A community conversation

Is College Worth It?

Michael M. Crow
January 21, 2015 / Galvin Playhouse, ASU Tempe campus
“Wisdom and knowledge, as well as virtue, diffused generally among the body of the people being necessary for their preservation of their rights and liberties; and as these depend on spreading of opportunities and advantages of education in various parts of the country, and among the different orders of the people…”

Massachusetts Constitution 1780
“...it shall be the duty of the legislators and magistrates in all future periods of this commonwealth to cherish the interests of the literature and the sciences, and all seminaries of them...”

Massachusetts Constitution 1780
“...especially at the university at Cambridge...”

Massachusetts Constitution 1780
CH. 5, SEC. 2
“Maybe it’s time to ask a question that seems almost sacrilegious: is all this investment in college education really worth it? The answer, I fear, is that it's not. For an increasing number of kids, the extra time and money spent pursuing a college diploma will leave them worse off than they were before they set foot on campus.” – Megan McArdle, Bloomberg View

“If you question the economic value of college, the defenders’ default answer is that it’s priceless. Before long, spending four years in a lecture hall with a hangover will be revealed as an antiquated debt-fueled luxury good.” – Peter Thiel, PayPal

“Knowledge is a form of capital that is always unevenly distributed, and people who have more knowledge, or greater access to knowledge, enjoy advantages over people who have less.” – Louis Menand, Harvard University
The American Dream
Educational attainment is key to social mobility.
Higher Education and Social Mobility

Adult Income for Individuals Raised in Families in Lowest Income Quintile

- Top Quintile: 5% of those without a college degree, 19% of those with a college degree
- Fourth Quintile: 45% of those without a college degree, 16% of those with a college degree
- Third Quintile: 30% of those without a college degree, 14% of those with a college degree
- Second Quintile: 25% of those without a college degree, 13% of those with a college degree
- Bottom Quintile: 20% of those without a college degree, 12% of those with a college degree

Employment Polarization

1975 - 2010

Non-routine Cognitive
Non-routine Manual
Routine

The Trend is the Cycle: Job Polarization and Jobless Recoveries, 2012
Value to the Individual
The internal rate of return for a degree substantially exceeds the cost of attending college.
Economists put the rate of return of a degree in 2012 at 15%, far above the return on stocks and bonds.
## Return to Bachelor’s Degree, by Major 2012

<table>
<thead>
<tr>
<th>Major</th>
<th>Overall</th>
<th>Underemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total, all majors</strong></td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Engineering</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Math and computers</td>
<td>18%</td>
<td>14%</td>
</tr>
<tr>
<td>Health</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>Business</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Communications</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Technologies</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Social sciences</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Sciences</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Architecture</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>Liberal arts</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Agriculture and natural resources</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Education</td>
<td>9%</td>
<td>7%</td>
</tr>
</tbody>
</table>

This is **true even for so-called** “underemployed” college graduates.
People who “learn to learn” continue to earn over their lifetime and earn more. Those who do not see their wages remain flat as they age.
As time passes and more learning is needed, the earnings gap widens for younger generations.
Rising Earnings Disparity Between Young Adults With and Without a College Degree

Median annual earnings among full-time workers ages 25 to 32, in 2012 dollars.

---|---|---|---|---
High School Graduate: $31,384 | $36,498 | $30,525 | $27,883 | $28,000
Two-year Degree/Some College: $33,655 | $34,595 | $32,173 | $30,000 | $28,000
Bachelor's Degree or More: $38,833 | $41,989 | $44,770 | $43,663 | $45,500

Value to Society
Percent Change in Employment Since Start of Recession, Sorted by Educational Attainment

-14.1%  -9%  0%  9.1%

College graduates
High school graduates (no college)
Some graduates/no B.A.
Less than high school

Bureau of Labor Statistics, via Haver Analytics
The discrepancy between graduates from college and high school has grown far worse in recent years.

Unemployment Rates Among Individuals Ages 25 and Older

- Less than a High School Diploma
- High School Diploma
- Some College, No Degree
- Associate Degree
- Bachelor’s Degree or Higher

The discrepancy between graduates from college and high school has grown far worse in recent years.
Recovery from the Great Recession has not occurred for workers without a college degree.
Employment has fallen for high school graduates while it has grown for degree holders.
ASU Analysis:
Economic impact of ASU graduates in Arizona

Approx. 207,000 ASU graduates worked in AZ in 2012.
ASU Analysis:
Economic impact of ASU graduates in Arizona

Their aggregate earnings was an estimated $11.4 billion.
They directly contribute an estimated $819 million in state taxes.
ASU Analysis: Economic impact of ASU graduates in Arizona

A two percentage point increase in the share of university graduates in the workplace would equal an estimated $1.2 billion gain in income and an additional $87 million in state tax payments.
ASU Analysis:
Economic impact of ASU graduates in Arizona

If ASU contributed to a 6 percentage point increase – from 23.7% to 29.7% – of 25-to-34 year olds with a bachelor’s degree who are absorbed into the AZ labor market, the projected result would (in the steady state):
ASU Analysis:
Economic impact of ASU graduates in Arizona

Raise AZ GSP by 3.5%
ASU Analysis:
Economic impact of ASU graduates in Arizona

Generate a $623 million increase in State taxes and fees combined
ASU Analysis:
Economic impact of ASU graduates in Arizona

Increase combined State & Local taxes by $777 million
ASU Analysis:
Economic impact of ASU graduates in Arizona

Increase combined State & Local taxes and fees by $1.12 billion respectively
College graduates are more likely to…

Have access to and participate in employer-provided pension plans
College graduates are more likely to…

Have access to employer-provided healthcare
College graduates are more likely to...

Lead a physically active lifestyle
College graduates are more likely to...

Participate in both vigorous and moderate exercise
College graduates are more likely to…

Spend more time per day with their children
College graduates are more likely to…

Participate in volunteer activities
College graduates are more likely to...

Demonstrate a greater understanding of political issues and are more likely to vote
College graduates are less likely to... Smoke
College graduates are less likely to... Suffer from obesity
College graduates are less likely to...

Have children who suffer from obesity
College graduates are less likely to...

Live in households below the poverty threshold
College graduates are less likely to...

Participate in public assistance programs
Educational Attainment and Public Assistance

Percentage of individuals 25 and older living in households participating in selected public assistance programs by education level.
The Challenge
Current Trajectories without Innovation
What about Arizona?
"Our economy … is growing, but it’s time to up our game. **Our people have put their faith in Arizona’s future.** They bring their families here, start businesses here, seek jobs here and build new lives here — believing in the promise of this state. **Yet, as opportunity goes, in the rankings of states, Arizona is still too far down the list.** We have what it takes to be at the top.”

– Arizona Governor Doug Ducey
January 5, 2015
Percentage of All Youths Enrolling in Postsecondary Education
Arizona is falling further behind.
Per Capita GDP Relative to US Average

Arizona
Colorado
Nevada
New Mexico
Oregon
Utah
Washington
Relationship between Change in Educational Attainment and Economic Development in US States, 2000-2010

Data Sources: US Census Bureau.
Education and Economic Growth in OECD Countries

Sum of PISA Math, Reading and Science Scores vs. Per Capita GDP

Data Sources: OECD, PISA 2012;
A New Economy Requires a New Kind of University
ASU Charter

ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural, and overall health of the communities it serves.
ASU Goals

Demonstrate leadership in academic excellence and accessibility
ASU Goals
Enhance our **local impact** and social embeddedness
ASU Goals

Establish ASU as a global center for interdisciplinary research, discovery and development by 2020
ASU Goals

Enhance our **local impact** and social **embeddedness**
Critical Thinking and Problem Solving

INFORM & INSCRIBE
Begin to clarify:
- What do you need to know?
- What do you already "know"?
- What information do you have about your issue/topic?

DISCOVER & EXPLORE
Look at your issue/topic more closely; start to be more directed and purposeful in seeking information

INTEGRATE & APPLY
Bring together the various ideas that you have considered in order to consolidate and articulate new understandings

NEGOTIATE & COOPERATE
Consider different perspectives: Engage in conversation with others

TEST & REVISE
Weigh up the evidence: Test our different ideas and alternatives

CRITICAL THINKING
ASU Gallup Study

% Employed Full-Time

- ASU Gallup Study: 72.8%
- National GPI: 64.4%
- Public Universities: 64.7%
- Large, Public Universities (>10,000): 64.3%
- Private Universities: 64.1%
Is there value in earning a college degree to the individual? **YES.**

Is there value in earning a college degree to the economy and to society? **YES.**

If Arizona is going to progress, do we need to produce more master-learners? **YES.**
Why do people still ask if college is worth it?