Section Four:
Getting Through and Getting Out

For many college students, there is no clear pathway to the finish line of a timely graduation. Many take required remedial courses that do not count toward graduation; many transfer to or take classes from other colleges that may or may not meet degree requirements; and many take time off or switch between full-time and part-time study to earn money or attend to family needs. The cumulative effect of these factors means that more students take more time, and often earn more credits, than needed to graduate—if they graduate at all. Nationally, only 40 percent of students complete a bachelor's degree within four years and only 60 percent graduate within six years from the college at which they started.[59]

More students take more time, and often earn more credits, than needed to graduate—if they graduate at all.

DEVELOPMENTAL/REMEDIAL EDUCATION

Developmental or remedial courses are noncredit classes that prepare incoming students who lack the skills to complete college-level coursework. Typically, these are one-semester classes in math, writing, and reading arranged in sequences (ranging from one to four levels) that lead to a "gateway" college-level math or English course. Nearly all public two-year colleges and 75 percent of public four-year institutions offer remedial instruction.[60]

Most colleges and universities require incoming students to take a placement test to determine their academic levels. Based on the results of that test, half of all undergraduates take at least one remedial course while enrolled (averaging 2.6 remedial courses per student).[61] Students attending open-access institutions take developmental education courses at especially high rates. Federal data indicate that 68 percent of community college students and 40 percent of students at public four-year colleges take at least one remedial course.[62]

Beyond the sheer number of students enrolled in developmental courses, there are growing concerns about these students' low rates of success in completing these courses and moving on to college-level classes and degree completion. Fewer than half of all students referred to developmental education complete their recommended curriculum sequence and begin a degree program.[63] Most of these students fail to graduate; only 28 percent of two-year college students who took at least one developmental education course earned a degree or

59. National Center for Education Statistics, Digest of Education Statistics, Table 326.10, "Graduation Rate from First Institution Attended for First-Time, Full-Time Bachelor's Degree-Seeking Students at 4-Year Postsecondary Institutions, by Race/Ethnicity, Time to Completion, Sex, Control of Institution, and Acceptance Rate: Selected Cohort Entry Years, 1996 through 2008," https://nces.ed.gov/programs/digest/d15/tables/dt15_326.10.asp.

60. Midwestern Higher Education Compact, *The Traditional Approach to Developmental Education: Background and Effectiveness* (Minneapolis: Midwestern Higher Education Compact, November 2014), http://www.mhec.org/sites/mhec.org/files/2014nov_traditional_approach_dev_ed_background_effectiveness.pdf.

61. Judith Scott-Clayton, Peter M. Crosta, and Clive R. Belfield, *Improving the Targeting of Treatment: Evidence from College Remediation*, working paper 18457 (Cambridge, Mass.: National Bureau of Economic Research, October 2012), http://www.nber.org/papers/w18457.pdf.

62. Community College Research Center, *What We Know about Developmental Education Outcomes* (New York: Columbia University, January 2014), http://ccrc.tc.columbia.edu/media/k2/attachments/what-we-know-about-developmental-education-outcomes.pdf.

63. Thomas Bailey, Dong Wook Jeong, and Sung-Woo Cho, "Referral, Enrollment, and Completion in Developmental Education Sequences in Community Colleges," *Economics of Education Review* 29 (2) (April 2010): 255–270.

Half of all undergraduates **take at least one remedial course** while enrolled (averaging 2.6 remedial courses per student).

certificate within 8.5 years, compared with 43 percent of nonremedial students.[64]

Additional critiques of developmental education include:

- Charges of inaccurate use and interpretation of placement exams;
- Mixed research results on the effectiveness of developmental education;
- An estimated annual cost of approximately $7 billion;[65] and
- That across all income groups at all types of colleges, students are borrowing an extra $380 million per year to take remedial courses in the first year of college.[66]

In response to the growing awareness of the number of students placed into developmental courses and the concomitant concerns about many aspects of developmental education, a growing number of reforms have recently been introduced:

- Redesigned delivery models that accelerate the traditional sequenced model or offer developmental courses concurrently with college-level courses ("corequisite courses");
- New course content, particularly in math, that is aligned to the student's intended program of study;
- New placement approaches that include multiple measures such as student high school performance and noncognitive attributes; and
- New policy approaches via state legislature, such as Florida's SB-1720 (2013), which allows students to voluntarily accept placement, or not, into developmental education courses, and Connecticut's Public Act No. 12-40 (2012), which requires developmental coursework to be embedded into college-level courses.

There are **growing concerns** about these students' **low rates of success** in completing these courses and moving on to college-level classes and degree completion.

64. Paul Attewell, David Lavin, Thurston Domina, and Tania Levey, "New Evidence on College Remediation," *The Journal of Higher Education* 77 (5) (September/October 2006): 886–924.

65. Midwestern Higher Education Compact, *The Traditional Approach to Developmental Education: Background and Effectiveness*; and Scott-Clayton, Crosta, and Belfield, *Improving the Targeting of Treatment: Evidence from College Remediation*.

66. Mary Nguyen Barry and Michael Dannenberg, *Out of Pocket: The High Cost of Inadequate High Schools and High School Student Achievement on College Affordability* (Washington, D.C.: Education Reform Now and Education Post, April 2016), https://edreformnow.org/app/uploads/2016/04/EdReformNow-O-O-P-Embargoed-Final.pdf.

TRANSFER

Transfer—the process whereby a student moves from one higher education institution to another—is a complex and significant process. A recently published report analyzing the transcripts of college students found that about one-third (35 percent) of first-time undergraduate students transferred from one institution to another or enrolled at the same time at two institutions at least once over a six-year time frame. Of this group, approximately 21 percent transferred/coenrolled once, and another 11 percent transferred/coenrolled more than once.[67]

Transfer is most commonly associated with students moving from two-year institutions to baccalaureate institutions, yet a significant number also transfer laterally. Of all first-time students who started at a two-year public institution in fall 2008, 24 percent transferred to a four-year institution while another 15 percent made a lateral move to another two-year institution.[68] And for students who started at four-year institutions, the rate of transfer to a two-year institution was similar to that of moving to another four-year institution: 17.2 percent and 17.9 percent, respectively.

> One-third (35 percent) of first-time undergraduate students **transferred from one institution to another** or enrolled at the same time at two institutions at least once over a six-year time frame.

A more mobile and diverse college student population, the growing popularity of online courses, and escalating demands on curriculum requirements have converged to create a multidirectional "transfer swirl" of students and credits moving about multiple institutions over time.

The data on successful transfers are not encouraging for the role of community colleges in facilitating transfer to four-year institutions. A joint report released by the Community College Research Center at Teachers College, Columbia University; the Aspen Institute; and the National Student Clearinghouse Research Center found that only 14 percent of students starting in community colleges transfer to four-year schools and earn a bachelor's degree within six years of entry. Further, the report found that lower-income students, who are more likely to start at a community college, fare worse on almost all transfer measures than their higher-income counterparts.[69]

A host of obstacles face students seeking to transfer, leading to lost credits, repetition of courses, low completion rates, and extended time to degree. Potential transfer barriers include:

- Confusing transfer policies and agreements;
- Vague knowledge on how transfer courses will be accepted and applied to the degree;

67. Sean Anthony Simone, *Transferability of Postsecondary Credit Following Student Transfer or Coenrollment* (Washington, D.C.: National Center for Education Statistics, August 2014), http://nces.ed.gov/pubs2014/2014163.pdf. In this study, *student transfer* refers to the movement from one institution to another; if a student returns to the original institution and the enrollment spell is less than four months, this is not considered transfer. Coenrollment refers to overlapping periods of postsecondary enrollment at two or more institutions.

68. National Student Clearinghouse Research Center, *Transfer and Mobility: A National View of Student Movement in Postsecondary Institutions, Fall 2008 Cohort* (Herndon, Va.: National Student Clearinghouse Research Center, July 2015), http://pas.indiana.edu/pdf/SignatureReport9.pdf.

69. David Jenkins and John Fink, *Tracking Transfer: New Measures of Institutional and State Effectiveness in Helping Community College Students Attain Bachelor's Degrees* (New York: Community College Research Center, Teachers College, Columbia University, published with the Aspen Institute and the National Student Clearinghouse Research Center, January 2016), http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/CCRCAspenNSC_Tracking%20Transfer.pdf.

- Inconsistent access to transfer information and to an appeals process; and
- Lack of knowledge about comparable courses taught at other public higher education institutions.

UNDERMATCHING

A growing number of studies indicate that students from low-income or disadvantaged backgrounds who are academically talented do not apply to more competitive colleges that would likely admit them. Had they applied, the evidence indicates that they would have improved their chances of graduating.[70] This so-called *undermatching* mainly occurs during the application process, not because students apply and are turned down. In some cases, undermatching occurs because students believe they will not be able to afford tuition at more competitive colleges. Sometimes they are right; but because of the complexity of the financial aid system, many families that would be eligible for substantial financial help may not even know it.

EXTENDED TIME TO DEGREE

While the bachelor's degree is commonly associated with four years of college coursework, the average time to completion is much longer. For example, students who started at a four-year college in 2007 took an average of five years and ten months to earn a bachelor's degree.[71] In California, half of the state's community college students take four years or longer to complete a "two-year" associate degree.[72] A study of public universities found that extended time to complete a bachelor's degree was predominantly the result of students spending additional semesters enrolled in college, as opposed to taking time away from college, and that the length of time to complete varied by institutional selectivity and student demographics.[73] Another study found that longer time to degree is concentrated among students at less selective institutions and suggested that students from lower-income families took longer to graduate than their wealthier peers because

Students who started at a four-year college in 2007 took an average of **five years and ten months to earn a bachelor's degree.**

70. William G. Bowen, Martin A. Kurzweil, Eugene M. Tobin, and Susanne C. Pichler, *Equity and Excellence in American Higher Education* (Charlottesville: University of Virginia Press, 2005); Caroline M. Hoxby and Christopher Avery, *The Missing "One-Offs": The Hidden Supply of High-Achieving, Low-Income Students*, working paper 18586 (Cambridge, Mass.: National Bureau of Economic Research, December 2012); Melissa Roderick, Vanessa Coca, and Jenny Nagaoka, "Potholes on the Road to College: High School Effects in Shaping Urban Students' Participation in College Application, Four-Year College Enrollment, and College Match," *Sociology of Education* 84 (2011): 178–211; Jonathan Smith, Matea Pender, and Jessica Howell, "The Full Extent of Student-College Academic Undermatch," *Economics of Education Review* 32 (2013): 247–261; and Joshua S. Wyner, John M. Bridgeland, and John J. DiIulio, Jr., *Achievementrap: How America is Failing Millions of High-Achieving Students from Lower-Income Families* (Washington, D.C.: Civic Enterprises, 2007), http://files.eric.ed.gov/fulltext/ED503359.pdf.

71. National Center for Education Statistics, *Profile of 2007–08 First-Time Bachelor's Degree Recipients in 2009* (Washington, D.C.: National Center for Education Statistics, 2012), Table 2.8, "Time to Degree: Among 2007–08 First-Time Bachelor's Degree Recipients, Median and Average Number of Months and Percentage Distribution of Months between Initial Postsecondary Enrollment and Bachelor's Degree Attainment, by Selected Individual and Institutional Characteristics: 2009," http://nces.ed.gov/pubs2013/2013150.pdf.

72. Campaign for College Opportunity, "The Real Cost of College: Time and Credits to Degree in California," YouTube video (July 2014), http://collegecampaign.org/portfolio/july-2014-the-real-cost-of-college-time-and-credits-to-degree-in-california/#.

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

of difficulties in financing their college education.[74] Additional explanations for why students are taking longer to earn degrees also include enrollment in developmental courses, students making uninformed course selections, institutions not offering required courses in a timely matter, and excessive degree requirements.

While the graduation rate gaps across race and ethnicity tend to be closing, **gaps across gender and income are increasing.**

GRADUATION RATES

Overall, about 40 percent of students who pursue a bachelor's degree obtain it within four years (this increases to 59 percent within six years)[75] and 29 percent of students who start a certificate or associate degree at a two-year college earn a credential within three years.[76]

Graduation rates vary by gender, race and ethnicity, and socioeconomic status. Women complete at higher rates than men, white and Asian students complete at higher rates than black and Hispanic students, and high-income students complete at higher rates than their low-income peers. While the graduation rate gaps across race and ethnicity tend to be closing, gaps across gender and income are increasing.

There are still other factors correlated with student graduation rates. Students who enroll full time, regardless of age, have significantly higher graduation rates than their part-time or mixed-time counterparts. Institutional type also matters, with graduation rates across four-year institutions varying from less than 10 percent to almost 100 percent. A sensitive but important contributor to low baccalaureate completion rates is that even after controlling for differences in precollege levels of academic preparation, students aspiring to earn a baccalaureate degree who choose to attend a four-year college have much higher graduation rates than those who choose to start at a community college.[77] Further, broader economic trends, such as the 2008 recession and changes in the job market, also contribute to fluctuations in graduation rates, with students tending to leave school when jobs are plentiful.[78]

While states and campuses are increasingly prioritizing the improvement of graduation rates, moving these numbers is hugely challenging. In 2011, the national Achieving the Dream initiative found that despite years of focused effort and dedication of resources to improve community college student outcomes—such as course completion, persistence, maintaining good grades, and earning college credentials—success rates have remained relatively unchanged at community colleges.[79] While this underscores the depth of the challenge, many institutions have made progress in improving completion rates.[80]

74. John Bound, Michael F. Lovenheim, and Sarah Turner, "Increasing Time to Baccalaureate Degree in the U.S.," working paper 15892 (Washington, D.C.: National Bureau of Economic Research, April 2010), http://www.nber.org/papers/w15892.pdf.

75. National Center for Education Statistics, Table 326.10.

76. National Center for Education Statistics, *The Condition of Education, 2015* (Washington, D.C.: National Center for Education Statistics, May 2015), http://nces.ed.gov/pubs2015/2015144.pdf.

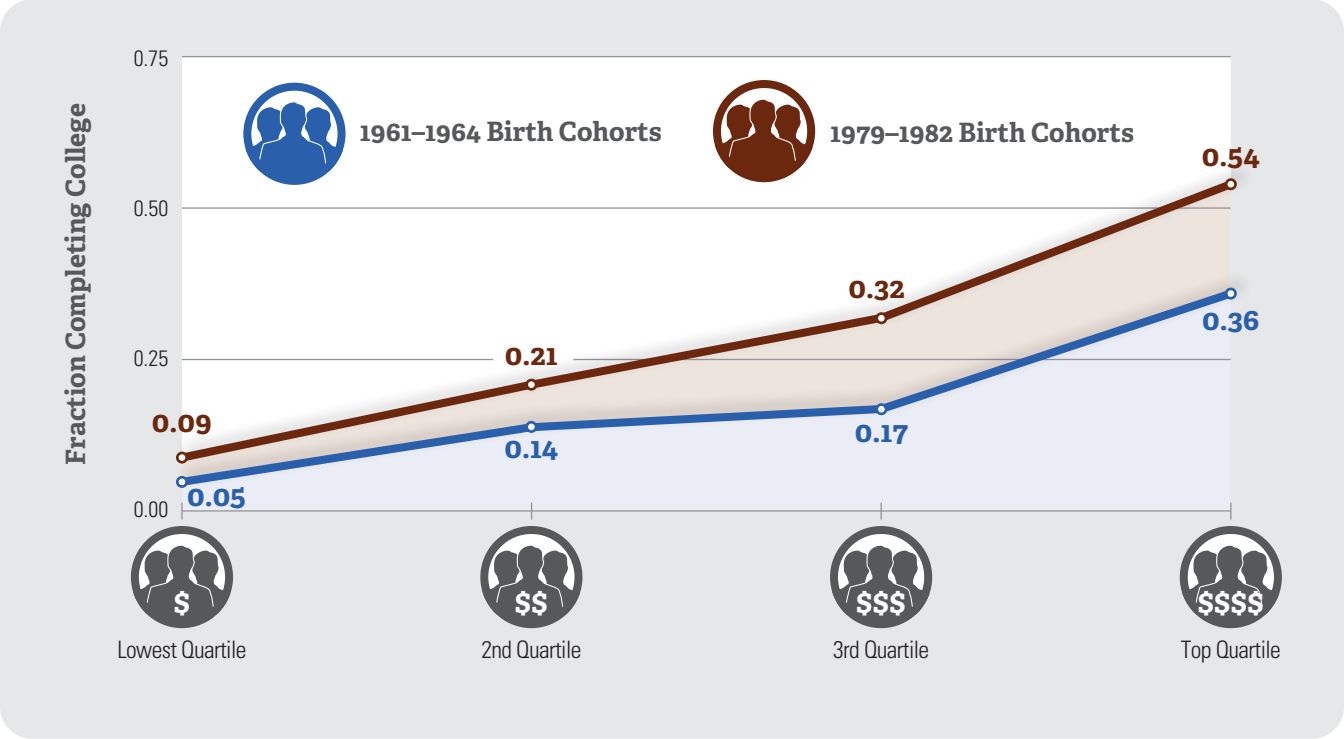
77. William G. Bowen and Michael S. McPherson, *Lesson Plan: An Agenda for Change in American Higher Education* (Princeton, N.J: Princeton University Press, 2016).

78. Ibid.

79. Elizabeth Zachry Rutschow, Lashawn Richburg-Hayes, Thomas Brock, et al., *Turning the Tide: Five Years of Achieving the Dream in Community Colleges* (New York: Community College Research Center, Teachers College, Columbia University, January 2011), xi, http://www.mdrc.org/sites/default/files/full_593.pdf.

80. See Richard Kazis, "Big Change on Campus," *Stanford Social Innovation Review* (Spring 2016), http://ssir.org/articles/entry/big_change_on_campus.

Figure V: Fraction of Students Completing College, by Income Quartile and Year of Birth



SOURCE: U.S. Bureau of Labor Statistics, "National Longitudinal Survey of Youth, 1979 and 1998," quoted in Martha J. Bailey and Susan M. Dynarski, "Inequality in Postsecondary Education," in *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*, ed. Greg J. Duncan and Richard J. Murnane (New York: Russell Sage Foundation, 2011).

ATTAINMENT RATES

The combination of inequalities in high school graduation rates, college enrollment, and college graduation rates means that consistently higher percentages of women, students from high-income families, and white and Asian students earn a college education compared with men, students from low-income families, and black and Hispanic students. In 2015, 50 percent of women aged twenty-five to twenty-nine held a bachelor's or higher degree compared with 41 percent of men. In that same year, attainment rates based on race/ethnicity varied as well: 72 percent of Asian students aged twenty-five to twenty-nine held an associate or higher degree compared with 54 percent of white, 31 percent of black, and 27 percent of Hispanic students.[81]

One study found that inequality in college attainment by family income level has increased dramatically in recent decades.[82] Figure V illustrates that students who were born in the 1960s into low-income families earned bachelor's degrees at a rate of only 5 percent, while their higher-income counterparts earned bachelor's degrees at a 36 percent rate. Twenty years later, of students born around 1980 into low-income families, only 9 percent earned a bachelor's degree, while their high-income peers pulled away to a 54 percent attainment rate, widening the gap significantly over this time period.

81. National Center for Education Statistics, Digest of Education Statistics, "Educational Attainment of Young Adults," http://nces.ed.gov/programs/coe/indicator_caa.asp (updated May 2016).

82. Martha J. Bailey and Susan M. Dynarski, *Gains and Gaps: Changing Inequality in U.S. College Entry and Completion*, NBER Paper No. 17633 (Cambridge, Mass.: National Bureau of Economic Research, December 2011), http://www.nber.org/papers/w17633.

CREDENTIALS CONFERRED

Of the undergraduate credentials awarded in 2013–2014 in the United States, less than half—48 percent—were bachelor's degrees, while 26 percent were associate degrees and 25 percent were certificates extending from the liberal arts to technical and career fields.[83] Over the past decade, the number of all levels of credentials awarded by colleges and universities has increased, with the fastest growing college credentials being associate degrees and certificates. The number of certificates awarded increased by 41 percent between 2004 and 2014; associate degrees increased by 51 percent, and bachelor's degrees increased by 34 percent.[84]

Of the one million associate degrees awarded in 2012–2013, the three fields producing the most awards were liberal arts and sciences, general studies, and humanities (34 percent); health professions and related programs (21 percent); and business, management, marketing, and support services (11 percent). The three fields accounting for the greatest portions of the 1.8 million bachelor's degrees earned in 2012–2013 were business (20 percent), health professions and related programs (10 percent), and social sciences and history (10 percent).[85]

Both associate and bachelor's degrees in health professions and related programs have exploded over the last decade. In the period between 2003 and 2013, associate degrees conferred in this field almost doubled, and bachelor's degrees grew by 160 percent. Degrees awarded in the liberal arts and sciences, general studies, and humanities have grown at a much slower pace: 55 percent for associate degrees and 19 percent for bachelor's. Similarly, bachelor's degrees awarded in social sciences and history have increased at a slower rate—35 percent—during the same period.[86]

There has been significant growth in credentials that prepare individuals for specific occupations, often referred to as vocational education, workforce education, or career and technical education. In 2012, students enrolled in certificate or associate degree career-education programs made up approximately one-third of all undergraduate enrollments.[87]

83. National Center for Education Statistics, Digest of Education Statistics, Table 318.40, "Degrees/Certificates Conferred by Postsecondary Institutions, by Control of Institution and Level of Degree: 1969–70 through 2013–14," http://nces.ed.gov/programs/digest/d15/tables/dt15_318.40.asp.

84. National Center for Education Statistics, "Degrees Conferred by Public and Private Institutions," http://nces.ed.gov/programs/coe/indicator_cts.asp (updated May 2016).

85. National Center for Education Statistics, "Undergraduate Degree Fields," https://nces.ed.gov/programs/coe/indicator_cta.asp (accessed April 2015).

86. National Center for Education Statistics, Digest of Education Statistics, Table 321.10, "Associate's Degrees Conferred by Postsecondary Institutions, by Sex of Student and Discipline Division: 2003–04 through 2013–14," https://nces.ed.gov/programs/digest/d15/tables/dt15_321.10.asp?current=yes; and National Center for Education Statistics, Digest of Education Statistics, Table 322.10, "Bachelor's Degrees Conferred by Postsecondary Institutions, by Field of Study: Selected Years, 1970–71 through 2013–14," https://nces.ed.gov/programs/digest/d15/tables/dt15_322.10.asp?current=yes.

87. Mary Alice McCarthy, *Beyond the Skills Gap: Making Education Work for Students, Employers, and Communities* (Washington, D.C.: New America, 2014), https://www.luminafoundation.org/files/resources/beyond-the-skills-gap.pdf.