

### **Poverty Fact Sheet:**

### Falling Further Behind: Inequality in College Completion



Prepared by Jacob Roble No. 13, 2016–2017

This fact sheet focuses on differential rates of college completion by socioeconomic status, the factors researchers think are behind them, and key aspects of promising efforts to help level the playing field and increase college completion among disadvantaged students.

# College Completion Differs by Socioeconomic Status

College completion is one of the surest pathways out of poverty,

but not everyone that sets foot on campus graduates. Since 1980, gaps in rates of college entry, persistence, and completion between children from low- and high-income families have widened, although women are outpacing men in college attainment in every demographic group. At UW-Madison, 70% of low-socioeconomic status (SES) students (those who experienced poverty in high school and whose parents did not attend college) graduate within 6 years, compared to 83% of high-SES students (those whose families were in the top 25% of income and had at least one parent with a bachelor's degree). The strong connection between SES and college completion remains even after adjusting for other student characteristics like pre-college test scores.

For example, at large state universities, 69% of students whose parents had no college education—often referred to as "first-generation students"—graduate within 6 years, compared to 79% of students with at least one parent with a college degree (Figure 1). More than one-half of this 10 percentage

point difference remains after taking into account parental income, SAT/ACT scores, high school GPA, state residency, race, ethnicity, gender, and university attended.

Further, when considering income, there is a 13 percentage point difference in completion between students from the bottom income and top income quartiles (Figure 1). Of this difference, 6 percentage points remain after accounting for differences in parental education, SAT/ACT scores, high school GPA, state residency, race, ethnicity, gender, and university attended.

# Why Do Parental Education and Income Make a Difference?

First-generation students are at greater risk of delaying college entry, experiencing culture shock upon entering college, taking remedial coursework, and dropping out of college than their peers with college-educated parents.

Parental income affects the resources available to students, including access to quality K-12 education, adequate food and

### **Key Terms**

**Socioeconomic Status (SES)**: A measure combining an individual's or family's income, education, and occupation.

**College Entry Rate**: The proportion of individuals born in a given year that have enrolled in college by age 19.

**College Persistence Rate**: The proportion of students who, once enrolled in college, continue on to the next semester.

**College Completion Rate**: The proportion of college students that graduate within 6 years of enrollment.

**College Attainment Rate**: The proportion of all individuals born in a given year that possess a bachelor's degree by age 25.

## readiness for college and their ability to succeed in school.

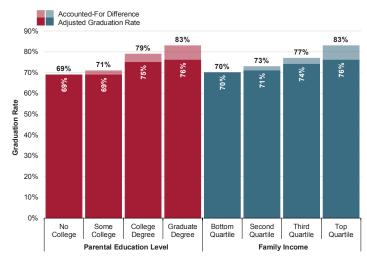
shelter, and extracurricular experiences that can boost a student's

Several other factors that are associated with growing up in a low-SES family may partially explain differences in college completion, including:

**What Are Other Related Factors?** 

- differential access to and enrollment in advanced and rigorous pre-college coursework;
- status as a nontraditional student, including those who delay their start, enroll part time, experience gaps in enrollment, and have children of their own;
- undermatching, whereby highachieving low-SES students attend colleges where the average GPAs and test scores of enrolled students are lower than their own;
- a lack of a sense of belonging; and
- being a student of color attending a predominantly white institution.

Figure 1: Variation in graduation rates between high- and low- SES students after controlling for student characteristics.



**Source**: The College Board.

# **Promising Programs and Policies to Increase College Completion among Low-SES Students**

The following efforts have shown evidence of boosting disadvantaged students' academic success:

#### **Providing Wrap-Around Support**

The City University of New York's Accelerated Study in Associates Program (ASAP), founded in 2007, aims to increase graduation rates at nine CUNY community colleges across New York City through full-time enrollment, financial support, tutoring, career services, and intensive mentoring. Prospective students must be a state resident, file a Free Application for Federal Student Aid (FAFSA), have a GPA of at least 2.0, and enroll in a full-time course load to participate in the program. A randomized-control trial found that graduation rates among ASAP students are more than double those of non-ASAP students (40% vs. 22%). The program is currently being replicated at Westchester Community College in Valhalla, New York, and Skyline College in San Bruno, California.

#### **Matching Students with the Right College**

The Expanding College Opportunities Project provides low-SES students informational packets about the college application process, application fee waivers, and net college costs. Program participants enrolled in colleges that were 19% more likely to be a good match and experienced graduation rates that were 6% higher than those of a control group.

### Increasing Students' Sense of Belonging

A recent experiment administered a 30-minute online module designed to improve students' sense of belonging to incoming students across three institutions in the summer before beginning college. The module provided information indicating that academic and social struggles were commonplace, non-reflective of potential for belonging, and eventually self-resolve. Among disadvantaged students, the intervention increased first year full-time enrollment from 32% to 41% and cumulative GPA from 3.33 to 3.42, and reduced the proportion of disadvantaged students in the bottom 20% of their class from 46% to 29%. Additionally, it increased social and academic integration across multiple metrics, and reduced the raw institutional achievement gap between advantaged and disadvantaged students by 40%. The University of Texas at Austin has created an online "U.T. Mindset" orientation based on the results from this research that is given to all first-year incoming students.

## **Addressing Lack of Academic Preparation with Co- Requisite Remediation**

A recent study at three CUNY community colleges enrolled remedial students in a college-level statistics course alongside weekly workshops for additional academic support instead of remedial algebra. Participating students had a 16% higher pass rate than did students taking remedial algebra (the control group) and also earned more college credits in the next year.

# **Decreasing Continuous Enrollment Gaps at Community Colleges**

Text message reminders to complete paperwork appear to be a promising strategy for encouraging continuous enrollment in community college. In a recent field experiment, researchers sent 12 personalized text messages to freshman enrolled in two-year community colleges encouraging them to refile their FAFSA in order to maintain their financial aid for the following year. Rates of persistence into the fall sophomore year increased from 64% to 76%. Persistence into the spring sophomore semester, after the intervention had ended, increased from 66% to 80%, suggesting an ongoing effect. At the same time, however, no gains from the intervention were seen among freshman at four year colleges.

#### **Providing Personal Coaching**

InsideTrack is a private company contracted by 15 colleges across the country to provide coaching services to students with the aim of improving retention and graduation. Coaches help students navigate class registration, childcare, and other obstacles that might impede completion. Coaches focus on areas such as health, academics, time management, finances, and persistence. An evaluation found the program increased persistence to the next semester by 9% (from 58% to 63%). Two years after receiving coaching, students were 14% more likely to stay in school and 4 years after the intervention the average graduation rate among coached students was 35% compared to 31% for the control group.

#### **Societal Benefits to Increased College Completion**

Beyond the benefits of college completion that are accrued by students and their families, there are also societal benefits to higher college completion rates, such that identifying and implementing promising practices and policies designed to increase college completion for low-SES students may benefit society as a whole. These societal benefits include:

#### **Increased Health and Decreased Health Expenditures**

Evidence suggests that college graduates smoke less, exercise more, and have lower rates of obesity compared to individuals without a college degree. These factors are associated with better health for individuals and decreased health care costs for society.

#### **Increased Income and Tax Revenue**

College graduates pay, on average, \$6,900 more in income taxes and earn \$17,700 more in after-tax income per year than high school graduates. Moreover, college graduates earn, on average, \$800,000 more than high school graduates by retirement.

#### **Increased Civic Engagement**

More highly educated individuals tend to have higher rates of civic engagement. In 2015, 16% of adults age 25 and older with a high school diploma volunteered compared to 39% of adults with at least a bachelor's degree.

#### **Decreased Public Benefit Participation**

In 2014, 29% of individuals age 25 and older who had a high school diploma participated in Medicaid compared to 12% of those with at least a bachelor's degree. Similarly, 13% of individuals with a high school diploma received Supplemental Nutrition Assistance Program (SNAP) food assistance compared to 3% of college graduates.

#### **Decreased Student Loan Default Rates**

Default rates on student loans are higher among students who drop out of college compared to those who attain a degree, despite that those who drop out have lower levels of average debt.



## Sources and Suggested Further Reading

### Falling Further Behind: Inequality in College Completion

## www.irp.wisc.edu

## Poverty Fact Sheet #13, 2017

Autor, David. 2010. *The Polarization of Job Opportunities in the U.S. Labor Market*. Center for American Progress. Available at: <a href="https://economics.mit.edu/files/5554">https://economics.mit.edu/files/5554</a>

Attewell, Paul, Heil, Scott, and Liza Reisel. 2011. "Competing Explanations of Undergraduate Noncompletion." *American Educational Research Journal* 48(3). Available at: <a href="http://journals.sagepub.com/doi/abs/10.3102/0002831210392018">http://journals.sagepub.com/doi/abs/10.3102/0002831210392018</a>

Bailey, Martha, Dynarski, Susan. 2011. "Gains and Gaps: Changing Inequality in U.S. College Entry and Completion," NBER Working Paper No. 17633. Cambridge, MA: National Bureau of Economic Research. Available at: <a href="http://www.nber.org/papers/w17633.pdf">http://www.nber.org/papers/w17633.pdf</a>

Baker, Rachel, and Eric Bettinger. 2014. "The Effects of Student Coaching: An Evaluation of a Randomized Experiment in Student Advising." *Educational Evaluation and Policy Analysis* 36(1). Available at <a href="http://journals.sagepub.com/doi/abs/10.3102/0162373713500523">http://journals.sagepub.com/doi/abs/10.3102/0162373713500523</a>

Baum, Sandy, Ma, Jennifer, and Kathleen Payea. 2013. *Education Pays: The Benefits of Higher Education for Individuals and Society.* The College Board. Available at: <a href="https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf">https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf</a>

Bengali, Leila, and Mary Daly. 2014. *Is It Still Worth Going to College?* Federal Reserve Bank of San Francisco. Available at: <a href="http://polkgoestocollege.web.unc.edu/files/2015/08/earn-an-extra-800000-dollars-in-income-1.pdf">http://polkgoestocollege.web.unc.edu/files/2015/08/earn-an-extra-800000-dollars-in-income-1.pdf</a>

Bowen, William, Chingos, Matthew, and Michael McPherson. 2009. *Crossing the Finish Line: Completing College at America's Public Universities*. Princeton, NJ: Princeton University Press. Available at: <a href="http://press.princeton.edu/titles/8971.html">http://press.princeton.edu/titles/8971.html</a>

Carroll, Stephen, and Emre Erkut. 2009. *How Taxpayers Benefit When Students Attain Higher Levels of Education*. Santa Monica, CA: RAND Corporation. Available at: <a href="https://www.rand.org/pubs/research\_briefs/RB9461.html">https://www.rand.org/pubs/research\_briefs/RB9461.html</a>

Caspar, Emma. 2014. "A Path to College Completion for Disadvantaged Students," *Focus* 31(2). Madison, WI: Institute for Research on Poverty. Available at: <a href="https://www.irp.wisc.edu/publications/focus/pdfs/foc312e.pdf">https://www.irp.wisc.edu/publications/focus/pdfs/foc312e.pdf</a>

Castleman, Benjamin, and Lindsay Page. 2017. "Freshman Year Financial Aid Nudges: An Experiment to Increase FAFSA Renewal and College Persistence." *Journal of Human Resources* 52(3). Available at: <a href="http://jhr.uwpress.org/content/51/2/389.short">http://jhr.uwpress.org/content/51/2/389.short</a>

Cunha, Flávio. 2009. "Crossing the Finish Line: A Review Article," *Journal of Human Capital* 3(4). Available at: <a href="http://www.journals.uchicago.edu/doi/full/10.1086/653689">http://www.journals.uchicago.edu/doi/full/10.1086/653689</a>

Dynarski, Susan. 2015. "Why Students With Smallest Debts Have the Larger Problem," *The New York Times*. Available at: https://www.nytimes.com/2015/09/01/upshot/why-students-with-smallest-debts-need-the-greatest-help.html

Dynarski, Susan, and Meghan Oster. 2016. Fulfilling the Promise of Community College: The ASAP Demonstrations. Brookings Institution. Available at: <a href="https://www.brookings.edu/research/fulfilling-the-promise-of-community-college-the-asap-demonstrations/">https://www.brookings.edu/research/fulfilling-the-promise-of-community-college-the-asap-demonstrations/</a>

Engle, Jennifer. 2007. "Postsecondary Access and Success for First-Generation College Students," *American Academic* 3. Available at: <a href="https://pdfs.semanticscholar.org/e27f/6b423579e29231e22446c0b7777d7b5946bf.pdf">https://pdfs.semanticscholar.org/e27f/6b423579e29231e22446c0b7777d7b5946bf.pdf</a>

Fries-Britt, Sharon, Bridget Turner. 2002. "Uneven Stories: Successful Black Collegians at a Black and a White Campus." *The Review of Higher Education*. Available at: <a href="https://muse.jhu.edu/article/30152">https://muse.jhu.edu/article/30152</a>

Grodsky, Eric, and Christian Smith. Forthcoming. "Stratification in Higher Education," in *Encyclopedia of International Higher Education Systems and Institutions*. Springer. Available at: <a href="http://www.springer.com/us/book/9789401789042">http://www.springer.com/us/book/9789401789042</a>

Hausmann, Leslie, Schofield, Janet, and Rochelle Woods. 2007. "Sense of Belonging as a Predictor of Intentions to Persist Among African American and White First-Year College Students," *Research in Higher Education*. Available at: <a href="https://www.jstor.org/stable/25704530?seq=1#page\_scan\_tab\_contents">https://www.jstor.org/stable/25704530?seq=1#page\_scan\_tab\_contents</a>

Holzer, Harry. 2015. *Job Market Polarization and U.S. Worker Skills: A Tale of Two Middles*. Washington, DC: Brookings Institution. Available at: <a href="https://www.brookings.edu/wp-content/uploads/2016/06/polarization\_jobs\_policy\_holzer.pdf">https://www.brookings.edu/wp-content/uploads/2016/06/polarization\_jobs\_policy\_holzer.pdf</a>

Hoxby, Caroline, and Sarah Turner. 2013. "Expanding College Opportunities for High-Achieving, Low Income Students." Stanford Institute for Economic Policy Research. Available at: <a href="http://siepr.stanford.edu/sites/default/files/publications/12-014paper\_6.pdf">http://siepr.stanford.edu/sites/default/files/publications/12-014paper\_6.pdf</a>

Inman, Elliot, and Larry Mayes. 1999. "The Importance of Being First: Unique Characteristics of First Generation Community College Students," *Community College Review*. Available at: <a href="http://journals.sagepub.com/doi/abs/10.1177/009155219902600402">http://journals.sagepub.com/doi/abs/10.1177/009155219902600402</a>

Logue, A. W., Watanabe-Rose, Mari and Daniel Douglas. 2016. Should Students Assessed as Needing Remedial Mathematics Take College-Level Quantitative Courses Instead? A Randomized Controlled Trial. Educational Evaluation and Policy Analysis. Available at: <a href="http://journals.sagepub.com/doi/abs/10.3102/0162373716649056">http://journals.sagepub.com/doi/abs/10.3102/0162373716649056</a>

McCarron, Graziella, and Karen Inkelas. 2006. "The Gap between Educational Aspirations and Attainment for First-Generation College Students and the Role of Parental Involvement," *Journal of College Student Development*. Available at: <a href="https://muse.jhu.edu/article/201902/summary">https://muse.jhu.edu/article/201902/summary</a>

Milesi, Carolina. 2010. "Do All Roads Lead to Rome? Effect of Educational Trajectories on Educational Transitions." Research in Social Stratification and Mobility. Available at: <a href="http://www.sciencedirect.com/science/article/pii/S0276562410000028">http://www.sciencedirect.com/science/article/pii/S0276562410000028</a>

Mullen, Ann. 2010. Degrees of Inequality: Culture, Class, and Gender in American Higher Education. Baltimore, MD: Johns Hopkins University Press. Available at: <a href="https://books.google.com/books?hl=en&lr=&id=sTBIKRk1LJ4C&oi=fnd&pg=PR7&dq=Mullen,+2010+college+completion&ots=G1R3wBdGoB&sig=FfNZ3DcRKIzu9Oblvaxi3Le3RcE#v=onepage&q=Mullen%2C%202010%20college%20completion&f=false</a>

Nunez, Anne-Marie, and Stephanie Cuccaro-Alamin. 1998. First-Generation Students: Undergraduates Whose Parents Never Enrolled in Postsecondary Education. U.S. Department of Education. Available at: <a href="http://files.eric.ed.gov/fulltext/ED420235.pdf">http://files.eric.ed.gov/fulltext/ED420235.pdf</a>

Ostrove, Joan, and Susan Long. 2007. "Social Class and Belonging: Implications for College Adjustment," *The Review of Higher Education* 30(4): 363-389. Available at: <a href="http://digitalcommons.macalester.edu/cgi/viewcontent.cgi?article=10">http://digitalcommons.macalester.edu/cgi/viewcontent.cgi?article=10</a> 00&context=psycfacpub

Randford, Alexandria. 2013. *Top Student, Top School? How Social Class Shapes Where Valedictorians Go to College*. Chicago: University of Chicago Press. Available at: <a href="http://press.uchicago.edu/ucp/books/book/chicago/T/bo15506888">http://press.uchicago.edu/ucp/books/book/chicago/T/bo15506888</a>. html

Yeager, David, and Gregory Walton. 2016. *Teaching a Lay Theory before College Narrows Achievement Gaps at Scale*. Proceedings of the National Academy of Sciences. Available at: http://www.pnas.org/content/113/24/E3341.full