

EDUCATION: THE FOUNDATION FOR ECONOMIC SUCCESS

JULY 2017

U.S. CONGRESS JOINT ECONOMIC COMMITTEE
Ranking Member U.S. Senator Martin Heinrich



Education: The Foundation for Economic Success

It is a core American belief that everyone should be able to achieve success regardless of their background. Unfortunately, today the American Dream is out of reach for too many. American workers are now competing with workers from around the globe, and technology advances are changing the skills that employers are looking for from their workers. With these changes, a high school diploma is often not enough to gain a job that pays well and offers good benefits. More education and training is needed to succeed in the labor market.

Educational attainment—the highest level of education completed—has risen substantially in recent decades. More Americans are attending and completing associate’s or bachelor’s degree programs. However, not all Americans have access to the education that allows them to succeed. There are sharp divisions in educational attainment by income level, race, ethnicity, and geography. When our education system leaves some behind, it produces divisions in our workforce and society that follow people through their lifetimes and into the next generation.

To ensure that all Americans have a pathway to achieve the American Dream, everyone must have access to the educational institutions that enable Americans to succeed in the labor market, including an affordable college education. Further, more paths must be developed, including ones that do not require a two- or four-year degree, but still build valuable skills that employers demand. This includes certification programs, apprenticeships, and programs that foster career readiness in high school students.

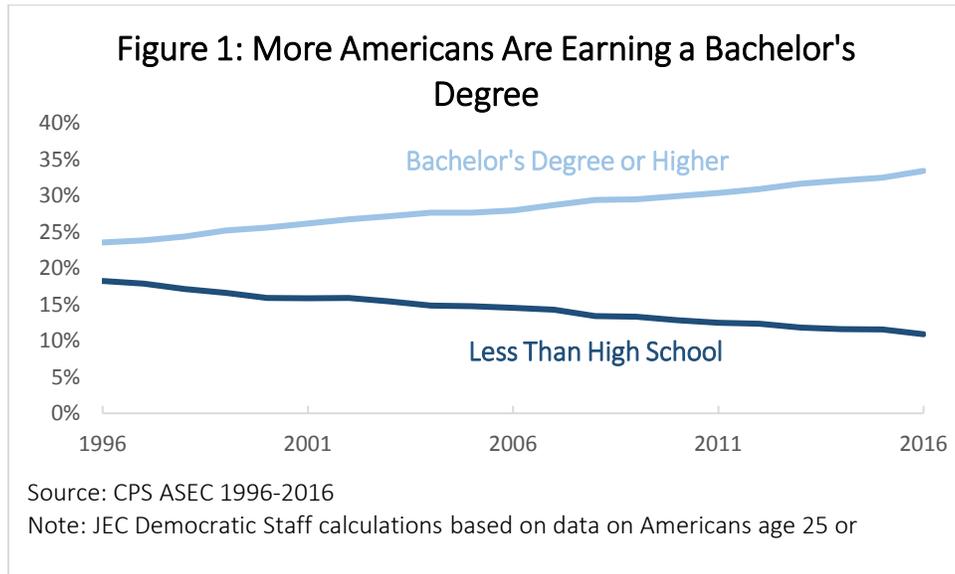
The 21st century economy requires a skilled labor force – one that has a strong education and training pipeline that starts early on and continues throughout a person’s life, with off-ramps to careers and on-ramps back into education along the way. This report will look at the value of education to success in today’s economy, and where we are currently falling short.

Americans are Becoming More Educated

Over the last 20 years, Americans have become steadily more educated. The proportion of people with less than a high school degree has been cut by 40 percent, while the proportion with a bachelor’s degree or higher has increased by 40 percent. More than one in three Americans above age 25 now holds a bachelor’s degree (see figure 1). More Americans also have graduate degrees, at 13 percent today up from 8 percent of working age adults in 1996.

The American labor force will continue to become more educated, as more high school graduates continue to enroll in and complete college. In 2015, nearly 70 percent of high school graduates enrolled in a two- or four-year college the fall after completing high school.¹ College completion rates are on the rise as well. About 60 percent of first-time, full-time four-year

college students are now finishing their degrees within six years, up from 55 percent a decade prior.²



Education Improves Economic Outcomes

The more education someone receives, the more likely she is to be in the labor force, have a job, and earn a living wage. In 2016, adults with a high school degree were nearly twice as likely to be unemployed as those with a bachelor’s, and those without a high school degree were 50 percent more likely to be unemployed than the national average.³ Those with a high school degree or less are also substantially less likely to be in the labor force. (See table 1.)

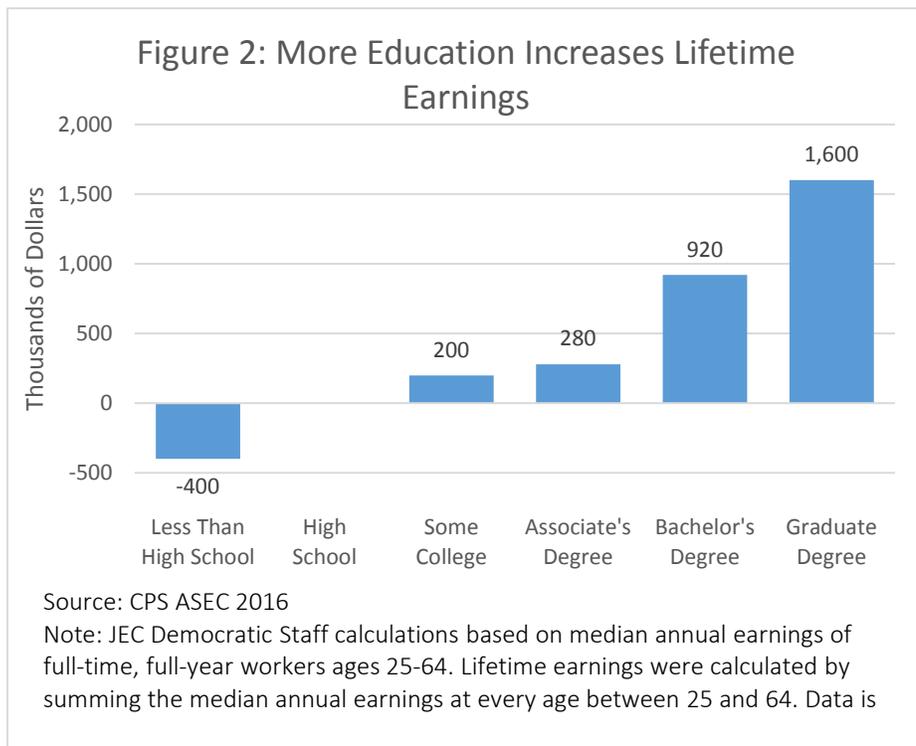
Table 1: Labor force participation and unemployment by educational attainment

	Labor Force Participation Rate	Unemployment Rate
Less than high school	46%	7.4%
High school	58%	5.2%
Some college, no degree	64%	4.4%
Associate’s degree	70%	3.6%
Bachelor’s degree	74%	2.7%
Graduate degree	75%	2.2%

Source: Bureau of Labor Statistics

Note: Includes adults over the age of 25 years

With every additional degree, workers earn higher wages. On average, adults with up to a high school degree earn \$400,000 more over their lifetime than those without a high school degree. Those with an associate’s degree earn \$280,000 more than those who stopped at high school, and the lifetime premium for having a bachelor’s degree is \$920,000 more than those whose education ended at high school.⁴ Graduate degrees increase lifetime earnings by \$1.6 million. (See figure 2.)



Part of this is because those most likely to succeed in the workforce attend college at higher rates, but this does not explain the entire difference. Rigorous academic research has shown that obtaining higher levels of education leads to higher income after controlling for other factors that may lead to both higher income and a higher probability of attending college. On average, earnings increase 5 to 15 percent for every year of college that a student attends.⁵

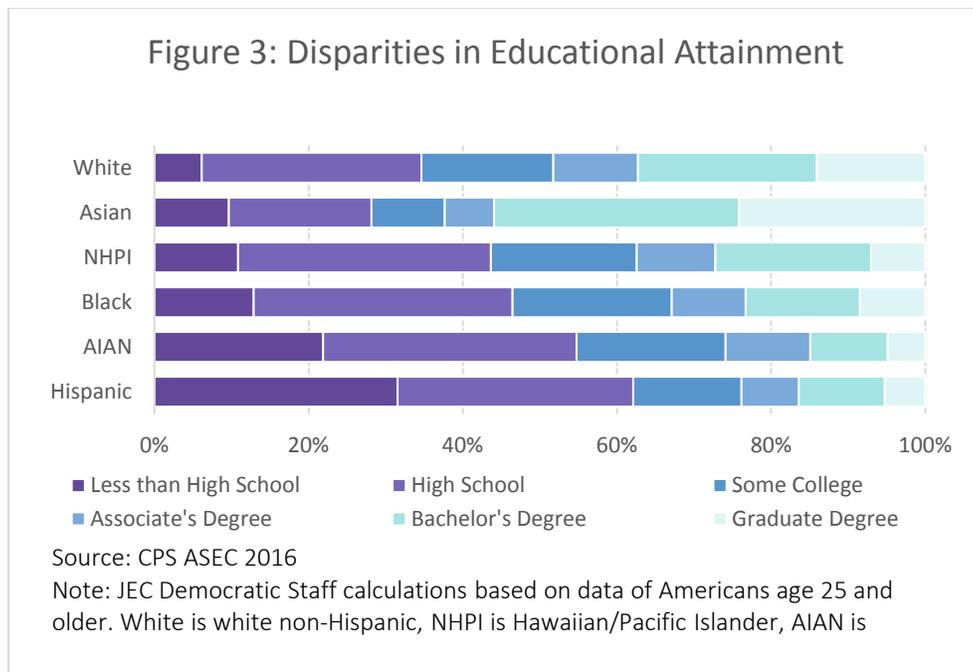
Despite Progress, Many are Being Left Behind

Education holds tremendous value, and overall educational attainment has been on the rise. But access to higher education varies widely across the country, and many groups of Americans are being left behind in a labor market that increasingly requires more education.

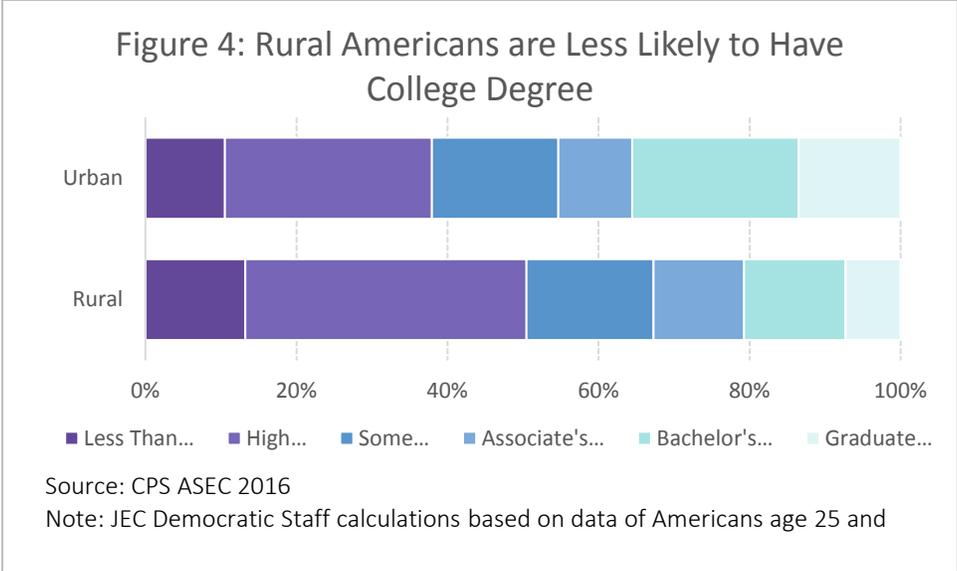
A parent’s income level is connected to whether a young person is bound for college. In 2005, children of the top earners were five times as likely to have a college degree as children in low

wage households—53 percent of children of parents who earned in the top fifth of Americans had a college degree, compared to only 11 percent of children of parents who earned in the bottom fifth.⁶ These gaps have widened over time.⁷

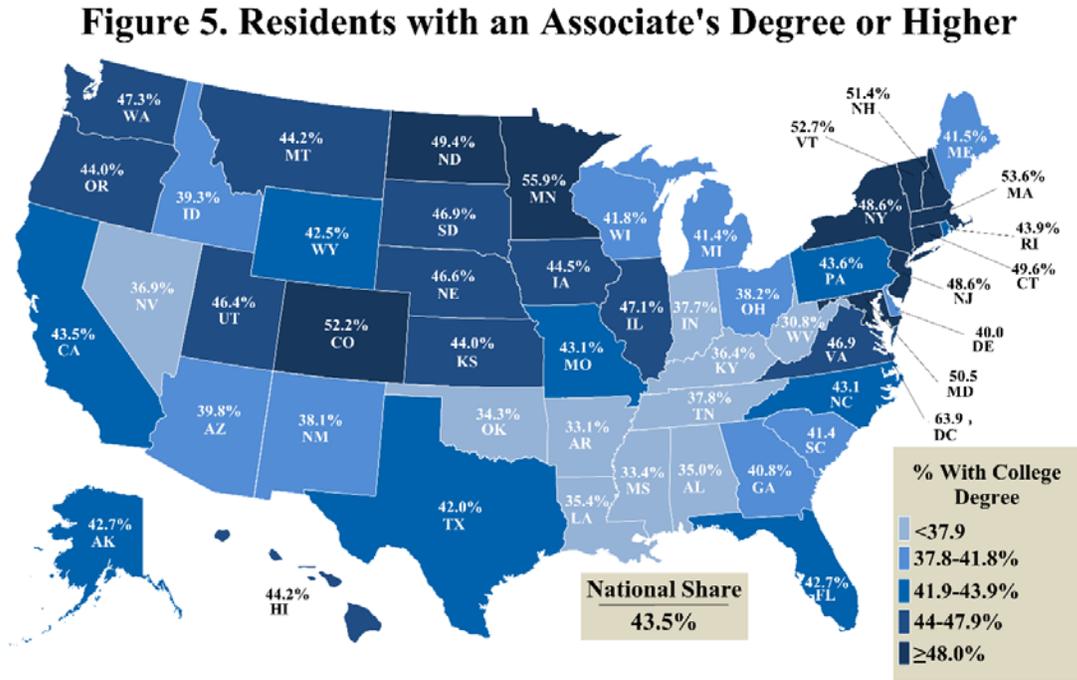
Considerable racial and ethnic disparities exist at every level of education. White adults (48 percent) are substantially more likely to have completed a college degree than Native Hawaiian and Pacific Islander adults (37 percent), black adults (33 percent), American Indian adults (26 percent), and Hispanic adults (24 percent). Asian American adults (24 percent) and white adults (14 percent) are also substantially more likely to hold graduate degrees than other racial and ethnic groups—though substantial variation occurs across Asian American ethnic subgroups. These educational disparities contribute to significant income and wealth gaps by race and ethnicity.⁸ (See figure 3.)



Education also varies geographically. Rural America, where one-third of the nation’s public school students live, consistently lags behind urban America in educational attainment and the gap is growing.⁹ Urban residents are almost twice as likely as rural residents to have a bachelor’s degree. Rural residents are also more likely to have not completed high school. (See figure 4). There are exceptions, though; primarily rural New Mexico has had success in attracting workers with graduate degrees—one in nine residents have one—likely partly attributable to the presence of two Department of Energy National Laboratories, although the state lags behind the national average at other levels of education.



Education varies widely across states as well. The proportion of adults with less than a high school degree ranges from one in fourteen adults in Minnesota to more than one in seven in Texas (see appendix table 2). College degree rates vary substantially by state as well, ranging from less than one third of the over-25 population in West Virginia to more than half in Minnesota (see figure 5).



Congress Must Do More to Close Educational Gaps

In order to ensure that all Americans have the ability to find a good job that pays well and provides a foundation for their family, Congress must close educational attainment gaps. Everyone should have access to higher education, regardless of race, ethnicity, location, or income level. Making college more affordable, giving students access to better information about their options, and better preparing high school students for the rigors of college are all goals that Congress must pursue.

At the same time, we must recognize that not all Americans are going to pursue and complete a college degree. We need more options for students to find pathways to successful careers. Middle-skill programs like apprenticeships and career and technical education are a promising option that must be expanded upon—completing a registered apprenticeship program can increase lifetime earnings by \$240,000.¹⁰ Working towards career readiness in high school must be a priority as well, so that students who enter directly into the workforce are equipped with skills and certifications that employers value.

Table 2: Educational Attainment by State

State	Less Than High School	High School	Some College, No Degree	Associate's Degree	Bachelor's Degree	Graduate Degree
Alabama	14%	34%	17%	10%	15%	10%
Alaska	6%	30%	21%	9%	22%	12%
Arizona	14%	24%	21%	10%	19%	10%
Arkansas	13%	36%	18%	9%	16%	8%
California	15%	23%	18%	9%	22%	13%
Colorado	6%	25%	17%	11%	27%	14%
Connecticut	8%	29%	13%	10%	24%	16%
Delaware	9%	37%	14%	10%	18%	12%
DC	8%	20%	8%	4%	26%	34%
Florida	9%	32%	16%	12%	20%	10%
Georgia	12%	30%	17%	9%	21%	11%
Hawaii	6%	31%	18%	12%	23%	10%
Idaho	9%	27%	25%	12%	18%	9%
Illinois	9%	27%	17%	9%	23%	15%
Indiana	10%	36%	16%	11%	16%	12%
Iowa	8%	30%	17%	14%	22%	9%
Kansas	9%	27%	21%	9%	24%	11%
Kentucky	15%	34%	15%	9%	16%	12%
Louisiana	14%	33%	18%	9%	17%	9%
Maine	7%	35%	16%	11%	19%	11%
Maryland	7%	28%	15%	9%	22%	19%
Massachusetts	8%	26%	12%	7%	25%	21%
Michigan	7%	32%	19%	11%	18%	12%
Minnesota	7%	24%	14%	16%	26%	13%
Mississippi	15%	32%	19%	12%	14%	7%
Missouri	9%	31%	17%	10%	21%	12%
Montana	6%	29%	20%	12%	22%	11%
Nebraska	10%	27%	17%	12%	23%	11%
Nevada	11%	32%	20%	10%	19%	7%
New Hampshire	5%	30%	14%	12%	23%	17%
New Jersey	8%	31%	13%	7%	25%	16%
New Mexico	13%	29%	20%	10%	16%	12%
New York	11%	28%	12%	10%	22%	17%
North Carolina	12%	28%	17%	11%	20%	12%
North Dakota	6%	27%	17%	16%	24%	9%
Ohio	8%	36%	17%	10%	16%	12%
Oklahoma	10%	35%	20%	9%	17%	8%
Oregon	8%	25%	23%	10%	21%	13%
Pennsylvania	9%	36%	12%	10%	21%	12%
Rhode Island	14%	28%	14%	10%	20%	14%
South Carolina	13%	29%	17%	11%	18%	12%
South Dakota	7%	29%	17%	17%	21%	9%
Tennessee	13%	33%	17%	9%	18%	11%
Texas	15%	25%	18%	9%	22%	11%
Utah	7%	24%	22%	13%	21%	12%
Vermont	6%	29%	12%	9%	28%	16%
Virginia	10%	25%	18%	8%	23%	16%
Washington	10%	24%	19%	11%	23%	13%
West Virginia	13%	43%	13%	9%	14%	8%
Wisconsin	8%	33%	17%	15%	18%	9%
Wyoming	5%	33%	19%	14%	17%	11%

Source: CPS ASEC 2016

Note: Data of individuals age 25 or older.

¹ National Center for Education Statistics. "[Fast Facts](#)." Accessed July 17, 2017.

² Note: six years is a common time frame to measure completion of a bachelor's degree as it is 150 percent of the typical four years, allowing a buffer for degrees or paths that can take longer than normal. National Center for Education Statistics. Digest of Education Statistics. [Table 326.10](#). October 2016.

³ Bureau of Labor Statistics. [Current Population Survey](#). Tables 1 and 7

⁴ JEC calculations based on data from the Census Bureau, American Community Survey. Note: It is important to note that these outcomes are on average, and that outcomes vary substantially by institution, program of study, and individual circumstances and demographics.

⁵ Council of Economic Advisers. "[Investing in Higher Education: Benefits, Challenges, and the State of Student Debt](#)." The White House. July 2016.

⁶ Haskins, Ron. Getting Ahead or Losing Ground: Economic Mobility in America. [Chapter VII: Education and Economic Mobility](#). Brookings. February 2008.

⁷ Bailey, Martha J. and Susan M. Dynarski. "[Gains and Gaps: Changing Inequality in U.S. College Entry and Completion](#)." National Bureau of Economic Research. December 2011.

⁸ Patten, Eileen. "[Racial, Gender Wage Gaps Persist in U.S. Despite Some Progress](#)." Pew Research Center. July 1, 2016; Jones, Janelle. "[The Racial Wealth Gap: How African-Americans have been Shortchanged out of the Materials to Build Wealth](#)." Economic Policy Institute. February 13, 2017.

⁹ National Center for Education Statistics. "[The Status of Rural Education](#)." May 2013.

¹⁰ Reed, Debbie, Albert Yung-Hsu Liu, Rebecca Kleinman, Annalisa Mastri, Davin Reed, Samina Sattar, and Jessica Ziegler. "[An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeship in 10 States](#)." Mathematica Policy Research. July 25, 2012.