Introduction

As a nation, we are making progress in increasing the number of people from disadvantaged backgrounds who manage to enroll in some form of postsecondary education. But the results are discouraging. Many students leave school without any certificate or degree. They have lost valuable time and frequently have student debt to repay, but they have not managed to measurably improve their prospects. Most of the students from low socioeconomic status backgrounds who do succeed in completing their programs of study earn occupational certificates or associate degrees, not bachelor's degrees. Some of these credentials yield significant returns in the labor market, but others do not.

The evidence points clearly to the need for significant change. Changes in federal and state policies and in postsecondary practices, particularly at the institutions that serve large numbers of low-income and older students, are central to improving these outcomes. There are unlikely to be any easy answers, and solutions will involve both using existing resources more effectively and devoting more resources to the effort. But there is strong evidence that some of the innovations that have been implemented on a small scale could make a real difference for many more students.

Reforming the postsecondary experience is necessary but not sufficient. Over the long run, reductions in the economic and educational

inequality throughout society should reduce the gaps in preparation for college. But given the current realities of socioeconomic inequality and inadequate elementary and secondary education for disadvantaged students, many recent high school graduates and older adults have such large gaps in their academic preparation, and so many other challenges to successful degree completion, that other routes to remunerative careers may hold more promise for them. Strengthening career and technical education in high schools, apprenticeship opportunities, and other routes to occupational success outside of postsecondary institutions is a necessary part of the solution.

This book explores this reality, seeking explanations for our failure to provide pathways to success for such a large segment of the population and evaluating potential policy reforms that could improve the lives of many Americans.

The Importance of Postsecondary Education

As is well known, it has become difficult for workers to succeed in the American job market without some type of college credential—whether it is a bachelor's degree, an associate degree, or an occupational certificate. In an era when the earnings of most American workers have been stagnant or declining, less-educated workers have fared worst. A high school education no longer provides a reasonable chance for earnings that can support a family. Improving educational attainment is widely seen as a mechanism for improving living standards and moving more people into the middle class, where they can expect some level of economic security.

Political leaders from both major parties have embraced the goal of increasing participation in postsecondary education. For instance, expressing dismay over disappointing college attainment rates in the United States, which have fallen behind those of many other countries around the world, President Obama set a goal that by 2020 America will once again have the highest proportion of college graduates in the world. This is an objective shared by many members of Congress, as well as state and local officials. The president also called for community college to be tuition-free, in an effort to make the first two years of postsecondary education as universally available to young

Americans in the twenty-first century as high school became in the twentieth century. In 2014 the state of Tennessee implemented a policy of tuition-free community college for qualifying recent high school graduates; Oregon followed suit in 2015; other states are in the process of implementing similar policies. That Republicans dominate the Tennessee state house and legislature makes it clear that the interest in expanding access to college and reducing its price is bipartisan.

Indeed, many scholars and policymakers share a strong belief that improving educational attainment and skill acquisition for all Americans, particularly those from low-income backgrounds, is essential for a healthy economy. In other words, in addition to promoting equity through economic opportunity for all and upward social mobility for the poor, economic efficiency is at stake. Higher education can improve people's lives in many ways, and getting a good job is only one of the numerous good reasons to go to college. But for many, and particularly for those from disadvantaged backgrounds, stable and well-paying employment afterward is often a primary motivation for attending college.

Many low-income youth and adults are following the advice they hear to "go to college." As shown in figure 1-1, the percentage of recent high school graduates from the lowest family income quartile enrolling within a year in a two- or four-year college increased from 36 percent in 1984 to 42 percent in 1994, to 51 percent in 2004, and to a peak of 56 percent in 2008. Indeed, the increases in their rate of enrollment were greater than the increases among students from middle- or higher-income families. By 2014, 67 percent of all recent high school graduates—and 52 percent of those from the lowest income group—went straight to college.¹

A small fraction of disadvantaged students manages to enroll in selective four-year institutions, while a larger number attend broadly accessible public four-year colleges and universities. But a majority of them, including many who have weak academic backgrounds, attend community colleges and for-profit institutions. The for-profit sector focuses on specific occupational programs, while community colleges

Figure 1-1. Percentage of High School Graduates Enrolling Immediately in College, 1984–2014

Source: NCES (2015b, table 302.30).

provide similar programs in addition to more traditional academic courses designed to facilitate transfer to four-year colleges.

The paths followed by disadvantaged students, who are often first-generation college attenders, too often do not lead to college attainment—which requires both enrollment in a program and its completion—and to labor market success. Although our economy rewards people—including those from disadvantaged backgrounds—who finish a college degree or certificate at a two-year or four-year institution, too many disadvantaged college students fail to achieve this outcome.

Figure 1-2 presents data on trends over time in educational attainment. Since 1980, the percentage of Americans ages twenty-five and older who have completed four years of college or more has risen from 17 percent to 33 percent. The percentage with some college, but less than four years, increased from 15 percent to 26 percent between 1980 and 2015. The earlier data are based on questions about years of college, so it is not possible to determine how many people actually completed a degree.

Percent □ <High school</p> ■ High school ■ Some college □ Associate degree ■ Four or more years of college

Figure 1-2. Educational Attainment of People Ages 25 and Over, 1980-2015

Source: U.S. Census Bureau (2016, table A-4).

But data reported in figure 1-2 also reveal that between 2000 and 2015 the percentage with an associate degree rose from 8 percent to just 10 percent. The percentage with some college but no degree was 18 percent in 2000 and 17 percent in 2015. While some of these individuals were still enrolled and will eventually earn a degree, a significant number of adults had started college but had not completed their programs; and we see little improvement in these outcomes since 2000.

Moreover, even among those who complete credentials, too many either concentrate in fields with low economic returns or for other reasons find themselves poorly prepared for the labor market. As a result, many who attend college have relatively low earnings afterward, making it difficult to sustain a satisfactory standard of living and to meet student debt repayment obligations.

These weak educational and employment outcomes for some students generate challenges to the goal of increasing postsecondary attainment among low-income youth and adults. Some strong voices argue that too many people are already going to college. The contention is that pushing individuals who are unprepared, uninterested, or incapable of doing college-level work to spend more time in school is a waste of resources and leaves too many people with nothing other than student debt to show for their time.² But given the currently available paths to financial security, avoiding postsecondary education is rarely the solution. We must find constructive ways to strengthen the completion rates and workforce outcomes of all individuals seeking to improve their lives through postsecondary education and training, at the same time that we develop more reliable and effective alternative paths to promising career opportunities.

Lowering the price of community college is not enough. Already, the majority of students who get through the door do not graduate. For some, the obstacles are primarily financial, but for others, weak academic preparation, family responsibilities, or other issues create insurmountable challenges. Among those who do graduate, too many never experience the payoff in which they thought they were investing. Improving these outcomes should be at the top of the agenda.

Funding Postsecondary Education

Total undergraduate enrollment (in two- and four-year institutions combined) grew by nearly 70 percent between 1985 and 2015.³ Although per-student funding has not kept up with enrollment, enormous public and private resources are invested in higher education in the United States. Indeed, federal, state, and local governments invest about \$250 billion each year in appropriations for higher education and student aid.⁴ Total spending, including funds from students,

- 2. Vedder, Denhar, and Robe (2013); Murray (2013).
- 3. NCES (2016, table 303.70).
- 4. State Higher Education Executive Officers (2016); Ma and others (2016).

families, and other private sources, is two to three times that amount.⁵

A good deal of this money is spent on the poor. The Pell Grant program, the federal government's foundational grant program for low- and moderate-income students, doubled in inflation-adjusted dollars between 2008–09 and 2010–11. In 2015–16, 7.6 million students received \$28 billion in Pell Grant funds. In 2014–15, the state and local governments spent \$91 billion to subsidize higher education and reduce tuition costs for in-state students, with lower tuition benefiting students from both disadvantaged and more affluent backgrounds.

More resources could almost certainly improve postsecondary outcomes for disadvantaged students. But we must also ask if the resources now available are being used effectively. This book probes the question of why educational and employment outcomes of disadvantaged students are often disappointing and examines the evidence about the potential policy solutions most likely to improve those outcomes.

The Purpose of This Book

We begin from the premise that, as a society, we can and must narrow the gaps in postsecondary success associated with family background. The labor market requires a wide variety of skills, but most jobs that pay a living wage require some form of education or training beyond high school. Our fundamental question is how—while we work to strengthen secondary school outcomes—to ensure that individuals who leave high school unprepared for the challenges ahead get the opportunities they need to lead successful and rewarding lives. As we encourage more people, particularly those from disadvantaged backgrounds, to go to college, we must be sure that we are directing them onto constructive pathways.

- 5. NCES (2015a).
- 6. Baum and others (2016).
- 7. Illinois State University (2016).

A relatively large research literature exists on many of these topics, including a body of policy evaluation evidence; but there are also significant gaps in this literature, and neither the causes of nor the solutions to the problems are entirely clear.

This book does not fill the gaps in the literature by developing new research estimates of the impacts of various policies or programs. Instead, it draws on existing knowledge, in addition to insights from newly available data, to develop promising, evidence-based policy proposals. In the long run, we certainly need more research. But we believe that we know enough now to make useful improvements. Our goal is to bridge the gap between the academics pursuing definitive answers and the policymakers who must make immediate progress on solving these critical problems.

The structure of the book reflects these goals. The first part lays out what we know about the problematic outcomes of disadvantaged students in higher education. We focus on low completion rates, concentrations in fields of study with low labor market returns, and debt accumulation among those not completing a degree and/or not finding well-compensated employment afterward. The second part of the book discusses potential policy solutions to each of these problems, with an additional chapter on potential additional pathways to gaining credentials or skills, starting with career and technical education (CTE) in high school.

Some Background

The chapters that follow analyze the enrollment patterns, completion rates, student debt, and labor market outcomes of disadvantaged students. To provide context for that discussion, we first provide an overview of the importance of postsecondary education for financial security and social mobility, and outline differences in enrollment patterns and outcomes across demographic groups.

Enrollment and Completion Patterns

Low-income and under-represented students are relatively concentrated at community colleges, less prestigious four-year colleges, and for-profit institutions.⁸ For example, in 2011–12, half of all first-year undergraduates who were recent high school graduates from the lowest family income quartile were enrolled in community colleges, and another 14 percent were in the for-profit sector. Among older adult students, these figures were 54 percent and 28 percent, respectively. In contrast, 40 percent of students from the highest family income quartile enrolled in one of these two sectors; this affluent group was disproportionately represented in public and private nonprofit four-year colleges and universities.⁹ Chapter 2 provides more detailed evidence on this issue.

In addition to enrolling in different types of institutions, students from different backgrounds have systematically different educational outcomes. Completion rates are very low for disadvantaged students. They lag far behind other students in completing four-year college degrees, and they are also less likely than other students to complete two-year programs, where overall completion rates are very low. Using data from the National Education Longitudinal Study (NELS) on students who were eighth graders in 1988, Harry Holzer and Erin Dunlop found that completion rates at four-year colleges, roughly eight years after high school graduation, were over 60 percent for all students, but just over 30 percent for those in the bottom quartile of socioeconomic status (SES). In the associate degree programs where so many low-income or minority students are concentrated, comparable completion rates both for all and for disadvantaged youth were 30 to 40 percent, but under 30 percent for black students.

The Job Market: Returns to Higher Education

It is by now well known that the average labor market return to the attainment of a higher education credential is quite high for all students, including those from low-income backgrounds.¹¹ This result

- 8. NCES (2012); Baum and Kurose (2013); Deming and others (2012); Holzer and Dunlop (2013).
 - 9. NCES (2012).
 - 10. Holzer and Dunlop (2013).
- 11. Card (1999); Goldin and Katz (2008); Baum, Ma, and Payea (2013). Most studies find even higher job market rewards for higher education among the poor

includes those who finish an associate degree and even an occupational certificate at a community college, ¹² although the average returns to these credentials are lower and have risen less over time than those to bachelor's and particularly higher degrees. ¹³

Earnings differences among individuals with different levels of education do not provide a precise measure of the returns to education, since there may be systematic differences in people's cognitive or noncognitive skills (motivation or self-discipline, for example) that would cause people who earned college degrees to earn more than those who did not even if they had not gone to college. However, careful statistical analyses suggest that earnings comparisons do not significantly overestimate the actual earnings premium for education.¹⁴

Median incomes have declined in real terms since the late 1990s for men with all levels of education and since the early 2000s for women with all levels of education. However, the declines have consistently been smaller for those with a bachelor's degree than for those with lower levels of education. Median earnings for men whose highest degree was a bachelor's degree were 67 percent higher than earnings for male high school graduates in 1995, 72 percent higher in 2005, and 93 percent higher in 2015. For women, the margins were 100 percent, 96 percent, and 102 percent, respectively.¹⁵

These averages hide considerable variation within levels of educational attainment. People with similar degrees have very different earnings patterns in different industries, in different parts of the country, and with different personal circumstances. Moreover, there

than among other groups. (See, for example, Zimmerman 2014; Oreopoulos and Petronijevic 2013). Hershbein (2016) has recently added to the more mixed evidence (Carneiro, Heckman, and Vytacil 2011), arguing that the rewards are lower for those who grew up in poverty. However, even his estimates show substantial rewards for low-income students who earn a college credential.

- 12. Kane and Rouse (1995); Bailey and Belfield (2013).
- 13. Autor (2010).
- 14. Card (1999); Rouse (2007); Oreopoulos and Petronijevic (2013).
- 15. U.S. Census Bureau (2016b, table P-16).

is growing evidence both that completion rates vary considerably across programs, institutions, and sectors, and that earnings are higher for individuals with technical certificates and associate degrees than for those with general sub-baccalaureate degrees.¹⁶

What postsecondary programs of study do students from low-income families pursue? Some go to college with specific occupational goals and enroll in short-term training programs—sometimes credit bearing, sometimes not—geared toward acquiring a necessary skill. Others seek associate degrees in health-related fields, technology, communications, or other areas. But many community college students follow a general education path, taking courses that might qualify for credit toward a bachelor's degree if they manage to transfer to a four-year institution. About two-thirds of community college students and half of those at for-profit institutions who are in associate degree programs are enrolled in general studies and transfer-oriented programs, as opposed to occupational and technical programs.¹⁷

In 2015, when median earnings for associate degree holders age twenty-five and older were \$39,000, 25 percent of these individuals earned more than \$60,000, while another 25 percent earned less than \$23,000.¹⁸

As we document in later chapters, data show relatively fewer disadvantaged or minority students in high-compensation fields of study, such as STEM (science, technology, engineering, and math), and relatively more in less well compensated fields, including "general studies" associate degree programs. This is true even though the likely primary interest of most disadvantaged students (unlike many middle-and upper-income students in liberal arts programs who plan to attend graduate school) is to attain a credential that will lead directly to stronger earnings upon graduation.¹⁹

^{16.} Backes, Holzer, and Velez (2015).

^{17.} NCES (2012, PowerStats calculations).

^{18.} U.S. Census Bureau (2016b, PINC-03).

^{19.} Jacobson and Mokher (2009); Backes, Holzer, and Velez (2015).

Financing College

A related issue is that students increasingly rely on loans to finance postsecondary education.²⁰ There is considerable variation in debt levels as well as in postcollege earnings. The percentage of associate degree recipients who borrowed \$20,000 or more increased from 3 percent in 2003–04 to 17 percent in 2011–12, when 55 percent of those from the for-profit sector had this much debt. The percentage of certificate recipients who borrowed \$20,000 or more increased from 1 percent to 10 percent, including 13 percent of those from the for-profit sector.²¹

The debt problems are particularly acute for those who fail to complete a degree, in addition to those who complete one in a low-compensation field, and those who have lower than expected earnings after completion, as was not uncommon in the weak job market for youth generated by the Great Recession of the early 2000s. Not completing a credential is the strongest predictor of defaulting on student loans;²² and among borrowers who began repayment in 2011–12, 24 percent of those who had not earned a credential defaulted within two years, in comparison with 9 percent of those who had completed a degree or certificate.²³

The issues we address are complex and deeply rooted in the unequal circumstances facing Americans. We do not pretend to have solutions that will eliminate the barriers confronting people growing up in disadvantaged circumstances and seeking to improve their lives through postsecondary education and training. But we are confident that a more thoughtful approach to developing evidence-based public policies can improve the lives of many Americans.

^{20.} Baum and others (2016).

^{21.} Baum and others (2016).

^{22.} Gross and others (2010).

^{23.} Looney and Yannelis (2015).

The Questions We Address

This book addresses six key questions:

- Why are completion rates for disadvantaged students so low?
- What causes the uneven employment and earnings outcomes of those students who do complete their course of study?
- How does the issue of financing postsecondary education relate to the unsatisfactory outcomes we observe?
- What kinds of interventions targeting students have the greatest potential to be cost-effective strategies for increasing completion rates and improving labor market outcomes?
- What kinds of interventions targeting higher education institutions—especially community colleges—have the greatest potential to be cost-effective strategies for improving post-college outcomes?
- Are there alternatives to enrollment in postsecondary institutions that can give individuals the skills and capacities they need to succeed in the labor market?

Each of the next six chapters addresses one of these questions. We address the first three questions in part I of the book, which includes chapters 2, 3, and 4. Chapters 5 through 7, in part II, address the next three questions. Chapter 8 then summarizes what we have learned and includes our policy recommendations.

Young people from disadvantaged backgrounds, as well as adults returning to school to improve their labor market opportunities, need more than a chance to enroll in college. They need much better chances of completing a degree or certificate program that will serve them well in an evolving labor market.