## UC Irvine

UC Irvine Law Review

## Title

Three Challenges for American Higher Education

## Permalink

https://escholarship.org/uc/item/8g42785n

## Journal

UC Irvine Law Review, 7(1)
ISSN
2327-4514
Author
Liu, Goodwin

## Publication Date

2017

# Three Challenges for American Higher Education 

Goodwin Liu*

Socioeconomic Diversity at Selective Institutions ..... 11
Increasing College Attainment ..... 14
Some College for All ..... 16

I am delighted to participate in this important symposium on the future of higher education. Let me offer a few remarks to set some context for today's discussion.

If you look at news headlines, it's rare to find a moment in recent history when our system of higher education (or, for that matter, our education system more generally) was not in "crisis." The nature of the crisis varies from era to era, but the perceived state of crisis seems constant.

Today, many say there is a crisis of affordability. Over the past two decades, middle-class families have seen their incomes stagnate, while higher education costs and tuition go up and up. Others say there is a crisis of confidence. Some people wonder whether higher education teaches marketable skills and whether the value of a college degree is worth the debt. And others say there is even an existential crisis, as higher education institutions confront the vast unknowns of online learning and other technological innovation that may someday make our current education delivery models obsolete.

Given all these crises, one has to wonder how our students are ever going to get their degrees without the roof collapsing on their heads. And I shouldn't even joke about that in California because we do have earthquakes here.

These are serious issues, though I tend to agree with University of California President, Janet Napolitano, who wrote in a 2015 editorial: "Higher education isn't in crisis. . . . [I]t is in motion, and it always has been. Higher education evolves as knowledge expands, societies change and new technologies are introduced. ${ }^{11}$ The

[^0]talk of crisis is better understood, she explained, as an indication of widespread "appreciation of the importance of universities and colleges in shaping American society and securing this country's place as a world leader." ${ }^{2}$ In other words, higher education matters. That's why we care so much about it.

The crisis talk does point out real problems, although we have to be careful to distinguish hyperbole from real facts on the ground. We also have to be careful not to treat higher education as a monolith, and this is the main contextual point I want to start with this morning.

Higher education is a very diverse sector. ${ }^{3}$ There are over 4600 degree-granting postsecondary institutions in America. About one-third are public; two-thirds are private. About two-thirds are four-year institutions; about one-third (over 1600) are two-year institutions, including community colleges and technical and vocational schools. Most two-year institutions (57\%) are public, and by far, most four-year institutions (77\%) are private.

Among private institutions, a slight majority ( $54 \%$ ) are nonprofits; the rest are for-profits. Over the past two decades, the number of for-profit higher education institutions has more than quadrupled, from 345 in 1994 to 1424 in 2014. In fact, because the numbers of public and private non-profits have declined slightly since $1994,{ }^{4}$ the growth of for-profit institutions accounts for the entirety of growth in the number of higher education institutions overall. ${ }^{5}$

An acknowledgment of this diversity is a necessary starting point for discussing problems and possible reforms. For example, are college students graduating with too much debt? Well, it's one thing to graduate from Harvard with $\$ 30,000$ of debt, and quite another to graduate from the University of Phoenix with $\$ 30,000$ of debt. The earnings prospects of students from these institutions are very different (\$95,500 on average for Harvard graduates vs. $\$ 51,100$ for University of Phoenix graduates, according to the federal government's new College Scorecard), ${ }^{6}$ so ideally our policies addressing student debt would be sensitive to such differences. The diversity of American higher education means that one-size-fits-all reforms are unlikely to work, or they may solve some problems at the expense of creating others.
2. Id.
3. See Institution of Education Sciences, Digest of Education Statistics 2015, at 596 tbl.317.10 (Dec. 2016) [hereinafter Institution of Education Sciences, Digest 2015], https://nces.ed.gov/ pubs2016/2016014.pdf [https://perma.cc/F3EU-ALGH], for the data referenced in this paragraph and the following paragraph.
4. Id.
5. See id. at 596 tbl. 317.10 n .1 ("Large increases are due to the addition of schools accredited by the Accrediting Commission of Career Schools and Colleges of Technology.").
6. Compare Harvard University, College Scorecard Data [U.S. Dep't of Educ.], https:/ /collegescorecard.ed.gov/search/?degree=b\&name=university $\% 20$ of $\% 20$ phoenix\&sort= advantage:desc [https://perma.cc/F5ZH-WD2N] (last visited Apr. 8, 2017), with University of Phoenix Search, College Scorecard Data [U.S. Dep't of Educ.], https:// collegescorecard.ed.gov/search/?degree=b\&name=university $\% 20$ of $\% 20$ phoenix\&sort $=$ advantage: desc [https://perma.cc/W27Q-VZ5X] (last visited Apr. 8, 2017).

The diversity of American higher education exists at the most fundamental level-at the level of institutional mission and purpose. Harvard and the University of Phoenix do not have the same institutional mission. In a recent essay, philosopher Kwame Anthony Appiah described two visions of higher education. ${ }^{7}$ One, he said, "focuses on how college can be useful-to its graduates, to employers and to a globally competitive America." ${ }^{8}$ As college becomes more expensive, this vision asks whether students are getting a good return on their investment. He called this vision "Utility U." ${ }^{\text {" }}$ The other vision, he said, "aim[s] at getting students ready for life as free men and women. . . . Here, college is about building your soul as much as your skills." ${ }^{10}$ College, in this view, is where you "think critically about [your] values" and "hone the tools for ... the pursuit of happiness." ${ }^{11}$ He called this vision "Utopia U." ${ }^{12}$ In a nice shorthand, Appiah says "Utility U. is concerned with value," whereas "Utopia U. is concerned with values." ${ }^{13}$

Of course, Utility U. and Utopia U. do not commonly exist in pure form. Most higher education institutions strive for a blend of these two visions. But what students want and what our colleges and universities offer vary a great deal along this spectrum. The diversity of American higher education is reflected in the diversity of students it serves. We want our colleges and universities to train rocket scientists, business leaders, innovators, and enlightened citizens; we also want them to train teachers, nurses, accountants, technicians, programmers, mechanics, and engineers. In the education marketplace, different institutions naturally carve out different niches, which means that diagnosing problems in higher education and proposing solutions must proceed more surgically than some of the generalized claims of crisis suggest. Again, if there's one point I'd like to make today, it's that one size does not fit all. So when we talk about problems and reforms in higher education, let's be specific about which institutions and which students we're talking about.

With this context in mind, I'd like to now discuss three challenges that illuminate the differentiated purposes of our higher education institutions.

## Socioeconomic Diversity at Selective Institutions

The first is the continuing dearth of low-income students at our nation's top colleges and universities. Although these institutions comprise a small slice of American higher education, they play an important role in educating our society's leaders and decision-makers. For that reason, we should be concerned whether the students at these institutions reflect our population as a whole.
7. Kwame Anthony Appiah, The College Crossroads: The Dream-and the Crisis-of Higher Education, N.Y. Times, Sept. 13, 2015, at 17.
8. Id. at 18.
9. Id.
10. Id.
11. Id.
12. Id.
13. Id. at 20 .

Ever since the Bak.ke decision in 1978, ${ }^{14}$ achieving racial and ethnic diversity in the student body has been a prominent goal of elite universities-one that they have been willing to act on and defend in court. There continue to be serious challenges on this front-for example, the low enrollment of black students at top public universities in states that have banned affirmative action. ${ }^{15}$ But overall, I think the story of the last four decades has been one of significant progress.

And yet, these institutions-with some notable exceptions, including this campus ${ }^{16}$ —have not applied the same sense of urgency to enrolling students from low-income families. In the Ivy League and at other top schools, the vast majority of students come from the upper tiers of the income distribution.

Over the past couple years, David Leonhardt of the New York Times has developed a measure of economic diversity called the College Access Index, which ranks top schools according to their percentage of students who are Pell Grant recipients, the graduation rate among those students, and the net price those students paid. ${ }^{17}$ In September 2015, the Times published its ranking of 179 colleges with a median five-year graduation rate of $75 \%$ or higher. ${ }^{18}$

Among the seven schools at the top of this ranking, six were UC institutions: Berkeley, UCLA, San Diego, Santa Barbara, Davis, and-at the very top-UC Irvine, with a remarkable $40 \%$ of students on Pell Grants. ${ }^{19}$ All of the Ivy League institutions landed in the upper half of this ranking, in part because very generous financial aid policies have driven the net price paid by needy students down to almost zero. Yet the percentage of Pell Grant recipients at those schools is not spectacular. Indeed, there are more Pell Grant recipients at this one campus, UC Irvine, than there are at all eight Ivy League schools combined. ${ }^{20}$

[^1]For a long time, the conventional wisdom was that the meager enrollment of low-income students simply reflected the stubborn correlation between income and educational achievement. And it is true that there are fewer students with exceptional academic qualifications at the bottom of the income distribution than at the top. But a few years ago, a study by two economists, Caroline Hoxby and Christopher Avery, found that "a large number—probably the vast majority—of very high-achieving students from low-income families do not apply to a selective college or university." ${ }^{21}$ They defined "low-income" as the bottom income quartile ( $\$ 41,472$ or less in 2008) and "high-achieving" as the top 10 percent of test-takers on the SAT or ACT with at least an A- grade point average. 22 The study estimated that there are 25,000 to 35,000 low-income high achievers every year in the United States. ${ }^{23}$ More than half of them do not apply to a college whose median test score is within 15 percentile points of the student's own score. ${ }^{24}$ And this is despite the fact that these students have qualifications that make them likely to be admitted with financial aid so generous that they would pay less than they do to attend the non-selective schools they usually attend. ${ }^{25}$

This phenomenon, called "undermatching,", ${ }^{26}$ presents a major challenge but also a major opportunity for selective colleges. Many of these low-income high achievers live outside of large metropolitan areas, where few students have applied to selective schools in the past and where teachers and counselors are unaccustomed to advising students capable of attending selective colleges. ${ }^{27}$ Unlike low-income high achievers who do apply to selective colleges, the undermatched students appear to be dispersed and isolated, living in neighborhoods with no critical mass of similar high-achieving students. ${ }^{28}$

The issue is not financial aid; generous aid packages have not significantly increased the enrollment of low-income students. ${ }^{29}$ But a randomized national experiment has shown that a modest, low-cost intervention that targets these students with application fee waivers and relevant information about net costs can

[^2]increase the number of applications they submit and the selectivity of the colleges they apply to and ultimately attend. ${ }^{30}$ There may be other steps that selective colleges can take to reach and engage these talented students. If selective schools began to tackle this issue as vigorously as they have tackled the issue of racial diversity, I think it is likely we would see substantial progress.

This is one of the most important bodies of educational research to surface in a long time. Every student deserves the chance to realize his or her full potential, and by attending a more selective school, a student encounters significant advantages in educational resources, earnings potential, social networks, and intangible opportunities. Moreover, society as a whole has a major stake in this project. Realizing the total talent available in our society redounds to everyone's benefit; increasing socioeconomic diversity among our leadership cadre enhances democracy; and allocating coveted seats in higher education on the basis of talent and motivation, not family income, affirms the ideal of equality of opportunity.

## Increasing College Attainment

Let me now discuss a second challenge facing higher education, and that is how to increase the rate of college attainment in our population. The problem I have just discussed-facilitating the admission of several thousand high-achieving, low-income students to selective colleges each year-does not have much to do with the overall rate of college attainment, which implicates hundreds of thousands of students each year.

The wage disparity between college and high school graduates has increased steadily over the past five decades and is now the highest it has ever been. ${ }^{31}$ This indicates continuing strong demand in the labor market for college graduates, consistent with the rising skill levels sought by employers in today's global economy.

In a 2008 book called The Race Between Education and Technology by Harvard professors Claudia Goldin and Lawrence Katz, ${ }^{32}$ the authors explain the rise of U.S. leadership in the global economy by highlighting the increasing educational attainment of the U.S. workforce over the twentieth century. From 1915 to 2005, the average years of schooling in the U.S. workforce grew by almost six years, with mass high school completion comprising a major part of the increase in the first half and middle of the century, and increasing participation in higher education furthering the trend in recent decades. ${ }^{33}$ However, since 1980, there has been an educational slowdown, as growth in the high school completion rate has attenuated while the rate of college attainment in the population has moved up gradually. ${ }^{34}$

[^3]Over the past forty years, the share of high school completers who go directly to college, has increased from roughly half to nearly two-thirds today. ${ }^{35}$ The share of high school completers who go directly to a four-year college stood at $42 \%$ in 2013.36 And the most recent six-year college graduation rate, for the cohort entering a four-year college in 2008, was $60 \% .{ }^{37}$ Because not all high school graduates go on to a four-year college and because not all four-year college-goers end up graduating, it stands to reason that the share of twenty-five- to twenty-nine-year-olds with a college degree or higher in 2014 was just over one-third. ${ }^{38}$

If we wanted to raise that figure, how would we go about doing it? One thing we wouldn't do is worry much about selective colleges, where generous resources push graduation rates above $80 \%$ or even $90 \%$ for all racial and income groups. ${ }^{39}$ Again, the diversity of American higher education requires a more refined approach. What are the leverage points for producing more college graduates, if that is our goal?

From an efficiency standpoint, it would seem most promising to focus on college non-completers-the more than $40 \%$ of students pursuing a bachelor's degree who currently do not graduate-than to increase college enrollment in the first place. Likewise, it seems easier to facilitate college access for the one-third of high school graduates who do not go directly to college than to mount a serious effort to reduce high school dropout rates. These are significant margins for policymakers to work with if the goal is to increase the number of college graduates.

A 2009 study by the Public Policy Institute of California on the state's need for college graduates illustrates the point. ${ }^{40}$ This study projected a steady rise in labor market demand for college graduates, together with shifts in labor supply as aging baby boomers are replaced by cohorts increasingly comprised of groups with historically low educational attainment. ${ }^{41}$ California's economy, the study estimated, will need almost one million more college graduates in 2025 than current policies are likely to produce. ${ }^{42}$

Among the options for closing the gap, the "least expensive," according to the study, is to improve the persistence and graduation rates of students already enrolled in the California State University (CSU) system, $50 \%$ of whom do not complete a four-year degree. ${ }^{43}$ The "second-least-expensive option" is to increase transfer rates

[^4]from community colleges to four-year institutions; the current rate is $20 \%$ to $30 \%$ statewide. ${ }^{44}$

The most "blunt and fiscally expensive" approach, the study reported, is to increase college enrollment overall. ${ }^{45}$ It is more difficult to make college graduates out of students who are not college-ready or not planning to enroll than it is to improve retention and completion by students who are already eligible and enrolled in college. As the study explained, "the state has already invested in [the latter] students by subsidizing their postsecondary education and, with a bit more investment, could realize the full benefits of having produced a college graduate." ${ }^{46}$ Even if California were to increase college enrollment as a way of producing more college graduates, it is doubtful that the most effective approach would be to reduce the high school dropout rate or otherwise target the worst-off students, since "students who struggle to finish high school would be the least likely to enroll and succeed in college." ${ }^{47}$ With only $56 \%$ of California's high school graduates going directly to college, "[i]mprovements in academic performance and college readiness of high school students who are on the margins of pursuing a college education could have a more important effect on college enrollment and completion." ${ }^{38}$

There are many possible strategies for supporting college completion and for increasing transfers from community colleges. I will not discuss those strategies here, except to say it seems unlikely that we can move the needle much on college attainment unless we reverse the decline in state support for public institutions and achieve major efficiencies at those institutions. My main point is that if the goal of public policy is to increase college attainment, it makes sense to target efforts at the significant population of students within striking range of earning a four-year degree, which means targeting the institutions, like CSU and other large public universities, that serve these students. Across-the-board policies are unlikely to be as efficient as tailored approaches that recognize the diversity of students and institutions in our higher education system.

## Some College for All

This brings me to the last challenge I want to mention today. The implication of saying that there is a significant population of students who are within striking range of earning a four-year degree is that there is a significant population of other students who aren't. This is an uncomfortable reality because it is widely believed that getting a college education is part of the American Dream. There are plenty of politicians who campaign on a commitment to "college for all." You don't see too many campaigning on the slogan "college for some."

[^5]Yet here is where egalitarian ideals must confront sober pragmatism. Although the share of working-age Americans with a college degree has been gradually increasing, the number currently stands at roughly one-third. ${ }^{49}$ Among low-income and historically disadvantaged groups, that figure is even lower. ${ }^{50}$ Earning a college degree is nowhere near a universal experience in our society, even in our technological age. The percentage of young adults with a college degree has increased about 11 percentage points over the past 25 years, from $23.2 \%$ in 1990 to $34.0 \%$ in $2014 .{ }^{51}$ Even if we could devise policies to increase that rate of growth so that the share of young adults with a college degree climbs to 50 percent over the next 25 years, that would still leave half of the young adult population without a college degree. What should the role of higher education be for these students?

This question brings to the fore a longstanding tension between academic preparation ("the college track") and career or technical education. In the 21st century, this dichotomy is surely worn and artificial. Although there are many goodpaying jobs in America that do not require a college degree, there are few such jobs that do not require a strong academic foundation of literacy and computational skill. A major challenge for our education system is how to do a better job preparing millions of students for a decent livelihood without a college degree. Of course, there is much room to improve our K-12 schools. But the stagnant wage curve for young adults with only a high school degree makes clear that higher education must also be part of the solution. Even if this is not the most politically salable priority, it is one of the most important priorities facing American higher education.

In a 2011 report called Pathways to Prosperity, education professor Robert Schwartz and his coauthors observe that among the jobs projected to require some postsecondary education, many are:
"middle-skill" occupations such as electrician, and construction manager, dental hygienist, paralegal and police officer. While these jobs may not be as prestigious as those filled by B.A. holders, they pay a significant premium over many jobs open to those with just a high school degree. More surprisingly, they pay more than many of the jobs held by those with a bachelor's degree. In fact, 27 percent of people with post-secondary licenses or certificates-credentials short of an associate's degree-earn more than the average bachelor's degree recipient. ${ }^{52}$
Many of these middle-skill jobs are in our robust healthcare industry-for example, nurses, lab technicians, and hospital administrators. And if you have recently used a plumber, electrician, computer technician, car mechanic, or contractor, then you have some idea of the specialized skills those fields require as well as the substantial wages those jobs can command.

[^6]There are many initiatives in this policy area, including efforts to improve course-taking and career guidance in high schools; to build more linkages between classroom learning and work experiences in high school and college; to expand high-quality apprenticeship and industry-recognized certificate programs; to more closely regulate and, if necessary, shut down underperforming for-profit colleges; to explore the potential of online courses to provide high-quality instruction and certification en masse; and to make community colleges even more accessible and more effective than they are today. ${ }^{53}$

This last point deserves special emphasis: For a wide swath of our population, community college is a key engine of social mobility. It is where students with a mediocre high school education can get a second chance. It is where young adults who can't afford four-year college right now can still learn marketable skills and lay a foundation for a four-year degree in the future. It is where people with children and families can advance their education with a flexible schedule of classes. It is where many immigrants go to learn English in the hope of getting a better job and participating more fully in civic life. And it is where working adults can retool and expand their skills, and thereby adapt to changes in the workplace and the global economy. The red state of Tennessee and the blue state of Oregon recently decided to make two years of community college free to all high school graduates. ${ }^{54}$ The first place to start making community college free was Tulsa, Oklahoma in 2007, 5 , and other jurisdictions are considering similar proposals. ${ }^{56}$

Doing our utmost to give every child-regardless of income, race, or social background-the chance to earn a college degree is profoundly egalitarian, and I recognize that "tracking" has an unflattering history in our education system. ${ }^{57}$ As I said earlier, we must strive to make the upper rungs of educational opportunity more inclusive and representative of America as a whole. But we must also strive to make alternatives to four-year college into true ladders of opportunity that enable
53. For a slightly dated yet thoughtful discussion, see ThOMAS BAILEY, NORENA BADWAY \& Patricia J. Gumport, Nat'l Center for Postsecondary Improvement, For-Profit Higher Education and Community Colleges (2001).
54. See Duane W. Gang, Eyes on Tennessee As It Begins Free Community College Plan, TENNESSEAN (Apr. 16, 2014, 4:56 PM), http://www.tennessean.com/story/news/education/2014/ 04/16/tennessee-lawmakers-approve-free-community-college-plan/7772245/ [https://perma.cc/ H74G-CWFK]; Richard Read, Oregon Embraces Free Community-College Tuition Abead of Other States, Outpacing Obama Proposal, Oregonian (July 12, 2015, 4:19 PM), http://www.oregonlive.com/ education/index.ssf/2015/07/oregon_embraces_free_community.html [https://perma.cc/FB9KPYXB].
55. Paul Fain, Free Community College: It Works, Inside Higher Educ. (Mar. 5, 2015), https://www.insidehighered.com/news/2015/03/05/tulsa-community-colleges-free-tuition-program-has-paid-while-inspiring-others [https://perma.cc/E7TU-KY56].
56. Free Community College, NAT'L CONFERENCE OF STATE LEGISLATURES, http:// www.ncsl.org/research/education/free-community-college.aspx [https://perma.cc/L2SW-H3QA] (last visited Sept. 26, 2016); Nanette Asimov, SF Reaches Deal for Free Tuition at City College, S.F. GATE (Feb. 7, 2017), http://www.sfgate.com/bayarea/article/SF-reaches-deal-for-free-tuition-at-City-College-10912051.php [https:/ / perma.cc/6R6X-AZU4].
57. See, e.g., JEANNIE OAKES, KEEPING Track: How Schools Structure Inequality (2d ed. 2005).
students to learn valuable skills and earn a decent wage. We cannot let such alternatives become dumping grounds for the thousands of students who do not end up getting a four-year degree. These students disproportionately come from low-income families or historically disadvantaged groups, and there is nothing egalitarian about an opportunity structure that relegates them to second-class citizenship. In an era of rising inequality, tackling this challenge is at least as pressing as increasing the number and diversity of students who earn a college degree. ${ }^{58}$

In sum, American higher education is not a monolith. It is a very diverse sector that serves millions of students with a wide range of abilities, interests, levels of preparation and motivation, and life circumstances. We should be cautious about describing problems or prescribing solutions with a broad brush. Different institutions serve different students and have different functions. That is one of our system's great strengths, and we are more likely to help our colleges and universities serve the needs of individuals and society if we pay careful attention to this institutional diversity.

[^7]
[^0]:    * Associate Justice, California Supreme Court, and former Associate Dean and Professor of Law, UC Berkeley School of Law.

    1. Janet Napolitano, Opinion, Higher Education Isn't in Crisis, WASH. POST (Mar. 12, 2015), https://www.washingtonpost.com/opinions/higher-education-isnt-in-crisis/2015/03/12/f92b777e-bba2-11e4-bdfa-b8e8f594e6ee_story.html [https://perma.cc/UWJ6-DGZP].
[^1]:    14. Regents of Univ. of Cal. v. Bakke, 438 U.S. 265 (1978).
    15. How Minorities Have Fared in States with Affirmative Action Bans, N.Y. Times, http://www.nytimes.com/interactive/2013/06/24/us/affirmative-action-bans.html [https:// perma.cc/L9U9-3W36] (updated Dec. 9, 2015) (citing Institution of Education Sciences, Digest of Educ. Statistics 2014, at 38 tbl.104.20 (Apr. 2016) [hereinafter Institution of Education Sciences, Digest 2014], https://nces.ed.gov/pubs2016/2016006.pdf [https://perma.cc/NF3S-656R]).
    16. Top Colleges Doing the Most for Low-Income Students, N.Y. Times (Sept. 16, 2015), http:/ / www.nytimes.com/interactive/2015/09/17/upshot/top-colleges-doing-the-most-for-low-incomestudents.html [https:/ / perma.cc/X8YQ-MPBR].
    17. Id.
    18. Id.
    19. Id.
    20. See id. An even more powerful study of socioeconomic diversity and intergenerational mobility at American colleges and universities was released as this article went into publication. See Raj Chetty et al., Mobility Report Cards: The Role of Colleges in INTERGENERATIONAL MOBILITY (2017), http://www.equality-of-opportunity.org/papers/coll_ mrc_paper.pdf [https://perma.cc/QN4E-MCL3]. Using data from federal income tax returns of over 30 million college students from 1996 to 2014, the researchers found that "[a]mong 'Ivy-Plus' colleges (the eight Ivy League colleges, University of Chicago, Stanford, MIT, and Duke), more students come from families in the top $1 \%$ of the income distribution ( $14.5 \%$ ) than the bottom half of the income distribution ( $13.5 \%$ ) . . . Only $3.8 \%$ of students come from the bottom $20 \%$ of the income distribution at Ivy-Plus colleges." Id. at 2 . The researchers measured each college's mobility rate, defined as "the fraction of its students who come from the bottom quintile of the income distribution and end up in
[^2]:    the top quintile," and found that the colleges with the highest mobility rates "are typically mid-tier public schools," including campuses of the City University of New York, the California State University system, the University of Texas system, and various community colleges. Id. at 3-4. Although a large percentage of low-income students who attend elite colleges end up in the top income quintile-indeed, the earnings outcomes of these low-income students are similar to the outcomes of their high-income peers—elite colleges have "a very small fraction of students from low-income families," and thus have mobility rates slightly above the national median. Id. at 4.
    21. Caroline Hoxby \& Christopher Avery, The Missing "One-Offs": The Hidden Supply of HighAchieving, Low-Income Students, Brookings Papers On ECON. Activity, Spring 2013, at 2.
    22. Id. at 2 n.1, 13.
    23. Id. at 14-15.
    24. Id. at 26 ; see id. at 27 fig. 11 .
    25. Caroline Hoxby \& Sarah Turner, Expanding College Opportunities, EDUC. NEXT, Fall 2013, at 67.
    26. Hoxby \& Avery, supra note 21, at 4.
    27. Id. at 38-39, 44.
    28. Id. at 2-3, 38-39.
    29. Id. at 1.

[^3]:    30. Id. at 68-70.
    31. Pew Research Ctr., The Rising Cost of Not Going to College 8 (2014).
    32. Claudia Goldin \& Lawrence F. Katz, The Race Between Education and TECHNOLOGY (2008).
    33. Id. at 31-34, tbl.1.2.
    34. Id. at 34 fig.1.8; see Institution of Education Sciences, Digest 2015, supra note 3, at 38-40 tbl.104.10.
[^4]:    35. Institution of Education Sciences, Digest 2015, supra note 3, at 450 tbl.302.10.
    36. Id.
    37. Fast Facts, NAT'L CTr. FOR EDUC. Statistics, http:// nces.ed.gov/fastfacts/ display.asp?id $=40$ [https:/ / perma.cc/878Z-W94Q] (last visited Nov. 7, 2016).
    38. Institution of Education Sciences, Digest 2015, supra note 3, at 41-42 tbl.104.20.
    39. See, e.g., Black Student Graduation Rates at High-Ranking Colleges and Universities, J. BLACKS IN Higher Educ. (Nov. 4, 2013), https://www.jbhe.com/2013/11/black-student-graduation-rates-at-high-ranking-colleges-and-universities/ [https://perma.cc/6EJA-TW83].
    40. Hans Johnson \& Ria Sengupta, Pub. Policy Inst. of Cal., Closing the Gap: MEETING CALIFORNIA's NEED FOR COLLEGE GRADUATES (2009).
    41. Id. at 1 .
    42. Id. at 5 .
    43. Id. at 11, 18; see id. at 11-12, 12 fig. 3 .
[^5]:    44. Id. at 8,18 .
    45. Id. at 7 .
    46. Id. at 12.
    47. Id. at 13 .
    48. Id.
[^6]:    49. Institution of Education Sciences, Digest 2015, supra note 3, at 41-42 tbl.104.20.
    50. See id.
    51. Id.
    52. William C. Symonds, Robert Schartz \& Ronald F. Ferguson, Harvard Graduate School of Education, Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century 2-3 (2011).
[^7]:    58. See Sarah Carr, Getting Real About High School, Wilson Quarterly (Summer 2013), http://wilsonquarterly.com/quarterly/summer-2014-where-have-all-the-jobs-gone/getting-real-about-high-school/ [https:/ / perma.cc/YA8Q-ALPM]; Michael J. Petrilli, 'Kid, I'm Sorry, But You're Just Not College Material" Is Exactly What We Should Be Telling a Lot of High School Students, SLATE (Mar. 18, 2014), http://www.slate.com/articles/life/education/2014/03/college_isn_t_ for_everyone_let_s_stop_pretending_it_is.html [https://perma.cc/4TSL-XXTY]; Robert B. Reich, Why College Isn't (and Shouldn't Have to Be) for Everyone, MOYERS \& CO. (Mar. 26, 2015), http:/ / billmoyers.com/2015/03/26/college-isnt-shouldnt-everyone/ [https://perma.cc/3MN5-ZTBG].
