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HIGH COSTS, UNCERTAIN BENEFITS

What Do Americans Without a College Degree Think About Postsecondary Education?

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High Costs, Uncertain Benefits: What Do Americans Without a College Degree Think About Postsecondary Education?

The path to economic mobility increasingly runs through postsecondary education. Although the combination of rising tuition prices and a difficult labor market have raised questions about the value of education after high school, degree and certificate holders are still better off than those with just a high school diploma.

Indeed, though the costs of attending public college have increased more than 40 percent since the early 2000s (after adjusting for inflation) and wages for recent college graduates have declined over the past decade, the wage premium attached to a college degree remains robust.[1] That is largely due to the fact that the economic fortunes of young workers with just a high school diploma have dimmed over time.[2] As a result, it is increasingly difficult to climb the economic ladder with just a high school education. Among children born in the bottom economic quintile, those who earned a college degree had just a 10 percent chance of remaining there as adults, but nearly half of their peers with just a high school diploma (47 percent) remained in the bottom quintile as adults.[3]

Yet, despite increases in high school attainment, 60 percent of American adults between the ages of 25 and 64 have not completed a postsecondary degree or certificate. A sizable proportion—22 percent—have enrolled in some college but dropped out before earning a degree.[4] Given the significant return on completing a postsecondary credential, scholars have asked why some qualified students forgo further education after high school. Many have argued that the high cost of higher education is the primary culprit, and government grant and loan policies are designed to ensure that prospective students can afford out-of-pocket costs.

However, prospective students may not have a clear sense of the costs and potential benefits of postsecondary education because they either are unaware of the information or hold inaccurate beliefs. These information problems may lead some who would otherwise benefit from further education to choose a different path. For instance, national evidence suggests that nearly 70 percent of parents are unable to accurately estimate college costs.[5] A study from the early 2000s found that some low-income families overestimate the cost of attending college by two to three times, perhaps leading some of them to conclude that postsecondary education is out of reach.[6]

Those who decide to enroll also fall victim to informational blind spots. Recent research has shown that when it comes to choosing a college, high-achieving, low-income students often enroll in one that does not match their academic qualifications.[7] Evidence suggests that these "undermatched" students are less likely to graduate than if they had gone to a school that was a better fit academically.[8] Other research on students in two-year colleges indicates that more students enroll in low-return programs than in high-return ones, and most fail to complete a credential.[9]

In response, policymakers have made efforts to improve the information that prospective consumers have at their disposal. President Barack Obama has developed a "College Scorecard" designed to help consumers compare colleges on basic measures of costs and student outcomes. In a handful of states, policymakers

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have merged postsecondary records with wage information to track and report the earnings profiles of graduates from different degree and certificate programs at different institutions.[10] And nonprofits and researchers have worked to push better consumer information out to prospective students.[11]

Improving consumer information is worthwhile. But we still know less than we should about people's beliefs, attitudes, and preferences when it comes to postsecondary education. One group in particular has received less attention than they deserve in these discussions about consumer information: adults without a college degree. Most studies of information and college choice focus on traditional-age undergraduates searching for four-year colleges. Discussions of the costs and benefits of college tend to focus on four-year bachelor's degrees. The same is true of existing research on students' perceptions of the likely economic returns to different college majors.[12]

The truth is, however, that the set of potential students is much broader than traditional-age undergraduates. As of 2012, 40 percent of undergraduate students were over the age of 25, and nontraditional student enrollment is projected to grow faster than enrollment of 18 to 22 year olds.[13] Moreover, despite the popular fixation on four-year bachelor's degrees, other paths exist to a middle-class wage. Specifically, many subbaccalaureate programs offered at two-year colleges—particularly certificates and associate degrees in career and technical fields—provide a sizable economic benefit and cost less in time and money.[14] In fact, studies of public university graduates in states like Florida, Texas, and Colorado have found that those with technical associate degrees can earn more immediately after graduation than those with bachelor's degrees.[15]

Again, though, the question is whether adults without a postsecondary degree recognize that there are benefits to further education and training and multiple pathways to realizing those benefits. The answer has implications for our efforts to lift Americans out of poverty and for the economy as a whole. As a group, young adults with a high school diploma have suffered through a sustained period of declining labor-market prospects. Those with some college have done somewhat better, but recent evidence suggests that those who started a degree but failed to finish it now do little better than their peers who have not gone to college at all.[16] Some of these citizens would benefit from further education and training, but how much do they know about their options?

Using a new, nationally representative survey, this report explores how adults without a college degree perceive the postsecondary system as a whole and the costs and benefits of their potential options. Specifically, the study examines the following questions:

- Do adults without a college degree aspire to higher levels of education?
- Do they feel that the current higher education system is well designed to meet their needs?
- Do these adults hold accurate beliefs about the costs of public community colleges?
- How do they see the economic returns to different types of education?

The 20-minute Internet-based survey asked respondents a battery of questions about their current economic situation, their educational history and current aspirations, the costs and potential benefits of different postsecondary options, and the types of information they see as important in choosing a college or program. This report provides the top-line findings from this survey, and future analysis will dig deeper into the data. I will briefly describe the survey and the data set; explore the main findings on aspirations, attitudes, and beliefs; and conclude with implications for policy.

Data Collection

The data were collected via an Internet questionnaire that took an average of 20 minutes to complete. The survey was administered by GfK North America, which maintains the KnowledgePanel, a probability-based online survey research panel. Unlike other Internet surveys (which are opt-in), panelists are randomly selected to participate using the United States Postal Delivery Sequence File, which covers 97 percent of American households (even those without a landline phone).

TABLE 1

DEMOGRAPHICS OF SURVEY PARTICIPANTS

Education	
High school	59.7
Some college	40.3
Race/Ethnicity	
White	56.8
African American	14.9
Hispanic	21.6
Other/Multiracial	6.8
Gender	
Male	53.5
Female	46.5
Household Income	
Less than $30,000	24.4
$30,000 to $60,000	31.7
$60,000 to $100,000	29.9
$100,000 and above	14.0
Employment	
Working	65.6
Not working (looking for work/ temporary layoff)	12.3
Not working (retired, disabled)	8.0
Not working (other)	14.1

Note: Cells contain the percentage of the sample in each category. Sampling weights applied. *N* = 1,584. Percentages may not sum to 100 due to rounding.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

Those households without access to the Internet who agree to participate are provided a laptop computer and Internet service. The Associated Press uses the KnowledgePanel to conduct many of its polls on politics (the "AP-GfK Poll"), and other education researchers have leveraged it to conduct surveys of Americans' attitudes toward K–12 schooling and education policy.[17]

The sampling frame included adults between the ages of 25 and 44 who had completed high school but did not have a college degree. Individuals who had enrolled in "some college" but did not finish a degree are included, along with those with just a high school diploma or GED. In all, 1,584 respondents took the survey over the course of March 2015. GfK provides poststratification weights to ensure that the sample reflects the population of Americans in this age and educational group on a set of demographic variables. Using these weights to calculate statistics, in turn, helps ensure that findings are representative. Unless otherwise noted, the statistics in this paper were calculated with these sampling weights applied.

Table 1 provides basic demographic information for the sample. About 60 percent of the respondents had a high school diploma, while 40 percent had some college but no degree. Just over half of the respondents are white, while 22 percent are Hispanic and 15 percent are African American. Nearly two-thirds of respondents were working, while an additional 12 percent were looking for work. Fourteen percent were categorized as "not working, other." About 56 percent of respondents had a household income less than $60,000 per year, and just 14 percent earned more than $100,000.

Educational Aspirations and Perceptions of the Postsecondary System

There is much debate about the extent to which American culture has emphasized the college degree as the achievement to which all should aspire. The emphasis on college has delighted those who wish to promote education attainment and dismayed others who worry that we are pushing too many students into college. Critics of "college for all" argue that working-class Americans without a college degree will think less of themselves and feel social pressure to enroll in a program that may not be a good match for their talents and abilities.[18] On the other side, proponents of the "completion agenda" argue that we need more students to enroll in postsecondary education, not fewer, and that part of the challenge is creating a system that better fits peoples' needs and budget constraints.[19]

Do Americans who have not yet finished a college degree aspire to further education and training? And how do they feel about the opportunities available to them in the existing postsecondary system? To shed

some light on these issues, the survey asked a set of questions about educational aspirations and plans, as well as attitudes toward the existing postsecondary system.

Educational Aspirations. Figure 1 reports on the educational aspirations of respondents. The survey asked respondents "What level of education would you like to reach in your life?" The goal was to measure people's broad aspirations in life, not only their immediate plans (though we asked about those as well). Respondents had the option to choose "I am satisfied with my current level of education."

Prior to this question, a series of short prompts described various postsecondary options: apprenticeships, certificate programs, associate degrees, and bachelor's degrees. For each, the prompt displayed the length of time a credential is supposed to take (normal time), what kinds of institutions offer them, and what subjects or fields they focus on (career and technical versus academic).

Interestingly, 43 percent of the respondents were satisfied with their current level of education. Nearly one-third aspired to a bachelor's degree or higher, while 14 percent aspired to an associate degree. Just 10 percent aspired to a certificate in an occupational field.

When you disaggregate the high school graduates from those with some college education, an interesting pattern emerges: though we might expect high school graduates to be the least satisfied with their current level of education, nearly 51 percent reported that they were satisfied with their current level of education.[20] The other half of the high school graduate group was roughly evenly split, with 27 percent of respondents aspiring to a certificate or associate degree and about 23 percent looking toward a bachelor's degree or above. The "some college" group had higher aspirations (which likely explains their prior enrollment). A little less than one-third of them were satisfied with "some college." A much larger proportion (46 percent) of this group were interested in earning a bachelor's degree or higher.

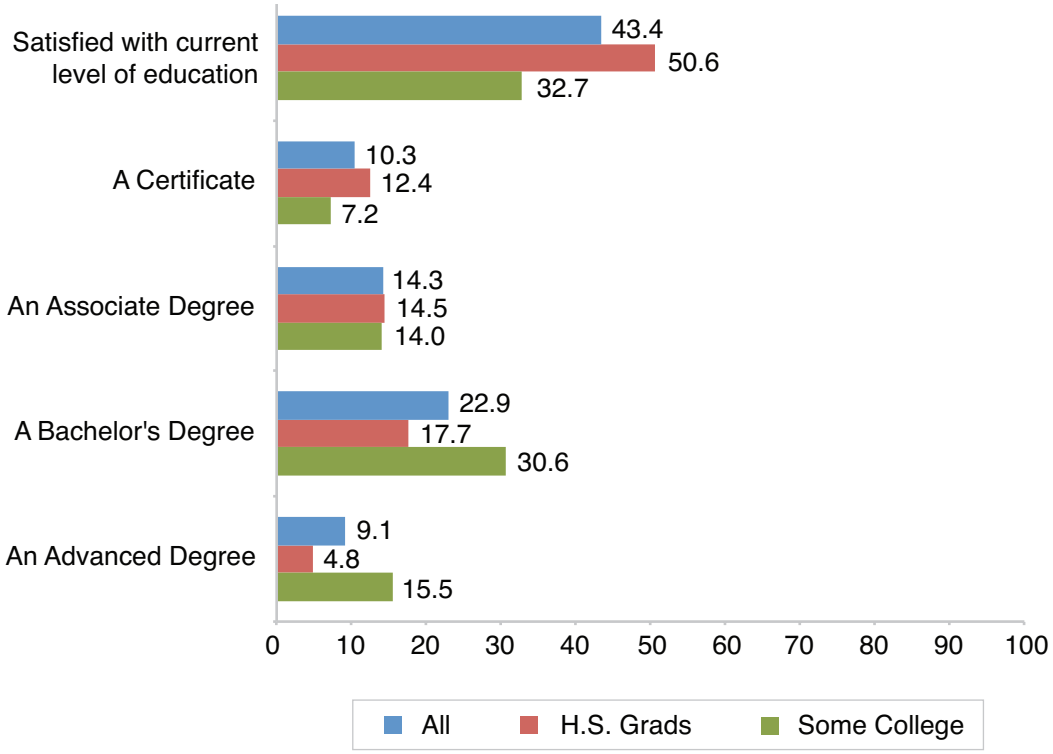
We also disaggregated aspirations by age groups (25–34 year olds and 35–44 year olds), race and ethnicity categories (white, African American, and Hispanic), and three income groups. The full results are available in the separate online appendix. Older respondents were more likely to be satisfied with their current level of education; 49 percent chose this response, compared to about 38 percent of those between the ages of 25 and 34. A nearly identical proportion of the younger group—38 percent—aspired to a bachelor's degree or higher, compared the quarter who wished to reach a certificate or associate degree. Among older workers, just over one-quarter aspired to a BA or above. Thus, while younger respondents were more likely to aspire to a degree or certificate than older ones, 40 percent of them reported being satisfied with their current level of education.

Gaps in aspirations were also evident among racial and ethnic groups. African American (34.9 percent) and Hispanic (36.3 percent) respondents were less likely than whites (50.6 percent) to report feeling satisfied with their current education. Nearly 40 percent of Hispanic respondents wished to reach a BA or higher compared to 34 percent of African Americans and just 27 percent of whites. In each group, the proportions of respondents who were satisfied or that aspired to a BA or higher outpaced those who wished to reach a certificate or an associate degree. The results across income groups were only somewhat different. Of respondents in the highest income category, 47 percent reported that they were satisfied with their level of education, compared to 39 percent of those respondents in the lowest income group. Thirty-three percent and 31 percent of high- and low-income respondents, respectively, aspired to a bachelor's degree or higher.

These aspirations track with respondents' postsecondary plans. When it comes to peoples' plans to enroll in postsecondary education in the next year, the majority of respondents felt it was unlikely that they would do so. Table 2 displays those results. When asked how likely it was that they would enroll in college or trade school in the next 12 months, nearly 70 percent of respondents thought that they would probably not or definitely not enroll in school in the next 12 months. Again, differences emerge across those with some college and high school graduates. Just 9 percent of high school graduates thought that they would probably or definitely enroll in the next 12 months, and 75 percent said that they would definitely not or probably not. Among those with some college, 23 percent said they would probably or definitely enroll. Still, 61 percent said they would probably not or definitely not enroll.

FIGURE 1

WHAT LEVEL OF EDUCATION WOULD YOU LIKE TO REACH?



Note: Bars represent the percentage of respondents who answered the question in each category. Sampling weights applied. Weighted *N* = All: 1,530, High School Grads: 914, Some College: 616.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

TABLE 2

HOW LIKELY ARE YOU TO ENROLL IN SCHOOL IN THE NEXT 12 MONTHS?

	All	High School Grad	Some College
Definitely or Probably	14.7	8.9	23.4
Possibly	16.2	16.4	16.0
Probably Not or Definitely Not	69.0	74.7	60.6
Weighted *N*	1,549	923	626

Note: Cells contain the percentage of the sample in each category. Sampling weights applied.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

Figure 1 and table 2 describe a set of adults who are not exactly chomping at the bit to enroll in further education and training. Overall, a slight majority of respondents aspire to earn a degree or certificate, but many are satisfied with their current level of education. This is particularly true among the high school graduates, older respondents, and white respondents. The next sections provide some possible explanations for why such a substantial proportion of the sample did not wish to reach a higher level of education in their lifetime.

TABLE 3

RESPONDENT PERCEPTIONS OF POSTSECONDARY EDUCATION

Statement	Agree/Strongly Agree
Some education after high school is necessary to get a good job today.	84.0
A college education is worth the cost.	60.0
Today's colleges are not set up for people with family and work responsibilities.	57.5

Note: Cells contain the percentage of respondents who answered the question in each category. Sampling weights applied. Weighted *N* = Statement 1: 1,545; Statement 2: 1,543; Statement 3: 1,543.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

Perceptions of Postsecondary Education: Necessary, but Too Expensive. The survey asked respondents a number of questions about the importance of education after high school in today's economy and whether college was affordable, worth the investment, and designed for students who have work and family responsibilities. Table 3 displays the proportion of respondents who agreed or strongly agreed (on a four-point scale) with the three statements in the left-hand column.

Though many reported being satisfied with their current level of education, a large majority (84 percent) felt that some education after high school was necessary today. However, only 60 percent saw college as being worth the cost, and 57 percent agreed that today's colleges are not set up for the many adults with family or work responsibilities. Asked about college affordability, 76 percent chose "even with financial aid, college is still too expensive for most people to afford" over "with financial aid, anyone can afford to enroll in college if they wish." (See online appendix.)

Figure 2 shows what respondents viewed as the top reason people do not attend college. By far, the most-cited answer was that college costs too much; 54 percent of respondents chose cost as the top reason. High school graduates were particularly likely to cite cost as the top reason, with 57 percent choosing that option. The second-most-cited reason was a straightforward one: some people are not sure of their career plans. Choices that had to do with the value of college ("college won't help them find a good job") or the convenience of attending ("courses are not offered at convenient times" or "it takes too much time to complete a degree") were each cited by fewer than 5 percent of respondents.

Most Adults Are Unable to Accurately Estimate Tuition Costs

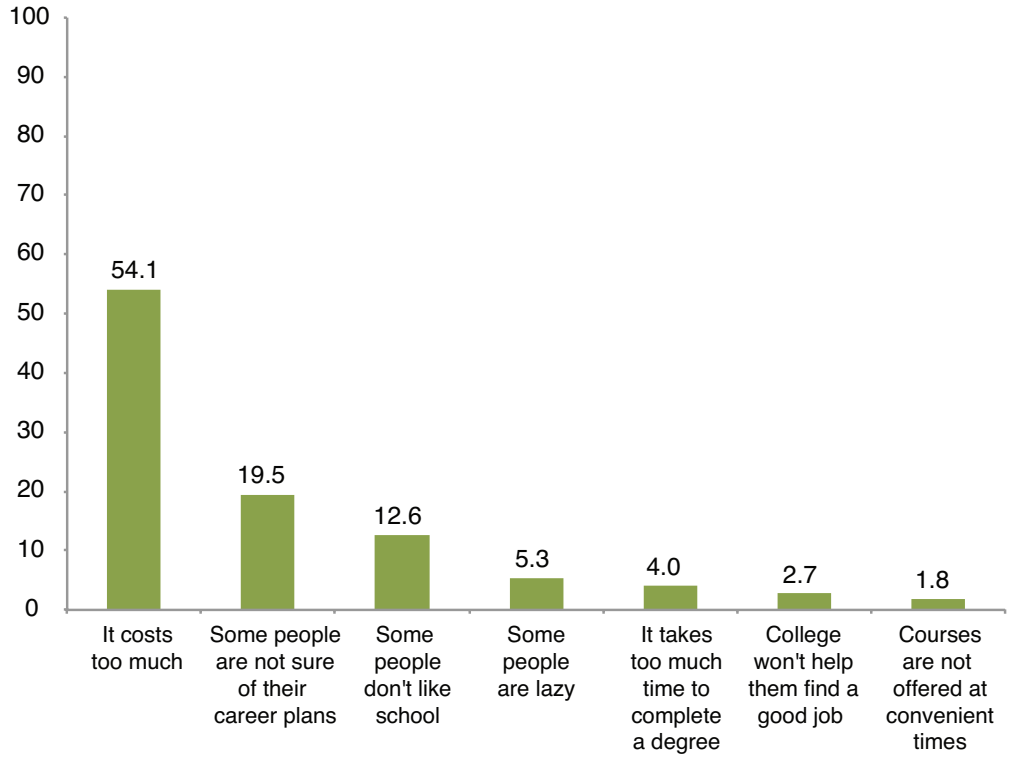
Existing research on traditional-age students and their families has found that consumers often lack accurate information about college costs. What about adults who might be in the market for further schooling? The survey asked respondents to estimate yearly tuition costs at local community colleges—a likely destination for adults without a postsecondary degree—as well as at for-profit colleges (thought to be the main competition for community colleges).

Estimating Local Community College Tuition. The previous section showed that respondents viewed the cost of college as the most important reason that students do not enroll. But this is different from having a good sense as to what tuition costs actually are. We chose to look at community college tuition because these institutions enroll many adult students, and most individuals live near one.

To assess this question, we first asked respondents to name a local community college. We then asked each for their best guess about how much it costs state residents in tuition and fees to attend a local community college full time for a year. We also asked how much they thought they might pay after accounting for any grants and scholarships they might be eligible for.

FIGURE 2

TOP REASON SOME PEOPLE DO NOT ENROLL IN COLLEGE



Note: Columns correspond to the percentage of respondents who provided each response. Sampling weights applied. Weighted $N = 1,533$.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

Finally, we asked how much community college *should* cost, with one option being that it should be free to anyone with a high school diploma.

For each item asking for an estimate of tuition prices, respondents were presented with a slider that ran from $2,000 to $20,000 in $500 increments, with options for "less than $2,000" and "more than $20,000." We started by comparing individuals' estimates of tuition costs (not including living expenses) to the average sticker price of tuition at two-year public colleges in their state, as reported by the College Board for 2014–15. (To calculate gaps between estimates and actual, answers of "less than $2,000" and "more than $20,000" were coded as $1,999 and $20,001, respectively).

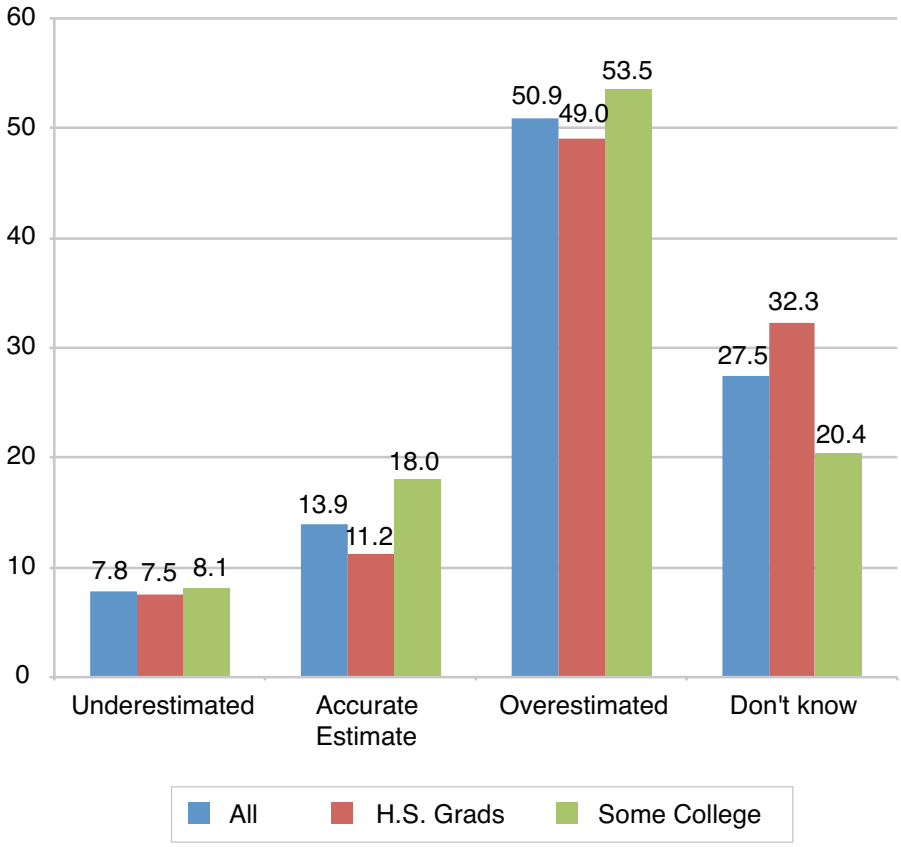
We considered estimates accurate if they were within $1,000 of the actual average tuition price in their state. Estimates above and below the average tuition cost by more than $1,000 over- and underestimated, respectively.

The results revealed that about 63 percent of respondents were able to successfully name a public two-year college in their state. Thirty percent either were not able to name one or skipped the question. About 5 percent named a college that was not a two-year public school. Among high school graduates, 59 percent volunteered correct answers.

When it came to estimating tuition, most respondents struggled to provide accurate answers. Figure 3 shows the results. Twenty-seven percent of respondents answered "I don't know" when asked to estimate what it would cost to attend local community college full time for a year. A little over half—51 percent—overestimated the cost of one year of tuition by more

FIGURE 3

DISTRIBUTION OF ESTIMATES, COMMUNITY COLLEGE TUITION AND FEES



Note: Columns correspond to the percentage of respondents in each category (excluding those who skipped the question). Sampling weights applied. Weighted *N* = All: 1,545; High School: 921; Some College: 624.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

than $1,000. More than 40 percent of respondents overestimated by $2,500 or more. Just 14 percent had an estimate within $1,000 of the actual average price. Those with some college were less likely to say "I don't know" and somewhat more likely to provide an accurate estimate than high school graduates. But even in that group, less than one in five respondents were accurate and 53 percent overestimated the cost.

Overall, nearly 80 percent of respondents either overestimated or were unable or unwilling to provide an estimate.

Did respondents recognize that they might pay a "net price" that was lower than the sticker price after accounting for grants and scholarships? More than one-third of the respondents replied "I don't know" when asked to estimate what they would pay to attend their local community college; in total, 38 percent answered "I don't know" to either the net price or the sticker price question. That made it impossible to compare the answers for those respondents.

Table 4 displays the results for the approximately 950 respondents who answered both items. Among those who answered, 9 percent estimated that they would pay more than their sticker price estimate. Around 36 percent did not change their estimate between the two questions, and more than 55 percent estimated that they would pay less after accounting for grants and scholarships. Most of the respondents who estimated a lower net price believed their tuition would be discounted by less than $5,000.

TABLE 4

DIFFERENCE BETWEEN ESTIMATED TUITION AND ESTIMATED NET PRICE (AFTER GRANTS AND SCHOLARSHIPS)

	All
Net price would be higher	8.8
Net price would be the same	35.6
Net price would be lower by less than $5,000	40.4
Net price would be lower by $5,000 or more	15.3

Note: Cells contain the percentage of respondents who answered the question in each category. Sampling weights applied. Weighted *N* = 956.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

These net price estimates were generally still too high, however. Nearly one-third of respondents estimated that they would still pay more than $5,000 to attend community college, even after accounting for grants. Over 8 percent reported that they would pay more than $20,000 in net tuition.

When asked how much it *should* cost to attend community college for a year, respondents had the option to choose "it should be free to anyone with a high school diploma." Just over one-quarter of respondents chose that option (about the same fraction who responded "I don't know"). If you exclude those who answered that they didn't know, 35 percent of respondents thought it should be free; 63 percent thought tuition should be either free or less than $2,000. While a sizable number believe community college should be free (and most believe it should be free or low-cost), the majority of respondents believe students should pay some tuition to attend.

The survey also asked respondents about their perceptions of tuition costs at for-profit colleges. We calculated the gap between the College Board's estimate of average sticker price at for-profit colleges ($15,230) and respondents' estimates. Again, 40 percent chose "I don't know." A larger proportion of respondents (32 percent) underestimated tuition by more than $1,000 than overestimated it (24 percent). Just 3.5 percent were within $1,000.

As a result, respondents saw for-profit tuition costs as being closer to tuition costs at community colleges than they actually are. Among the 827 respondents that answered both questions, 15 percent estimated that for-profit colleges cost less than their local community college, and 17 percent estimated that they cost the same. Meanwhile, just 19 percent pegged the gap at $10,000 or more, a far more accurate estimate.

What Do Adults Think about the Likely Returns to Different Postsecondary Options?

Costs are only one part of the postsecondary value proposition. The economic return to additional schooling is another. Do respondents believe that, on average, completing a degree or certificate leads to higher wages? Do they think it would result in higher wages for them?

When asked their view of whether higher education pays off, about half of respondents agreed that "further schooling is a good investment." One-quarter believed that "further education does not always pay off." The other 25 percent of respondents were unsure.

To get a more detailed look at how respondents saw the returns to different types of education, the survey asked respondents what they thought the median worker with various types of degrees and credentials earns in a year. Before these questions, a series of simple prompts explained basic information on five different postsecondary options: apprenticeships, certificate programs, technical associate degree programs, academic associate degree programs, and bachelor's degree programs. Later, a prompt explained the concept of the median income using a simple example. Respondents were also told what the median high school graduate in their region earned in 2013 (based on data from the American Community Survey).[21] This information was intended to anchor estimates of the economic payoff of particular credentials.

Respondents were then asked to provide their "best guess" of what the median worker earned in the labor market after completing one of six different programs: an apprenticeship, a certificate, an associate degree in nursing, an associate degree in manufacturing

TABLE 5

RESPONDENTS' VIEWS OF MEDIAN WAGES FOR DIFFERENT EDUCATIONAL GROUPS

Program Type	Median Estimate	Median Premium	Weighted *N*
Apprenticeship	$35,000	$7,450	911
Certificate	$35,000	$6,750	939
Associate in Liberal Arts	$35,000	$8,450	816
Associate in Registered Nursing	$42,000	$14,450	888
Associate in Manufacturing Tech	$40,000	$13,750	833
Bachelor's Degree	$50,000	$19,750	1,018

Note: Cells contain the median estimate of how much the median worker in each category earns in a year and the median wage premium (the gap between respondents' estimates and the median wage of high school graduate in their region in 2013, which was pegged on the number line). Statistics exclude any respondent who answered "don't know" or skipped the question.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

technology, an associate degree in liberal arts, and a bachelor's degree.[22] Answers were registered on "sliders" that ran from $20,000 to $70,000 in $1,000 increments, and respondents could choose "more than $70,000." The slider also displayed the median wage of high school graduates in the respondent's region to provide an anchor.

One trend jumped out immediately: even though respondents were provided with an anchor on the slider, between 33 and 42 percent chose "I don't know" rather than estimate. Between 42 and 46 percent of respondents said they did not know what a worker with an associate degree in liberal arts or manufacturing technology earned per year. Respondents were least likely to say "I don't know" in reference to bachelor's degrees, but uncertainty was relatively high across credentials. High school graduates were more likely to say "I don't know" than those with some college; about half said "I don't know" when asked about the associate degrees, and 41 percent said the same about bachelor's degrees. To the extent that "I don't know" responses indicate uncertainty about the likely benefits of different paths, these results suggest that high school graduates are particularly uncertain.

Among those who did answer, though, a clear rank order emerged. Table 5 displays the median earnings estimate for each education level and the median estimate of the wage premium attached to each. The median premium is the median difference between the earnings estimate the respondent provided and the wages of the median high school graduate in their region. (Recall that this estimate appeared on the slider, so it was known to the group.)

In the aggregate, the estimates that 60 to 65 percent of respondents were able to provide actually produced a reasonable ranking of the value of the different credentials. They recognized that bachelor's degree holders were, on average, likely to earn more than those with a certificate or an associate degree. The median premium suggests that respondents saw associate degrees as having a somewhat larger payoff (compared to a high school diploma) than certificate or apprenticeship programs. The median respondent estimated that the wage premium attached to a nursing or manufacturing degree was more than twice as large as the bump from a certificate. Respondents saw certificates and apprenticeship programs as being of roughly equal value, despite the fact that the prompts provided earlier in the survey identified apprenticeships as the longer of the two programs.

Respondents also saw associate degrees in technical fields like registered nursing or manufacturing technology as being more valuable than an associate degree in liberal arts. Although this rank ordering

is accurate, the gaps are actually much larger in real life. In Texas, for instance, the median graduate with a technical associate degree in registered nursing earned nearly $70,000 in the first year out of school; those who earned an academic associate in liberal arts earned about $19,900.[23]

In the mind of respondents, though, the big payoff was attached to the bachelor's degree. Respondents who provided an estimate believed that BA holders earned almost $20,000 more than a high school graduate, on average. This might help explain why those who aspired to a higher degree were most likely to choose a bachelor's.

Overall, the fact that a subset of respondents had a reasonable rank ordering should not overshadow the number that failed to provide an estimate at all. Though some adults may recognize the potential benefits of these different pathways, many apparently do not.

We also asked respondents to estimate how further schooling might improve their own earning power. Specifically, they were asked: "Now think about yourself. Compared to now, how much money do you think you would make per year if you went back to school and completed:" a certificate, an academic associate degree, a technical associate degree, or a bachelor's degree.[24] Using a seven-point scale, they were asked whether they thought they would earn less than they do now, about the same as they do now, or more than they do now in $5,000 increments ("I'd earn $5,000 more," "I'd earn $10,000 more," and so on, up to "I'd earn more than $20,000 more"). We did not include an "I don't know" option, but respondents were able to simply skip the question.

Figure 4 reveals the distribution of responses. It collapses choices three and four ($5,000 and $10,000) and choices five through seven ($15,000, $20,000, and more than $20,000 more).

Somewhat surprisingly, a sizable proportion of respondents thought that a sub-baccalaureate credential like a certificate or an associate degree would not improve their earning power by $5,000 or more. Indeed, 44 percent of those who answered the question on certificates thought that they would earn less (11 percent) or about the same (33 percent) as they do now if they completed a certificate. Just under 40 percent said the same about a technical or an academic associate degree. A smaller—but still substantial—proportion of respondents (26 percent) did not believe that even a bachelor's degree was a surefire ticket to higher earnings.

In line with table 5, respondents saw certificates as being the least valuable to their own economic success, while bachelor's degrees were most valuable. (Nearly half estimated that they would earn more than $15,000 more with a bachelor's.) The data suggest that respondents viewed academic associate degrees designed for transfer and technical associate degrees designed for the workforce as being of roughly equal value in their own career. Indeed, a test of the difference in the mean rating across these two questions was not statistically significant.

In short, when asked about the effect of completing a credential on their own earnings, a sizable proportion of respondents believed that earning an associate degree or certificate would not change their trajectory much at all, especially compared to a bachelor's degree. This pattern likely explains why so many more respondents aspired to earn a bachelor's degree than aspired to earn a certificate. And despite recognizing a distinction between associate degrees in technical fields like nursing and those in academic fields like liberal arts in table 5, respondents did not appear to make such a distinction when it came to their own earnings.

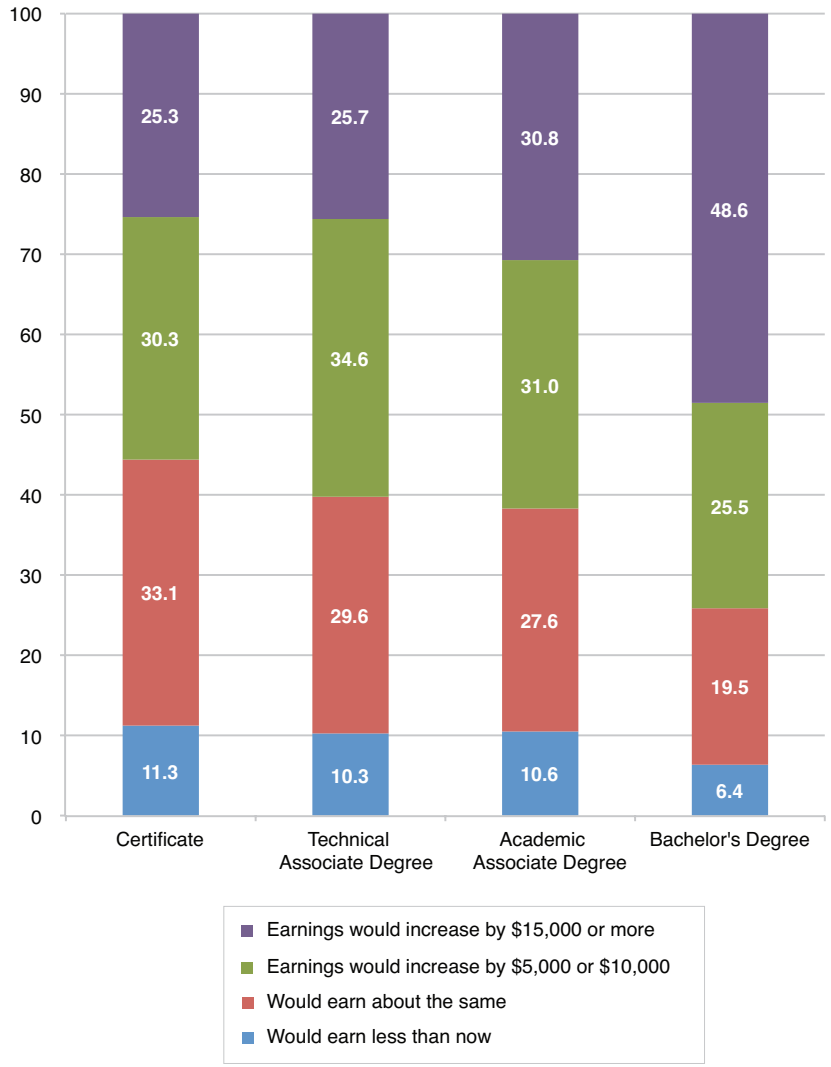
Summing up respondents' views of the returns to different postsecondary paths:

- Based on the number of "don't know" responses, the results suggest that adults without a degree—particularly those with only a high school diploma—are quite uncertain about the value of different credentials. Despite being provided with an anchor, between 30 and 40 percent of respondents did not provide an estimate.

- When asked about their own earning power, between 25 and 40 percent of respondents were not sure that further schooling would increase their earnings.

FIGURE 4

RESPONDENTS' VIEWS OF HOW FURTHER SCHOOLING WOULD AFFECT THEIR EARNINGS



Note: Segments correspond to the percentage of respondents who provided an answer in each category. Sampling weights applied. Weighted *N* = Certificate: 1,508; Technical Associate Degree: 1,482; Academic Associate Degree: 1,470; Bachelor's Degree: 1,474.
Source: Author's calculations using AEI Survey of Adults without a College Degree.

- Among those who did estimate the returns from the various credentials, however, the rank order of likely returns was reasonably accurate. Respondents saw the bachelor's degree as the most valuable credential, and some may underestimate the value of apprenticeships and particular certificate programs.
- And while respondents saw technical associate degrees in particular fields—like nursing and manufacturing technology—as being more valuable than associate degrees in liberal arts for graduates who enter the workforce, that distinction did not surface when they were evaluating the effect on their own earnings.

Conclusions, Questions, and Next Steps

The results I have presented raise a number of questions and implications for policy.

How should we interpret the percentage of adults who report being satisfied with their current level of education? Elites have identified the struggles of high school graduates as a key area of concern for our economy and argued that further education and training could improve their fortunes. Despite this drumbeat—and the evidence that training and education can pay off—large numbers of adults with a high school diploma reported that they were satisfied with their level of education. The explanation may be quite simple: many of these respondents have likely worked their way to a fulfilling life at their current level of education, a path that we should admire and learn from. But, as these data suggest, others who would benefit from further education likely have imperfect information on the costs and benefits of different postsecondary pathways. It could also be the case that these adults see the existing postsecondary system as being ill-suited to serving the needs of students with family and work responsibilities and therefore have accepted their current level of education. Further research should examine these explanations in more detail.

Because adults without a postsecondary degree do not always see the value in returning to school, efforts to encourage education and training should clarify the benefits to different postsecondary pathways. A sizable proportion of survey respondents reported being satisfied with their current level of education, and between 25 and 40 percent did not believe that completing a degree or certificate would markedly improve their earning power. To the extent policymakers have an interest in encouraging more adults to enroll in some kind of education or training, a more concerted effort to clarify the cost-benefit calculation may be necessary.

Adults without a degree tend to see the bachelor's degree as the most valuable credential, but that may lead them to ignore other options. When it comes to estimating the returns to different pathways, respondents thought the bachelor's degree reigned supreme. On a basic level, this perception reflects reality; bachelor's degree recipients earn more, on average, than those with less education. However, this perception may also lead adults to believe—incorrectly—that a bachelor's degree is the only path to economic success. Indeed, when the survey asked whether they thought society values four-year degrees more than career and technical training, 60 percent of respondents chose that statement. These beliefs could lead them to ignore shorter-term career and technical options that could help them climb into the middle class.

Does anxiety about the cost of college reflect the reality on the ground? Existing research shows that parents and traditional-age students tend to have low levels of information when it comes to college costs, and that many overestimate those costs. It is, therefore, not particularly surprising to find that adults are also likely to hold inaccurate beliefs about the costs of tuition. Misperceptions about tuition costs may lead adults to feel locked out of the system when affordable options may be available. If anxiety about college affordability reflects information problems as well as a genuine inability to pay, our approach to policy should acknowledge that expanding opportunity is not only a question of public spending.

Would providing more information make a difference? Researchers have successfully used inexpensive informational "nudges" to help prospective students make choices that would maximize their chances of success.[25] Questions remain as to how adults—some of whom may not be considering further education at all—might respond to additional information on the costs and benefits of different options, if at all. In that spirit, the second half of the current survey embedded a series of informational experiments, in which a randomly chosen subset of respondents received additional information about the earnings of different types of graduates and the costs of community colleges. In addition, a follow-up survey of 500 of these respondents is currently in the field, designed to track whether respondents who receive additional information retain it over time. Forthcoming research will examine whether additional information had an effect on respondents' beliefs and aspirations.

Notes

1. On tuition prices, see National Center for Education Statistics, *Fast Facts: Tuition Costs of Colleges and Universities*, 2013, http://nces.ed.gov/fastfacts/display.asp?id=76. On earnings of recent college graduates, see Jason R. Abel and Richard Deitz, "Do the Benefits of College Still Outweigh the Costs?" *Current Issues in Economics and Finance* 20, no. 3 (2014), www.newyorkfed.org/research/current_issues/ci20-3.pdf.

2. Demos, "Median Earnings, Workers Ages 25–34, High School Graduates," www.demos.org/data-byte/median-earnings-ages-25-34-high-school-graduates; Pew Research Center, "The Rising Costs of Not Going to College," February 11, 2014, www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/.

3. Pew Charitable Trusts, *Pursuing the American Dream: Economic Mobility across Generations*, July 2012, www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_mobility/PursuingAmericanDreampdf.pdf.

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5. Laura Horn, Xianglei Chen, and Chris Chapman, *Getting Ready to Pay for College: What Students and Their Parents Know about the Cost of College Tuition and What They Are Doing to Find Out*, National Center for Education Statistics, 2003, http://nces.ed.gov/pubs2003/2003030.pdf.

6. Eric Grodsky and Melanie Jones, "Real and Imagined Barriers to College Entry: Perceptions of Cost," *Social Science Research* 36, no. 2 (June 2007): 745–66.

7. On four-year college "matching," see Caroline M. Hoxby and Christopher Avery, "The Missing 'One-Offs': The Hidden Supply of High-Achieving, Low-Income Students" (working paper no. 18586, National Bureau of Economic Research, Cambridge, MA, December 2012), www.nber.org/papers/w18586.

8. William G. Bowen, Matthew M. Chingos, and Michael S. McPherson. *Crossing the Finish Line: Completing College at America's Public Universities* (Princeton, NJ: Princeton University Press, 2009).

9. On enrolling in low-value two-year programs, see Louis Jacobsen and Robert LaLonde, *Using Data to Improve the Performance of Workforce Training*, Brookings Institution, April 2013, www.brookings.edu/~/media/research/files/papers/2013/04/17-jacobson-lalonde-workforce-training/thp_jacobsonlalondepaperf2_413.pdf.

10. See College Measures, "Economic Success Metrics Program," http://collegemeasures.org/esm/.

11. Caroline Hoxby and Sara Turner, "Expanding College Opportunities," *Education Next* 13, no. 4 (Fall 2013), http://educationnext.org/expanding-college-opportunities/.

12. See, for instance, Julian R. Betts, "What Do Students Know about Wages? Evidence from a Survey of Undergraduates," *Journal of Human Resources* 31, no. 1 (Winter 2006): 27–56; Jeff Dominitz and Charles Manski, "Eliciting Student Expectations of the Returns to Schooling" (working paper no. 4936, National Bureau of Economic Research, Cambridge, MA, November 1994), www.nber.org/papers/w4936.

13. Center on Law and Social Policy, "Yesterday's Non-Traditional Student is Today's Traditional Student," January 2015, www.clasp.org/resources-and-publications/publication-1/CPES-Nontraditional-students-pdf.pdf.

14. Mina Dadgar and Madeline Joy Trimble, "Labor Market Returns to Sub-Baccalaureate Credentials: How Much Does a Community College Degree or Certificate Pay?" *Educational Evaluation and Policy Analysis* (November 5, 2014), http://epa.sagepub.com/content/early/2014/10/21/0162373714553814.full.pdf+html?ijkey=IC4hU3xEM6Gg.&keytype=ref&siteid=spepa.

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16. Daniel Carrol and Amy Higgins, "A College Education Saddles Young Households with Debt, but Still Pays Off," Federal Reserve Bank of Cleveland, July 2014, www.clevelandfed.org/en/Newsroom%20and%20Events/Publications/Economic%20Trends/2014/A%20college%20education%20saddles%20a%20household%20with%20debt%20but%20still%20pays%20off.aspx.

17. Associated Press and GfK, "Poll Archives," http://ap-gfkpoll.com/poll-archives; William G. Howell, Paul E. Peterson, and Martin R. West, "The Persuadable Public," *Education Next* 9, no. 4 (Fall 2009), http://educationnext.org/persuadable-public/.

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19. David Bergeron and Carmel Martin, "Strengthening Our Economy through College for All," Center for American Progress, February 19, 2015, www.americanprogress.org/issues/higher-education/report/2015/02/19/105522/strengthening-our-economy-through-college-for-all/.

20 Later, when we asked those who had not ever enrolled in college with the intention of earning a degree or certificate whether they regretted not going to college, just 35 percent said they regretted it. Fifteen percent said they were happy with their decision not to attend, while 51 percent responded "I'm not sure."

21. US Census Bureau, 2013 American Community Survey, "B20004: Median Earnings in Past 12 Months (in 2013 Inflation-Adjusted Dollars) By Sex, Educational for the Population 25 and Older," American FactFinder, http:/factfinder.census.gov.

22. The survey asked about these three different associate degree programs in anticipation of a subsequent survey experiment in which some respondents received real information on wage returns to different associate degrees. In the case of the question on the associate degree in liberal arts, which is designed for transfer, the question asked respondents to think of a graduate who chooses to enter the labor force instead of transferring to a four-year college.

23. See College Measures, "Economic Success Measures-Texas," http://esm.collegemeasures.org/esm/texas/.

24. Because of time constraints, we were unable to ask about apprenticeship programs in this set of items.

25. See Hoxby and Turner "Expanding College Opportunities." See also Benjamin L. Castleman and Lindsay C. Page, *Summer Melt: Supporting Low-Income Students through the Transition to College* (Cambridge, MA: Harvard Education Press, 2011).

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