, there will be a shortage of 3 million workers who have some postsecondary degree (associate or higher) and of 4.7 million workers who have a postsecondary certificate.

"This shortfall will mean lost economic opportunity for millions of American workers," the report says.

Colleges may like much of the rhetoric surrounding the report, which will be released officially today at an event scheduled to feature representatives of the Obama administration and the Bill & Melinda Gates Foundation. The clear implication of the report is that the United States needs to spend much more on higher education -- and in particular on the educations of those who are not on the fast track to earning degrees at elite institutions.

But the lead author of the report said in an interview that the report should also shake up colleges -- and challenge most of them to be much more career-oriented than they have been and to overhaul the way they educate students, to much more closely align the curriculum with specific jobs.

The colleges that most students attend "need to streamline their programs, so they emphasize employability," said Anthony P. Carnevale, director of the Georgetown center.

Carnevale acknowledged that such a shift would accept "a dual system" in which a select few receive an "academic" college education and most students receive a college education that is career preparation. "We are all offended by tracking," he said. But the reality, Carnevale said, is that the current system doesn't do a good job with the career-oriented track, in part by letting many of the colleges on that track "aspire to be Harvard." He said that educators have a choice: "to be loyal to the purity of your ideas and refuse to build a selective dual system, or make people better off."

The Data

The data in the report trace a long-term shift, from the 1970s to the next decade, in the jobs in the United States for which postsecondary training is needed. In 1973, only 28 percent of jobs required a postsecondary education, while by 2018, 63 percent will.
Shifts in Educational Attainment Required for All Occupations

<table>
<thead>
<tr>
<th></th>
<th>1973</th>
<th>1992</th>
<th>2007</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's or higher</td>
<td>7%</td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>9%</td>
<td>19%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Associate degree</td>
<td>12%</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Some college</td>
<td>n/a</td>
<td>19%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>High school diploma</td>
<td>40%</td>
<td>34%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>High school dropout</td>
<td>32%</td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

The report also stresses the shift over time in the likelihood that people without postsecondary education can join the middle or upper income classes. In 1970 only 26 percent of the middle class had postsecondary education, while today, 61 percent do. Notably, in 1970, it was not only possible but likely that those in upper income levels lacked a college degree -- a circumstance that has changed dramatically. In 1970 only 44 percent of the upper class had postsecondary education, compared to 81 percent today.

The report proceeds from these broad trends to a wealth of data about states and specific fields, showing that the growth in jobs (until now and for the next decade) will primarily be in fields that require various levels of college education. And the report suggests that if various players -- students, colleges, the government -- don't act on that conviction, many Americans will lack good jobs and many key jobs could go unfilled.

Carnevale said that he hopes the message reaches multiple audiences. He said he wants high school students not only to realize the importance of going to college, but also to plan for a career at the time they make their college choices. "It matters a great deal that they go to college and get a credential, but what matters the most now is the occupation that they will pursue," he said.

The key psychological change that is needed, he said, is to move away from "the old model, where you go to college and then go out and find a job" to one in which the college years are explicitly "preparing for an occupation." He said that his recommendations may not apply to the
highly competitive colleges whose graduates can still focus on jobs (or graduate education) after they finish a bachelor's degree. "But the world isn't like that anymore" for everyone else, he said.

This doesn't mean that community colleges or state universities should eliminate the liberal arts, he said, but that they should counsel students to pick programs based on careers, track the success of various curriculums in preparing students for jobs, and adjust programs to assure that they are focused on jobs. "It's all about alignment," he said.

And that does mean a clear priority at most colleges for career-oriented programs over all others, Carnevale said. He said that, without major changes in education policy, there is no way the country can meet President Obama's goal of having the United States lead the world by 2020 in the proportion of adults who are college graduates. And that requires honesty, he said, about the fact that the current system is not working.

He also said that a serious focus on these issues should lead to a shift in resources -- one he said he wasn't sure would take place -- from the universities that educate the best prepared to those who educate most of America. That would mean less money for flagships and more for the community colleges and other public institutions. Carnevale said that the institutions that need more are also those that educate larger proportions of minority and low-income students, and that such patterns have led to many a court case when they involve elementary and secondary schools.

While Carnevale's findings are likely to receive plenty of praise today, there are some who are skeptical. A number of economists, including some prominent conservatives, have been gaining attention of late for suggesting that the value of a college education may be overrated. An article in The New York Times, "Plan B: Skip College," has prompted widespread discussion (and much criticism).

But the new analysis from Carnevale's research center may also receive criticism from the left. Amy E. Slaton, associate professor of history and politics at Drexel University, is a scholar of the history of education politics, and she argues that the push for a career orientation to higher education limits the potential for many students. "This approach accepts the notion that you need a tiered education system," she said, "and that seems like a good way of making sure that the least number of people are given a chance to develop their potential to be innovators, to learn creative skill sets."

Slaton said that she agrees that many students benefit from learning job skills and the current system has many flaws. But she said Americans should be wary of a focus that could limit options at the institutions most people attend. "How do you know when you look at people what their potential is?" she asked.
In the article “A Jobs Mismatch”, Jaschik has compiled the findings of a new report that was released by the Georgetown University Center on Education and the Workforce. The Georgetown University report claims that there is a severe shortage of college graduates in America, and that this shortage has the United States on a “collision course with the future.” Several studies have found that the demand for skills is likely to grow much faster than the supply of skilled workers in the coming years (Holzer & Lerman, 2007).

Carnevale (2010) suggests that a key factor contributing to the shortfall of workers is the lack of alignment between job readiness and the college curriculum. His solution to this dilemma is the implementation of a dual system where most students receive a career-oriented college education and an elite few receive what is viewed as “traditional” academic preparation. Carnevale acknowledges that most of the students put on the career oriented path would be the underprivileged. One of his critics suggested that his career-oriented approach “…seems like a good way of making sure that the least number of people are given a chance to develop their potential to be innovators…” As the disparity in college attendance between privileged and underprivileged students continues to grow, the issue addressed in the report regarding the shortage of educated workers is one that may become more pronounced.

It was suggested that resources should be shifted from the universities that educate the best prepared to the institutions that educate most of America: community colleges. The American Association of Community Colleges (AACC) estimates that 40% of students enrolled in community colleges are minorities and 42% are first generation (AACC, 2009). With public institutions increasing tuition to make up for reduced state funding and the limited grant funds available for financial aid, the United States may only see the small gains made by minority and low income students in higher education. The dual track system suggested may further restrict higher education access available to those students who do not come from privileged backgrounds.

Youth in more affluent communities tend to have more family and school support in career exploration, which results in consideration of a wider range of career options (Ferry 2006). By requiring a career decision to be made early on, students from disadvantaged backgrounds may be more inclined to underestimate their own potential because they have not gained exposure to as many positive influences and environments as have more affluent students.

It would be advantageous for high school students to see growth trends data for the next decade. Knowledge about specific fields and various states can assist them to make informed decisions about whether or not to attend a postsecondary institution. The statistics presented in the article show a dramatic difference between the job market of the 1970s
versus that of today, however, today’s students need more specific information regarding tomorrow’s jobs.

According to Rothstein (2009) the unemployment rate for those with a college degree (including both mature workers and recent graduates) was 4.8% in May 2009, up from 2.1% at the start of the recession, and higher than at any time since 1979. Not included in the Georgetown report are the figures for the rates of unemployment for current college graduates, as well as how many college graduates are working jobs that do not require a college degree as a condition for hire. The following excerpt provides further food for thought regarding to the bold assertions that the Georgetown report makes:

The Bureau of Labor Statistics (BLS) has consistently projected that the number of college graduates in the U.S. labor market will continue to match (or exceed) the number of job openings requiring college education. Indeed, BLS finds that many of the largest areas of future job growth in the American economy are in occupations requiring little skill, not even a two-year post-secondary credential - waiters and waitresses, retail salespersons, truck drivers, janitors, home health aides. This reality will not be changed if only colleges could make their graduates more attractive candidates (Rothstein, 2009, ¶5).

For years, the debate on the tracking system in the United States (U.S.) has been at the forefront of education policy for the secondary level. The idea that students can be separated and placed in different programs based on their potential is embraced by many experts; the assumption is that students are being offered a special educational advantage in that particular area. Others discount the notion that student potential can be measured so easily and that all students should be offered the same access and opportunity. It should be noted that higher education in the U.S. is a state responsibility, not a federal one. Although the federal government can recommend reform in higher education, the context of a particular state must be taken into consideration (Thelin, 2004).

It is imperative that we find a balance between career oriented and academic education while considering the public and private good (benefits) of higher education (Institute for Higher Education Policy, 1998; Pasque, 2009). While an academically based education is considered to be intellectually rewarding and allows students the freedom to define their own career path, a career-oriented education may be the best educational approach to ensure employment upon graduation. There are pros and cons to this issue, but complaining without a plan will not remedy the situation. All stakeholders should actively participate in discussions and actions that will aid in shifting our educational system. Undoubtedly, this discussion will include the role and growth of for-profit higher education institutions which are career oriented (Tierney & Hentschke, 2007). Before the U.S. agrees to make dramatic changes in the curriculum for our students, which will possibly limit their options for career growth and opportunity, we must consider the claims and critically examine the facts.
References and Suggested Readings

Alliance for Excellent Education. (2010). Reinventing the federal role in education: Supporting the goal of college and career readiness for all students. *Education Digest, 75*(6), 34-43.


Discussion Questions

1. If state colleges and universities begin to focus primarily on career education, what will happen to technical and community colleges that are already focusing on these types of programs? Would this change in the public system of higher education better serve the state and its citizens?

2. At 16 years of age, are college students able to make the kind of choices that Carnevale’s reform requires?

3. What criteria would be used to differentiate the students who would continue on the academic track from those who would take the career preparation track?

4. In the *Jobs Mismatch* article, it mentioned that skeptics (economists and conservatives) consider the value of college education to be overrated. Is there merit to this statement? Why or why not?

5. It is suggested that programs be “streamlined” so that they emphasize employability. What does this mean to a college student? Will streamlining guarantee attainment of a job upon graduation?

6. To ensure the success of a career oriented higher education, what roles should the student, the teachers/faculty, administrators, secondary education, and the government play?