



## How Can We Improve College Success for Underserved Students?

### Through Early, Sustained, and Multifaceted Support

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### Executive Summary

**Social inequity provides a unique challenge to our education system as access to educational opportunity is the key mechanism for social mobility. For over a century researchers have experimented with new programs and policies, but no single intervention strategy has led to sustained, long-term improvements for multiple populations. To support the educational needs of underrepresented students, policy makers and educators should embrace the fact that no single intervention strategy will lead to meaningful and long-term improvements. Instead, multi-faceted strategies should be employed that:**

- Start early: target interventions that build college knowledge about academics and financing.
- Offer transitional support: Focus on transitional supports that lead to opportunities to earn college credit, and assisting pathways from two- to four-year colleges.
- Deliver sustained support: Expose students to academic and social integration programs, specialized learning communities, multi-purpose diversity initiatives, and a campus culture that prioritizes good teaching practices.

## Introduction

**A**mong the most difficult challenges we face in the United States is social inequality—when opportunities and rewards are provided based on different social positions or statuses within a group or society. At the core of this challenge is our education system, which acts as both the problem and the solution. The system both maintains disadvantages through disparate access to opportunities and provides the key mechanism for social mobility.<sup>1</sup> For over a century, policymakers and researchers have experimented with new policies, programs, and interventions to promote the success of traditionally disadvantaged students. While gains have been made, significant challenges remain. For example, the percent of low-income students enrolled in college has increased, but they continue to be underrepresented relative to their peers of higher socioeconomic status.<sup>2</sup> Policies to make college more affordable, such as the federal Pell grant program, have proven instrumental for expanding postsecondary opportunity, but have failed to meet demand or keep up with the costs

of college.<sup>3</sup> And at our most selective institutions, racial and ethnic minority students have made gains in college attendance, but remain underrepresented.<sup>4</sup>

Despite these persistent inequalities, the extant literature points to several keys for improving access and success in higher education for underserved students whom we define as minority and/or students of color, those from low-income families and communities, English language learners, students with disabilities, recent immigrants, and students who are the first in the families to reach college. With this report we address the important question: How best do we cultivate postsecondary access and success for underserved students? We begin with a critical look at how expectations for success in education have evolved in recent years and then highlight several policies and practices found to promote educational success among these students, from the college enrollment to graduation. We conclude with several recommendations for further investment in interventions and evidence-building aimed at supporting the educational needs of underrepresented students.

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## Gauging Success in Higher Education

The past 20 years have seen dramatic shifts in the nation's expectations for educational attainment. As recently as the late 1990s, education reformers and policymakers were focused on the deeply entrenched "dropout crisis" and on a high school graduation rate that had not changed in almost 25 years (hovering around 70 percent nationally and 50 percent in urban areas like New York City). By 2015, the country witnessed record levels of high school graduation, for the first time topping 80 percent nationally and 70 percent in NYC. While prominent gaps remain among groups identified by race, ethnicity, socioeconomic status, English-learner status, and disability status, even those gaps have narrowed, at least in terms of high school graduation rates.<sup>5</sup> Meanwhile, the high school diploma has been rendered largely obsolete as a terminal education credential where labor market earnings for those with only a high school diploma are now dwarfed even by those with two years of post-secondary education. College graduates, particularly those with bachelor's degrees, have higher earnings, higher job satisfaction, and

better health outcomes than adults who do not have a college degree.<sup>6</sup>

Despite the gradual closing of gaps in high school diploma attainment, access to and completion of post-secondary education have not kept pace, contributing to persistent social inequality. The National Center for Education Statistics (NCES) reports overall gains in bachelor's degree completion rates from 1990 to 2015, but with gaps widening between Whites and Blacks (from 13 to 18 percentage points), and between Whites and Hispanics (from 18 to 26 percentage points). A critical factor to remember is that an increase in completion rates for all students does not mean a decrease in the overall gaps by race and ethnicity. Currently among ages 25–29, 41 percent of Whites have attained a bachelor's degree or higher as compared to 22 percent of Blacks, 15 percent of Hispanics, and 61 percent of Asians/Pacific Islanders.<sup>7</sup>

These trends raise high-stake questions about what constitutes post-secondary success, particularly for colleges and universities. Should success be gauged by measures of access that capture high school preparation and credentials, and support for both the financial

and social/emotional needs of aspiring college applicants and enrollees? Should success be assessed based on persistence in and completion of post-secondary programs of study? To what extent should success be assessed based on what college students learn and the skills they acquire? Finally, to what extent should benchmarks for success include longer-term indicators of labor market participation, civic engagement, and family and community commitment?

Importantly, we face new and evolving questions about who is accountable for producing educational success, particularly in regard to post-secondary education and the wide disparities among groups of young people, regardless of the success measures. How much responsibility should K-12 education systems be expected to bear for student success after they leave those systems? To what extent should (and can) post-secondary education institutions be held accountable for whether their students complete their degrees and learn the content and skills being taught? How might regulations and strategies designed to promote equitable access to higher education also support and complement efforts to maximize excellence and ensure equitable outcomes?

Since the very beginnings of higher education in the United States, colleges and universities have maintained a multifaceted purpose centered on cultivating academic and intellectual growth, as well as developing leaders in key professions and occupations. Success, therefore, must be defined in a similarly multifaceted way to account for the expanding diversity—in terms of students, institutions, modes of delivery, programmatic offerings, etc.—and with the understanding that as systems become more complex they also become more stratified.

## Policies and Practices That Work

Scholarship on access and success in higher education has predominately focused on factors that predict a student's likelihood of enrollment in college, and the conditions for success as most often defined by persistence and completion of a post-secondary degree or credential, and to a lesser extent by student development and learning across multiple domains. The weight of evidence points to the combination of financial aid, academic support, and information as most influential for increasing student's likelihood of enrolling in college, persisting, and completing a degree

or credential for students in general, and particularly for underserved students.<sup>8</sup> Studies of broader notions of student success once in the postsecondary pipeline point to the critical importance of good teaching and interaction with diversity.<sup>9</sup> We therefore summarize the most important evidence-based takeaways from multidisciplinary research identified to be some of the most effective strategies for higher education access and success among underserved students. These include interventions along the college enrollment to completion pipeline focused on financial aid, academic preparation, programmatic support during college, good teaching, and diverse peer interactions.

We organize our brief review of the evidence on what works to improve access and success in high education starting with preparation during high schools then following the progression of students through application, enrollment, persistence, and performance in post-secondary institutions.

## Academic Preparation and College Readiness

Academic preparation is deeply connected to factors such as quality of teachers, curriculum, and levels of racial segregation documented to harm student outcomes such as test scores and high school graduation outcomes.<sup>10</sup> It is of no surprise, then, that the greatest factor predicting college enrollment is academic achievement prior to college, a factor that maintains its predictive strength through to college completion.<sup>11</sup> Programs that have the greatest influence are those that offer multiple services—mentoring, academic preparation, and college application assistance targeted at students not likely to enroll in college—provide robust evidence that it is the combination of supports that matters most for college enrollment and success.<sup>12</sup>

Take for example the nation's largest multi-service programs such as GEAR UP, Upward Bound, Talent Search, Project Grad, and AVID. These programs have been evaluated using various research designs, and many with mixed results. The programs all serve low-income students broadly but use different selection mechanisms in regard to first-generation status, immigrant status and, in some cases such as AVID, low- to moderate-achieving students with recognized potential to complete rigorous work. Of these access programs, Upward Bound is perhaps the most rigorously evaluated. The program, a nearly 21-month commitment to a stu-

dent that can begin as early as 9th grade and into first year of college, increased the number of high school math credits earned but not other measures of academic preparation. Evaluations found some evidence of increased college enrollment at four-year colleges and larger impacts for boys, Hispanic and White students, and some lower-achieving students.<sup>13</sup>

Targeting secondary schools that are under-resourced and offering a combination of academic and college support services may be the best way to enhance college access among underrepresented students. Other work suggests that programming that encourages participation in factors known to enhance college admission—such as SAT or ACT test prep, and volunteer or leadership opportunities—could help to close resource and opportunity gaps.<sup>14</sup> For example, programs like the National College Advising Corps have had positive influence on college attendance among low-income students through a nationwide consortium of advisers in underserved high schools who provide assistance in areas such as registering to take SAT/ACT exams, visiting college campuses, and completing the FAFSA (federal student aid application).<sup>15</sup> Among the program's positive results is increased prevalence of taking SAT or ACT test prep courses. Still, the evidence for long-term success of these programs is mixed, signaling that these interventions are not as effective on their own for persistence and completion of a college degree.

## Financial Aid

Perhaps the most evaluated mechanism in the area of college enrollment studies is financial aid. The purpose of using public resources in higher education is to lower the costs to individuals, stimulate student demand and attainment, and ultimately increase the socially desirable outcomes that accompany a more educated population, such as better health, greater level of civic involvement, and a more skilled and productive workforce.<sup>16</sup> Decades of research on financial aid across multiple disciplines indicates that students are particularly sensitive to college price increases and are so to a greater degree by income as well as race and ethnicity.<sup>17</sup> This demonstrates that the decision to enroll in college does vary by income, race and ethnicity, and type of high school attended.<sup>18</sup> Researchers found evidence that students whose parents had attended less-selective colleges or attended public high schools were less likely to enroll in

college for every \$1,000 increase in room and board.<sup>19</sup> Others provided descriptive evidence suggesting that African-American and Latino students respond differentially to types of aid with varying levels of awareness and understanding of the costs of attending college and financial aid options.<sup>20</sup> Still another researcher examined the retraction of a key aid program and found that this sudden reduction of aid caused a significant drop in college enrollment by nearly one-third, with a more pronounced negative effect for Black students.<sup>21</sup>

Once in college, financial aid—particularly grants—plays an important role in promoting equitable attainment outcomes by socioeconomic status and race/ethnicity. Several rigorously designed studies have found that receiving grants and scholarships (need-based, merit-based, or a combination of the two) positively affect college persistence, credits earned, and graduation.<sup>22</sup> Experiments have further shown and that financial aid is most effective when accompanied by a performance-based component, such as achieving a certain number of credits and grades, and when paired with academic support services.<sup>23</sup>

Students from lower-income backgrounds and first-generation college students uniquely benefit from need-based grants, resulting in decreased likelihood of temporarily dropping out and better odds of graduating.<sup>24</sup> Lower-income students reap similar and unique strong benefits from receiving merit aid, although there is mixed evidence based on state context regarding merit aid on underrepresented minority students.<sup>25</sup> Across racial/ethnic groups, Black and Latino students appear to benefit more from receiving grants than do White students.<sup>26</sup> It may be that students from lower-income backgrounds are more likely to depend heavily upon financial aid to stay enrolled and progress towards a degree than are students with greater financial resources, leading aid to be especially influential for less-affluent students. Differences by first-generation status and race/ethnicity may be reflecting these financial dynamics.

## Programmatic Support Once in College

Among enrolled college students, evidence shows that persistence and attainment are enhanced by programs such as first-year seminars, student support services such as faculty-student interactions, academic and social integration, on-campus residence, and learning

communities. Similar to the academic preparation programs examined earlier, evaluations of these efforts include various research designs. A key difference, however, is that efforts are also spread across two- and four-year institutions with the bulk of the experimental evidence at two-year colleges. These include programs such as Opening Doors in New York, Louisiana, and Ohio.<sup>27</sup> These multi-service programs include outcomes such as decreased likelihood of withdrawing from college in Louisiana and New York, but no effect in Ohio. Most recently, the Accelerated Study in Associates Program (ASAP) program in New York City, which includes a highly comprehensive set of services, yielded one of the largest effects of two-year college completion evaluated. The program doubled three-year graduation rates for developmental education students.<sup>28</sup>

At the four-year level, there is increasing descriptive evidence that first-year seminars uniquely benefit low-performing students.<sup>29</sup> Since lower-achieving students are clearly at greater academic risk, the learning strategies and other content of these first-year seminars may be especially helpful for students who are initially lower-achieving, since these students likely have more to learn from such courses. For example, one experiment found that a matched sample of first-term college students who participated in a learning-strategies course maintained higher grades during their first two years, and were more likely to graduate when compared to comparable students who did not participate in the course. Another evaluation similarly showed positive effects on graduation among students who participated in a first-year seminar that included campus orientation information, academic success training, stress managements, and career planning, among other things. Here again, the effects were most pronounced among students who were lower performing in high school. Importantly, the most effective interventions are those that combine multiple support services, such as a first-year seminar, along with tutoring, and shared residence halls.<sup>30</sup>

## Good Teaching

Good teaching is the primary means through which colleges and universities affect students. Effective teaching encourages students to spend time preparing for class, provides students with feedback, gives students opportunities to reflect, and actively engages students in the

learning process. Across myriad outcomes and based on numerous studies that carefully account for students' differences upon entering college (sociodemographic characteristics, academic achievement, motivation, and parallel pretests of learning), there is simply no substitute for good teaching in undergraduate education. Exposure to good teaching increases a student's likelihood of persisting and graduating and leads to greater cognitive gains in areas like critical thinking and intellectual engagement.<sup>31</sup> Similar to programmatic support discussed previously, exposure to good teaching may have a compensatory effect by having the most positive developmental influence among students who enter college with lower academic achievement.<sup>32</sup> At least two experimental studies found that underrepresented minority students had greater gains in course-specific content knowledge as a result of engaging in active learning environments.<sup>33</sup> Good teaching practices also appear essential to students' learning gains in online and hybrid courses, which are increasingly being used to expand access to higher education.<sup>34</sup>

But what is good teaching and what can be done to support it? Several general indicators of effective teaching exist, including: frequent contact between students and faculty, instructional emphasis on cooperative learning, academic effort and involvement, prompt feedback from instructors to students, high expectations and challenging assignments, and organized instruction.<sup>35</sup> Effective teaching both engages students in the learning process through prompt feedback and scheduled time for reflection, and encourages students to spend time preparing for class. Strategies for cultivating good teaching on campus are many, such as: requiring evidence of teaching ability in recruitment, retention, and promotion decisions; not leaving teaching to chance through relying on part-time instructors; and providing support through university-based resources centers for faculty development.

## Diversity

An important finding replicated across multiple studies is that a hostile racial climate on campus is negatively and significantly related to retention and persistence among students of color, but not White students, and more strongly related to institutional commitment among Blacks than Whites.<sup>36</sup> At predominantly White institutions, a hostile racial climate often occurs pri-

marily by excluding and/or marginalizing students of color, which may explain these differences.<sup>37</sup> The harms of racial isolation on college campuses are well documented and important to recognize given their effects on student outcomes.<sup>38</sup> However, there is also burgeoning research on the benefits of diverse student environments that extend beyond the individual student. Racially diverse educational settings facilitate improvements in intergroup contact and increase cross-racial interactions that are likely to reduce prejudice among students.<sup>39</sup> Diverse educational collegiate environments are also associated with improvements in critical thinking skills, cognitive abilities, and problem-solving skills as a result of exposure to students different from themselves.<sup>40</sup>

## Conclusions and Recommendations

Despite the concerns and challenges associated with persistent inequality in higher education access and success, the evidence highlighted here provides a roadmap for concentrating resources to improve educational outcomes among traditionally underserved student populations. The key finding across numerous studies is that no single intervention strategy will lead to sustained and meaningful improvements in postsecondary access and success, and that sustained deployment of resources across the high school to college completion pipeline is critical for the long-term success of these investments. Therefore, we believe it is important to intervene early and reach across multiple factors affecting students at each stage of their progression through high school and then into and through college. We recommend the following strategies that warrant deeper investments in interventions and evidence-building:

- Start early with targeted interventions that combine academic preparation with efforts to build “college knowledge.”
- Make college financing a central focus of high school guidance and support students as they navigate their initial enrollment in high school.
- Continue to investigate creative strategies for effective developmental education for the underprepared and facilitate acceleration toward credit-accumulation.

- Develop stronger supports for students making the transition from two-year to four-year colleges as this is an increasingly common pathway for most low-income students.
- Cultivate and support good teaching practices in undergraduate settings. Invest in the postsecondary teaching labor force.
- Integrate multi-purpose diversity initiatives ranging from student and faculty recruitment to culturally relevant curricula and instructional practices that provide effective learning opportunities for all students on college campuses.

An uncomfortable truth for researchers may be that multiple-component interventions hold the most promise but are also the most challenging to conduct and evaluate. This does not excuse organizations from properly evaluating programs and policies. However, the findings from this work indicate that the college success story is not solely about what happens inside of a school. Indeed, the evidence suggests that disrupting the embedded forces of social inequality will require interventions that attend to the “to and through” college pipeline as well as “inside and outside” of the college classroom.

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