Higher Education Pipeline: Evaluation of Access and Attainment

SUMMARY

Research conducted for Jobs for the Future by the Parthenon Group looked at rates of high school graduation, college entrance, and college success. It focused on the barriers to college entrance and success for low-income families and other youth who are underrepresented in postsecondary education, including minorities and immigrants who are learning English. The research examined the costs to individuals and the nation for low rates of college success, as well as the return that states and the nation would gain on investments designed to increase the number of students completing college.

The research led to three major conclusions:

- More education is better for individuals and society.
- Access to college is necessary but not sufficient.
- Targeted investments will help close the “attainment gap” in the rates of college success for underrepresented youth compared to all young people.

More education is better for individuals and society.

While there are clear benefits in obtaining a high school diploma or an Associate’s degree, the biggest education benefits in terms of income occur when students obtain a Bachelor’s degree. The importance of education has increased over the last 20 years: wages for a Bachelor’s degrees or higher have grown between four to seven times faster than real wages for those with only a high school degree.

Moreover, if the United States is to address anticipated shortages of 12 million highly skilled workers by 2020, the nation must radically change how we educate and support low-income students and minority students, who comprise the fastest-growing segments of the youth population.

Increasing the number of underrepresented students who gain postsecondary credentials offers potential economic, social, and civic benefits. The economic
benefits include increased tax revenues. Social and civic benefits include lower unemployment rates and greater voter participation rates.

**Access is necessary but not sufficient.**

Since passage of the Higher Education Act of 1965, the U.S. higher education system has focused on increasing access to college, with significant gains in particular in the percent of low-income high school graduates entering college. We have shown that when we focus on solving a problem, we can effect meaningful change.

But access does not necessarily translate into attainment of a college degree. An in-depth analysis of high school and college graduation data shows that only one in three eighth graders in 1988 earned an Associate’s degree 12 years later.

Failures to translate access into attainment are most apparent among historically underserved populations—low-income and ethnic minorities:

- 19% of low-income eighth graders complete an Associate’s degree or higher vs. 76% for their high-income counterparts.
- Only one in three low-income students who enroll in college completes an Associate’s degree or higher vs. about four out of five of their high-income counterparts.
- Hispanic and African-American student are half as likely as their white counterparts to complete an Associate’s degree or higher.

These gaps in attainment are caused by failures at critical points along the higher education pipeline, with real economic and social costs. Although the historical focus has been on access and not attainment, we must better balance the two goals.

**Targeted investments will help to close the attainment gap.**

The gaps in college attainment are not acceptable, and aggressive targets need to be set. In particular, we must seek to “Double the Numbers” of low-income college graduates, which will raise the attainment level of low-income students to roughly that of middle-income students. Improvements in low-income attainment rates would generate an additional 460,000 college graduates by 2020.

“Doubling the Numbers” is an aggressive target, requiring a coherent, systematic approach all along the higher education pipeline: K-12 preparation for college, college enrollment, and college success. We must transform how we prepare young people for college, break down the barriers that separate schools and
postsecondary education, and develop new incentives for individuals to attend college and for institutions to enroll and retain students.

- Targeted investments along the higher education pipeline over the next decade will help close the attainment gap and provide significant social and economic benefits.

- The federal government should make its expenditures more effective by establishing systemic and creative solutions, rooted in compelling incentive structures.

- All states have room for improvement in overall degree attainment, although the nature of the problem varies. Tailored solution sets are needed to address state-specific challenges.

- Success is possible. A combination of public and private educational institutions are succeeding in getting target populations into and through college.

**About the study**

The Parthenon Group drew on a variety of sources for its analysis, including: National Center for Education Statistics, National Education Longitudinal Study, 1988/2000; National Center for Education Statistics, Projections of Education Statistics; Bureau of Labor Statistics; U.S. Census Bureau; U.S. Department of Education Web site and research staff; Postsecondary Education OPPORTUNITY; The Manhattan Institute; National Center for Public Policy and Higher Education; Higher education academics and experts; and Company 10K’s and Investor Relations.

**Jobs for the Future** believes that all young people should have a quality high school and postsecondary education, and that all adults should have the skills needed to hold jobs that pay enough to support a family. As a non-profit research, consulting and advocacy organization, JFF works to strengthen our society by creating educational and economic opportunity for those who need it most.

**The Parthenon Group** is a leading boutique advisory firm focused on strategy consulting and principal investment, with offices in Boston, San Francisco, and London. Since its inception in 1991, the firm has embraced a distinctively entrepreneurial and committed approach to strategic advisory services; long-term client relationships and willingness to share risk with performance-based fees are the hallmarks for which The Parthenon Group has become recognized in the industry. Since its inception, Parthenon has had a deep commitment to education and had developed relationships with a wide range of clients across all aspects of the educational value chain from K-12 to higher education and corporate training.
Higher Education Pipeline

Key Themes

- More education is better for individuals and society
- Access is necessary, but not sufficient
- Targeted investments over the next decade will help to close the attainment gap

More Education is Better

Income Increases Sharply With More Education...

Increase in Earnings Relative to H.S. Dropouts for Year-round, Full-time Workers (Ages 25 and Older, 2000)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Median Earnings</th>
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<tbody>
<tr>
<td>High school diploma+</td>
<td>$28,800</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>$32,400</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>$35,400</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>$46,300</td>
</tr>
<tr>
<td>Master's degree</td>
<td>$55,300</td>
</tr>
<tr>
<td>Doctorate</td>
<td>$70,500</td>
</tr>
<tr>
<td>Professional degree</td>
<td>$80,200</td>
</tr>
</tbody>
</table>

Median earnings for High school dropouts are $28,800

Focus On Access

Since the 1965 Higher Education Act, access to college has significantly increased for low income high school graduates.

Percent Increase in High School Graduates Who Enroll in College (By Family Income, 1970-2000)

- Low Income: 19% increase
- High Income: 3%

1970-2000 College Enrollment Rates:
- Low Income: 46%-54%
- High Income: 79%-82%

Note: Represent independent 18-24 year olds having graduated from high school and enrolled in college. Low Income represents the bottom 25th percentile family income level in the U.S., Low Income represents the bottom 25th percentile family income in the U.S.

Attainment Gap

Access does not necessarily translate into degree attainment, and large gaps exist across income and ethnicity.

Degrees Earned by Family Income (1980 8th Graders in 2000)

- $75,000 or more: 76%
- $25,000-$74,999: 43%
- Less than $25,000: 13%

Degrees Earned by Ethnicity (1980 8th Graders in 2000)

- White: 40%
- African American: 21%
- Hispanic: 20%

Higher Education Pipeline

Gaps in attainment are caused by failures at critical points along the higher education pipeline.

- Graduate High School: 75-77% (± 11% GED)
- Enroll in Associate’s or Bachelor’s Program: 72%
- Complete Associate’s or Bachelor’s Program: 34%

Coordination required across secondary and postsecondary to produce better outcomes.

Note: Data represents vary by sex, age, and socioeconomic status. The graduation rates include those who obtained a GED. The data are based on the 2000 National Education Longitudinal Study (NELS) and the Current Population Survey (CPS) for the years 1998-2000.

Higher Education Pipeline

Low income students demonstrate significantly lower enrollment and degree attainment rates than their peers.

<table>
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<tbody>
<tr>
<td>High Income (≥ $75,000 or more)</td>
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<tr>
<td>High School students: 100%</td>
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<tr>
<td>Drop out of School: -1%</td>
</tr>
<tr>
<td>Never attended college: -2%</td>
</tr>
<tr>
<td>Never obtained Associate’s degree or higher: -11%</td>
</tr>
<tr>
<td>Low Income (Less than $25,000)</td>
</tr>
<tr>
<td>High School students: 100%</td>
</tr>
<tr>
<td>Drop out of School: -21%</td>
</tr>
<tr>
<td>Never obtained degree: -37%</td>
</tr>
</tbody>
</table>

Note: Data represent vary by sex, age, and socioeconomic status. The graduation rates include those who obtained a GED. The data are based on the 2000 National Education Longitudinal Study (NELS) and the Current Population Survey (CPS) for the years 1998-2000.
“Double The Numbers”

Gaps Are Unacceptable And Aggressive Targets Should Be Set To “Double the Numbers” Of The Most Underserved Populations

<table>
<thead>
<tr>
<th>Low Family Income</th>
<th>2003 Actual College Attainment</th>
<th>+460,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Attainment to increase from 19% to 40% by 2020</td>
<td>410,000</td>
<td>+460,000</td>
</tr>
<tr>
<td>Middle Family Income</td>
<td>880,000</td>
<td>+260,000</td>
</tr>
<tr>
<td>College Attainment to increase from 43% to 53% by 2020</td>
<td>240,000</td>
<td>+40,000</td>
</tr>
<tr>
<td>High Family Income</td>
<td>1,530,000</td>
<td>+760,000</td>
</tr>
<tr>
<td>College Attainment to increase from 44% to 49% by 2020</td>
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Overall Student Population

Based upon experience, both the higher education system and the labor market are expected to absorb these increases


“Double The Numbers”

“Doubling The Numbers” Requires A More Coherent System Along The Higher Education Pipeline

- **Quality of Preparation:**
  - High expectations and robust curriculum
  - Supportive environment
  - Highly qualified teachers

- **College Awareness and Information:**
  - Communication of benefits of college to students
  - Alignment of systems
  - Financial aid information and awareness

- **Access:**
  - Affordability:
    - Financial aid
    - Information and support
  - Flexible models for learning:
    - Distance-based
    - Non-traditional

- **Support Systems and Incentives / Accountability:**
  - Academic support
  - Personal support
  - Experiential, work-based, applied learning
  - Ongoing guidance and counseling (financial, academic, career)
Models Of Success

Success Is Possible: Institutions Can Deliver Results While Serving Many Low Income And Minority Students

<table>
<thead>
<tr>
<th>Public and Private Non-Profits</th>
<th>For-Profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xavier University of Louisiana</td>
<td>University of Phoenix (Apollo Group)</td>
</tr>
<tr>
<td>Miami Dade Community College</td>
<td>Career Education Corp.</td>
</tr>
<tr>
<td></td>
<td>Strayer Education, Inc.</td>
</tr>
</tbody>
</table>

Examples:
- Focus on minority and low income students
- Provide opportunities to historically underserved students
- Disproportionately serve minority and low income students
- Working adults

Outcomes:
- Retention and completion rates reported to be above average for target populations
- Above average student retention
- Students tend to complete degrees more quickly than traditional programs

Incentives:
- Mission-driven
- Financial—to recover high acquisition costs
- Fiduciary responsibility to shareholders

Link Access And Attainment

Incentives To Institutions Must Link Access And Attainment

2003 Postsecondary Education Appropriations

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<thead>
<tr>
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<th>Philosophy of Engagement:</th>
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<tbody>
<tr>
<td>Access Based</td>
<td>Focus on systemic solutions, driving linkages across High School and Higher Education</td>
</tr>
<tr>
<td>Attainment Based</td>
<td>Allocate resources such that they reinforce goals of access and attainment</td>
</tr>
<tr>
<td>$248</td>
<td>Invest in programs with measurable results</td>
</tr>
<tr>
<td></td>
<td>Target dramatic improvements through scalable models</td>
</tr>
</tbody>
</table>

Reconfigure the pipeline and incentives

Source: Department of Education, Partnership analysis
Link Access and Attainment

There is No Silver Bullet, As States Require Tailored Solutions

- Loss points vary across states, but all have room for improvement.

Source: National Information Center for Higher Education Policy and Analysis (National Center for Higher Education Management Systems), NICHE (HS Grad and Enrollment), DEED 2010 Graduation Rate Survey (Attachment)

Link Access and Attainment

Higher Education System Performance Splits Into Transition And Completion Factors

- Nature of higher education performance is distinct in each state.

Source: National Information Center for Higher Education Policy and Analysis (National Center for Higher Education Management Systems), NICHE (HS Grad and Enrollment), DEED 2010 Graduation Rate Survey (Attachment)
Link Access And Attainment

Several High Potential Programs Are Emerging

Graduate High School → Enroll in Associate’s or Bachelor’s Program → Complete Associate’s or Bachelor’s Program

Program Philosophies:
- Institutional Models:
  - Alignment
  - Access
  - Articulation
  - Acceleration
  - Attainment

Institutional Incentives:
- Access
- Articulation
- Accountability
- Attainment

Sample Programs:
- Advanced Placement
- Dual Enrollment
- Early College High School
- Middle College High School
- Technical Preparation

Grants With Matching Funds
- Funding Programs (Grants and/or Loans) Linked To Attainment of Target Groups

Key Sources

- Parthenon used a variety of sources as a basis for its analysis:
  - National Center for Education Statistics, Projections of Education Statistics
  - The Bureau of Labor Statistics
  - US Census Bureau
  - US Department of Education (website and research staff)
  - Postsecondary Education OPPORTUNITY
  - The Manhattan Institute
  - National Center for Public Policy and Higher Education
  - Higher education academics and experts
  - Company 10K’s and Investor Relations