



Expanding Access and Opportunity

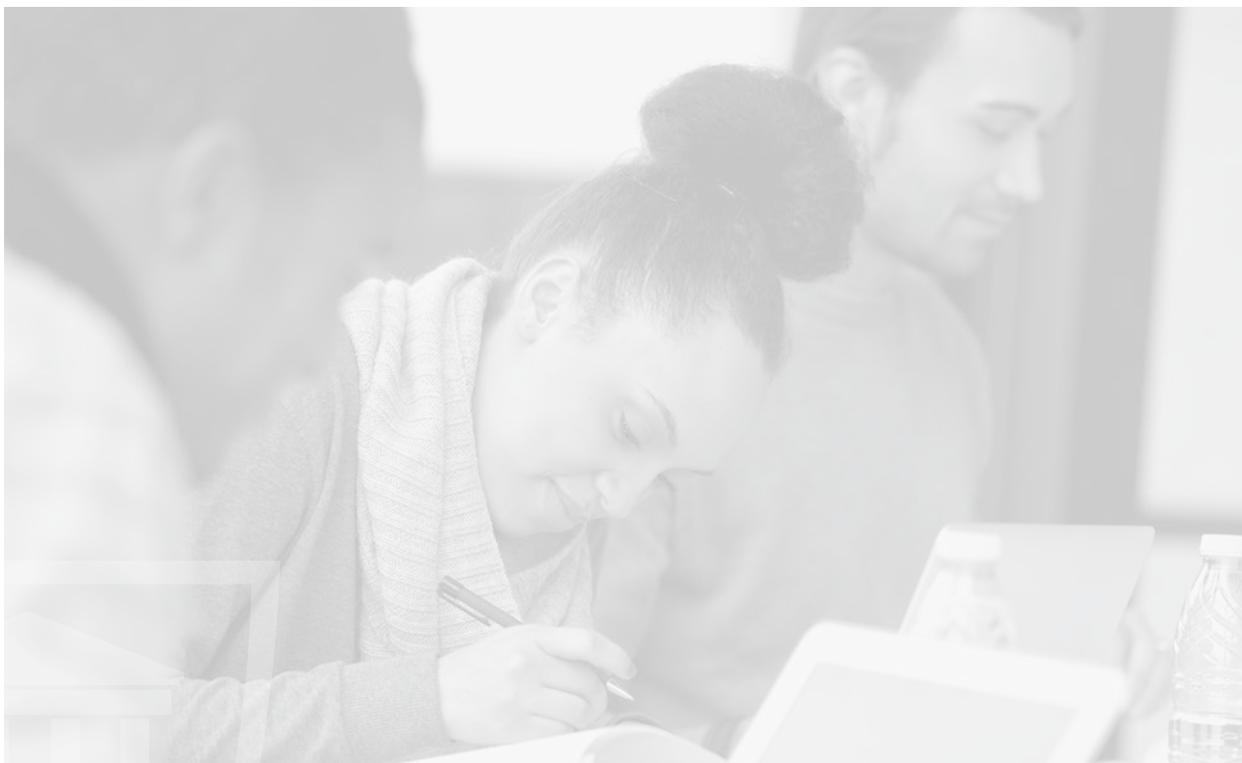
How Small and Mid-Sized Independent Colleges
Serve First-Generation and Low-Income Students

A REPORT BY



THE COUNCIL OF
INDEPENDENT COLLEGES

This report was prepared as a component of the Council of Independent Colleges' public information campaign, *Securing America's Future: The Power of Liberal Arts Education*. The initiative promotes the effectiveness and contributions of private liberal arts colleges and universities and the importance of the liberal arts as fields of study. In addition to this report, the campaign includes a website with related news, social media activity, data and analyses, editorials, speeches, alumni testimonials, and additional reports. Generous support for the campaign is provided by Arthur Vining Davis Foundations, Carnegie Corporation of New York, Christian A. Johnson Endeavor Foundation, Jessie Ball DuPont Fund, Gladys Krieble Delmas Foundation, and Teagle Foundation.



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A Report by the Council of Independent Colleges
March 2015

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The Council of Independent Colleges is an association of 750 nonprofit independent colleges and universities and higher education affiliates and organizations that has worked since 1956 to support college and university leadership, advance institutional excellence, and enhance public understanding of private higher education's contributions to society. CIC is the major national organization that focuses on providing services to leaders of independent colleges and universities as well as conferences, seminars, and other programs that help institutions improve educational quality, administrative and financial performance, and institutional visibility. CIC also provides support to state fundraising associations that organize programs and generate contributions for private colleges and universities. The Council is headquartered at One Dupont Circle in Washington, DC. For more information, visit www.cic.edu.

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Preface

A great deal of effort across higher education has been devoted to increasing access and establishing the conditions for success by low-income and first-generation students. If American higher education is to achieve the nation's aspirational goals for college completion, colleges and universities must enroll and graduate far more students from underserved backgrounds than they do today.

Unfortunately, policy makers often look in the wrong places to solve this problem. A persistent bias toward scale leads many to conclude that large public universities or wholly online educational providers are the best vehicles for expanding access and opportunity. This report demonstrates that independent colleges and universities provide the best opportunities to help first-generation and low-income students enroll in and graduate from college.

As part of the Council of Independent Colleges' public information campaign, *Securing America's Future: The Power of Liberal Arts Education*, the report takes up several fundamental questions:

- What kinds of colleges tend to enroll the largest proportion of low-income and first-generation students?
- In what institutional settings are low-income and first-generation students most likely to experience the most effective and engaging educational environments?
- What types of colleges and universities have the best track record in helping low-income and first-generation students earn a degree in a timely fashion?

The report concludes that small and mid-sized independent colleges and universities outperform other types of institutions in providing educational opportunities and timely and successful degree completion for low-income and first-generation students. This fact, combined with the relatively small difference in the cost of attending a public versus a private institution, strongly suggests that underserved students would do well to consider attending a small or mid-sized private college. Moreover, policy makers should look to this sector to help reduce educational inequality and advance national competitiveness goals.

Richard Ekman

President

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March 2015

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Executive Summary

Upward mobility remains an elusive dream for many Americans, and social and economic advancement are often unattainable for working class families. Given the unique role American colleges and universities historically have played in facilitating social mobility, the White House and other prominent policy makers have called attention to the issue of educational access for low-income and first-generation students. Indeed, the current disparity in higher education access and success in the United States prevents many first-generation and low-income students from realizing the benefits of social mobility into the middle class. Moreover, when a nation fails to educate wide swaths of its population, its competitiveness on the global stage is diminished.

If the United States is to succeed as a nation in reducing educational disparity, restoring social mobility, and retaining national competitiveness, it must make every effort to ensure that low-income and first-generation students have access to higher education and the support systems they need to obtain a college degree. This objective will require understanding the characteristics

and challenges unique to low-income and first-generation student populations, as well as the types of educational environments best suited to serve these students.

Not only do first-generation and low-income students experience hurdles in accessing higher education, they also tend to be less engaged in their college experience and less likely to persist to degree than other students. With public resources scarce, policy makers and funders must direct support to those institutions that are most effective in admitting, retaining, and graduating first-generation and low-income students. Often overlooked in strategies to promote college attainment of underrepresented students are small and mid-sized independent colleges and universities.

This report demonstrates that students of all academic and social backgrounds attend smaller private colleges. Moreover, these institutions provide educational opportunity to students with varying degrees of academic preparation, not just those who have had access to the best high schools and socioeconomic support

structures. First-generation and low-income students receive an excellent education at smaller private colleges, which provide a more personalized, rigorous, and engaged college experience than larger public universities provide—and at a fraction of the cost to society.

Key findings include:

Access to Higher Education

- Small and mid-sized private colleges and universities enroll a higher proportion of first-generation and low-income students than public and private doctoral universities.
- A higher proportion of first-generation and low-income students graduate with no student loan debt from smaller private colleges than from public doctoral universities.

College Experiences

- At a point so critical to student persistence and success—the first year of college—first-generation and low-income students at smaller private colleges are more likely to be taught by a faculty member and to experience classroom environments more conducive to learning than at any other institutional type.
- First-generation and low-income students at these institutions are more likely than their peers at public doctoral and nondoctoral universities to report meeting with an academic advisor in their first year and having informal meetings and discussing academic matters with faculty members outside of the classroom by their junior year.
- Over half of all first-generation and low-income freshmen at smaller private colleges report that they regularly take essay exams, and more than three-quarters report regularly having to write papers for their college courses—larger proportions than at public doctoral and nondoctoral universities.
- In their junior year, first-generation and low-income students who attended private nondoctoral colleges are nearly three times as likely as their

peers in public universities to report becoming involved in community service or volunteer work as a class exercise.

- First-generation and low-income students who attend smaller private colleges are more likely to participate in a range of extracurricular activities such as athletics, school clubs, and fine arts performances, which have been found to strengthen student success, retention, and persistence.

College Outcomes

- First-generation and low-income students who attend smaller private colleges are far more likely to graduate—and to do so on time—than their peers at larger public universities.
- The overwhelming majority of first-generation and low-income students at smaller private colleges express satisfaction with the quality of their undergraduate education six years after matriculation and are more likely to be satisfied than their peers from public doctoral and nondoctoral universities.
- First-generation and low-income graduates of smaller private colleges tend to stay more civically-engaged through voting and volunteering in their communities.

Recommendations

As we strive as a nation to reduce educational disparity, restore social mobility, and retain national competitiveness, a number of practical steps can be taken to move us closer to achieving these goals:

- At the local level, student advisors, such as high school guidance counselors, should encourage first-generation and low-income students to consider enrollment at the institutions where they are most likely to flourish, namely smaller private colleges. Early in the college search process, first-generation and low-income students and their parents should be made aware of the affordability, accessibility, quality, and effectiveness of these institutions.

- At the state level, policy makers should view smaller private colleges as part of a larger postsecondary ecosystem in which constituent institutions may use different means and methods but ultimately contribute to the same public purposes. Consequently, state initiatives to increase access and opportunity for underrepresented populations should include smaller private colleges in both their design and execution, as these institutions have demonstrated tremendous success in these areas.
- At the federal level, policy makers should recognize the private nondoctoral sector as a highly effective vehicle for expanding opportunity to and fostering the social mobility of first-generation and low-income students. Smaller private colleges should be viewed as priority partners in accomplishing the federal government's graduation goals as set forth by the White House College Completion Agenda.

Working in tandem with small and mid-sized private colleges, local, state, and federal officials can create conditions that ensure these providers of educational opportunity and success can maximize their contributions to achieving national college completion priorities and to restoring the social mobility essential to securing America's future.



Introduction

Higher Education, Social Mobility, and National Competitiveness

The idea of social mobility is fundamental to the American experiment. Our nation was founded on the premise that one's family background and social standing need not determine one's destiny. In America, economic opportunity was thought to await those who were willing to work hard to achieve success, and over more than two centuries, countless persons have left their homelands to pursue this American Dream.

Unfortunately, upward mobility remains elusive for many Americans, and social and economic advancement often are unattainable for working class families. Given the unique role American colleges and universities historically have played in facilitating social mobility, the White House and other prominent policy makers have called attention to the issue of educational access for low-income and first-generation students. "Educational inequality . . . is a major barrier to reducing income inequality and increasing social mobility

for future generations. A college education is one of the surest ways into the middle class" (Executive Office of the President 2014, p. 10).

Indeed, the current disparity in higher education access and success in the United States prevents many first-generation and low-income students from realizing the benefits of social mobility into the middle class. Moreover, the effects of educational inequity extend beyond constriction of individual opportunity and contraction of social mobility; when a nation fails to educate wide swaths of its population, its competitiveness on the global stage is diminished.

Because economic and employment growth have been concentrated in skilled labor markets, policy makers and educators seek to raise the number of college graduates to ensure that the United States maintains a skilled workforce and remains economically competitive (National Student Clearinghouse Research Center 2012). One major effort, the College

Completion Agenda, aligns the federal government and prominent private foundations around the ambitious goal of returning the United States to first in the world in college degree attainment by enhancing workforce development and improving educational access (Executive Office of the President 2014). Engle and Tinto (2008) summarize well the rationale behind the recent emphasis on college completion: “Given the pressure to remain competitive in the global knowledge economy, it is in our shared national interest to act now to increase the number of students who not only enter college, but more importantly earn their degrees, particularly bachelor’s degrees” (p. 2).

If we are to succeed as a nation in reducing educational disparity, restoring social mobility, and retaining national competitiveness, it is imperative that we make every effort to ensure that low-income and first-generation students have access to higher education and the support systems needed to obtain a college degree.

If we are to succeed as a nation in reducing educational disparity, restoring social mobility, and retaining national competitiveness, it is imperative that we make every effort to ensure that low-income and first-generation students have access to higher education and the support systems needed to obtain a college degree. This objective will require understanding the characteristics and challenges unique to low-income and first-generation student populations, as well as the types of institutional environments best suited to serve these students.

Profile of Low-Income and First-Generation Students

Among high school graduates in the United States, more than one-quarter (27 percent) are from homes where parents hold only a high school diploma or

equivalent, and almost one-fifth (18 percent) are from families in the lowest socioeconomic quartile (Horn and Carroll 1997). Low-income students are less likely than their middle- and high-income peers to enroll in college. One study found that only 31 percent of 18–24 year olds from low-income families were enrolled in or had attended college, and less than half of these students (14 percent) attended public or private non-profit four-year institutions (Pell Institute 2005). Another study found that the proportion of all first-time, full-time college freshmen who were first-generation had dropped from 38.5 percent in 1971 to only 15.9 percent in 2005 (Saenz et al. 2007).

Lower college participation rates suggest that first-generation and low-income students can experience significant hurdles in accessing higher education. These students often have a limited understanding of the college search process, as their family members are often less able to provide support in navigating the complex college application and financial aid requirements (Cabrera and La Nasa 2000; Long and Riley 2007). In addition, first-generation and low-income students are more likely to attend high schools with limited staffing and resources, which can limit their access to college counseling staff (Cabrera and La Nasa 2000; McDonough and Calderone 2006). Consequently, fewer of these students typically receive advanced placement credit or complete key college “gatekeeper courses” in high school (Adelman 2006; Choy 2001). Finally, because admissions test scores are closely linked to family socioeconomic and educational status (Camara and Schmidt 1999; Ishitani 2003), first-generation and low-income students can be misrepresented in the college admissions process as less well-prepared for college-level work.

Barriers to access and success arise during the college choice process as well. Underrepresented student communities often lack accurate information about college cost, financial aid, and student loans (Cabrera and La Nasa 2000; Horn, Chen, and Chapman 2003; Long and Riley 2007; McDonough and Calderone 2006), and first-generation and low-income college-

going families are often averse to taking on even modest amounts of student debt (Cunningham and Santiago 2008). Family and financial pressures can result in underrepresented students electing to attend institutions that are less expensive, prestigious, or resourced, such as community colleges or public comprehensive universities (Cabrera, Burkum, and La Nasa 2005). Because first-generation and low-income students are less likely to persist to graduation at less-resourced institutions, institutional selection can inhibit successful college completion (Cabrera and La Nasa 2000; Engle and Tinto 2008; Paulsen and St. John 2002).

Economic concerns also can affect the college experience of low-income and first-generation students, who often elect to work while enrolled to assist with paying college expenses (Engle and Tinto 2008; O'Toole et al. 2003), are more likely to take courses part-time (Engle and Tinto 2008), and are less likely to live on campus. As a result, first-generation and low-income students can be less engaged in their college experience than other students, as financial pressure often drives them to work a greater number of hours than their peers. The extra work hours leave students less time to devote to coursework (Ishitani 2003; Walpole 2003) or to engage in campus life and activities such as clubs, athletics, or community service that enhance student success (Pascarella and Terenzini 2005; Pike and Kuh 2005).

Not only do first-generation and low-income college students report lower levels of social and academic integration into campus life (Ishitani 2003; Terenzini et al. 1996), but research also has shown that low-income and first-generation students are less likely to interact with faculty members (Pascarella and Terenzini 2005; Pike and Kuh 2005). This is troublesome because positive student-faculty interactions have been found to enhance social and academic skill sets among undergraduates in general (Seifert et al. 2008; Seifert et al. 2010) and to help first-generation and low-income students in particular build cultural and social capital (Hahs-Vaughn 2004; Terenzini et al. 1996; Walpole 2003), personal resources that have been shown to support college persistence (Braxton et al. 2014; Wells 2008).

First-generation and low-income students are less likely to complete an undergraduate degree than their peers (Balz and Esten 1998; Ishitani 2003). Moreover, those who do persist to earn a degree tend to take longer than their peers. For example, a recent study found that only 27 percent of first-generation college students earned a bachelor's degree within four years and only

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50 percent did so within six years; these completion rates registered well below those for non-first-generation college students (DeAngelo et al. 2011). Another study reported that only 28 percent of low-income college students earned a bachelor's degree in four years, while 63 percent graduated within six years (Wei and Horn 2009).

The Role of Institutional Type

Research repeatedly shows that from access to completion—and everything in between—the college experience differs significantly for first-generation and low-income students. Overlooked by most studies, however, is the role of institutional type in shaping the experiences and outcomes of these students. In order to achieve national completion goals efficiently, it is critical to understand which kinds of colleges and universities provide environments that are more likely to ensure the success of first-generation and low-income students. With public resources scarce, wise policy must direct support to those institutions that are most effective in admitting, retaining, and graduating first-generation and low-income students.

This study details how first-generation and low-income students experience college across the major sectors of American higher education. The results of this study demonstrate that a sector receiving no direct state support—private nonprofit nondoctoral colleges—is often more effective than the public nondoctoral and public doctoral sectors in serving first-generation and low-income students. In particular, results show the relative success of small and mid-sized independent colleges in providing postsecondary access to first-generation and low-income students, fostering high-quality and supportive academic environments for these students, and graduating a larger proportion of first-generation and low-income students than other types of colleges and universities.

Methodology in Brief

By examining national postsecondary data collected by the U.S. Department of Education, this study addresses five questions:

- What types of colleges do first-generation and low-income students attend?
- How well are first-generation and low-income students prepared for college?
- What financial aid is made available for low-income and first-generation students?
- In what contexts are first-generation and low-income students most likely to report personal attention in the academic environment, rigorous educational practices, and extracurricular engagement?
- In what institutional settings are first-generation and low-income students most likely to have high college completion rates and report positive post-graduation outcomes?

The results presented in this study are for first-time college students who were enrolled full-time throughout their undergraduate experience. For the purposes of this study, first-generation college students are defined as persons whose parents did not attain formal education beyond a high school diploma or the equivalent (Saenz et al. 2007), and low-income college students are defined as having an annual family income of \$25,000 or less.

This study compares private nonprofit nondoctoral institutions (small and mid-sized independent colleges and universities) with three other types of four-year institutions: public nondoctoral, public doctoral, and private nonprofit doctoral institutions. Results presented in the report were generated from the Beginning Postsecondary Students (BPS: 04/09) survey collected by the National Center for Education Statistics. A complete description of the methods used to analyze this dataset is included as Appendix A of this report. Results of this analysis are referenced throughout this report; tables presenting complete results of the analysis are included as Appendix B.

HIGHLIGHTS: Introduction

- Educational inequality leads to fewer opportunities for individuals, less upward mobility within society, and a less competitive position for the U.S. on the global stage.
- Ensuring that young people from underserved groups have access to higher education and complete a college degree is a key strategy to reduce educational inequality.
- First-generation and low-income students are less likely to enroll in college than young people whose parents hold college degrees or who come from higher-income backgrounds.
- Institutional practices are major determinants of college success for first-generation and low-income students.



Access to Higher Education

The first step toward reducing educational inequality, restoring social mobility, and retaining national competitiveness is to ensure that a college education is accessible for students of all backgrounds. The accessibility of a sector can be measured by the types of students who typically attend its institutions, the level of academic preparation they are likely to bring with them, and the relative personal cost those students incur for a college education.

Attendance Patterns

First-generation and low-income college students are less likely to enroll in four-year colleges than their peers and more likely to enroll in two-year community colleges (Cabrera and La Nasa 2000; Engle and Tinto 2008; Paulsen and St. John 2002). Figure 1 illustrates the proportions of first-generation and low-income students who attend four types of four-year colleges and universities: public nondoctoral, public doctoral, private nonprofit nondoctoral, and private nonprofit doctoral institutions. As one might expect, public

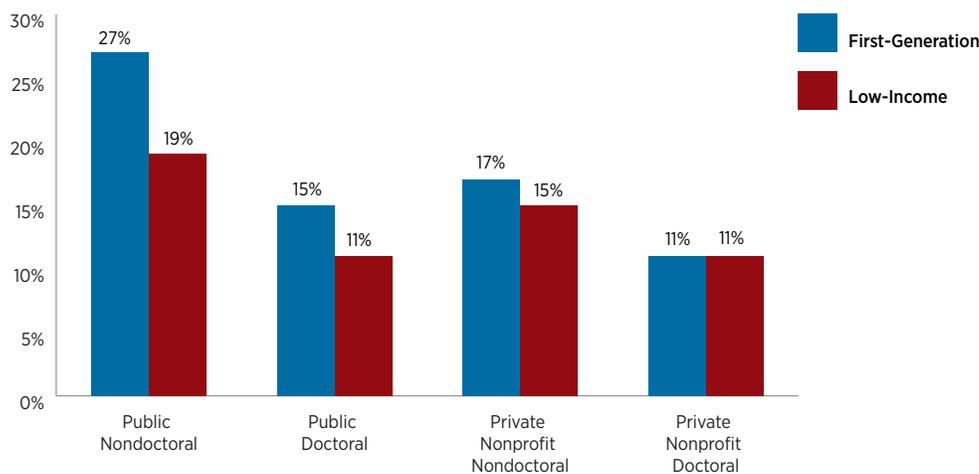
nondoctoral institutions, also known as regional comprehensive universities, had the highest proportions of first-generation (27 percent) and low-income (19 percent) students enrolled of the four sectors. Perhaps unexpectedly, enrollments at smaller private colleges had the next highest proportions of first-generation (17 percent) and low-income (15 percent) students, higher than public and private doctoral institutions. Although many people falsely believe that smaller private colleges are exclusive institutions accessible only to students of means, these findings demonstrate that smaller private colleges enroll students from a wide range of family educational and economic backgrounds and thereby offer a pathway to social mobility by creating college access for student groups that are underserved by other higher education sectors.

Academic Preparation

Colleges and universities that boast the highest graduation rates often enroll only the most high-achieving and well-resourced high school students (Hoxby

FIGURE 1

Proportions of First-Generation and Low-Income Students Enrolled by Sector



and Avery 2013). Low-income students typically earn lower high school grade point averages (GPAs) than their higher-income peers regardless of school location (Buddin 2014), and first-generation college applicants tend to have lower high school GPAs and admissions test scores (Ishitani 2003). Thus, it is insufficient to ask if college is accessible to underrepresented students; one must examine the extent to which less well-prepared students from underrepresented groups are able to access higher education.

Smaller private colleges enroll students from a wide range of family educational and economic backgrounds and thereby offer a pathway to social mobility by creating college access for student groups that are underserved by other higher education sectors.

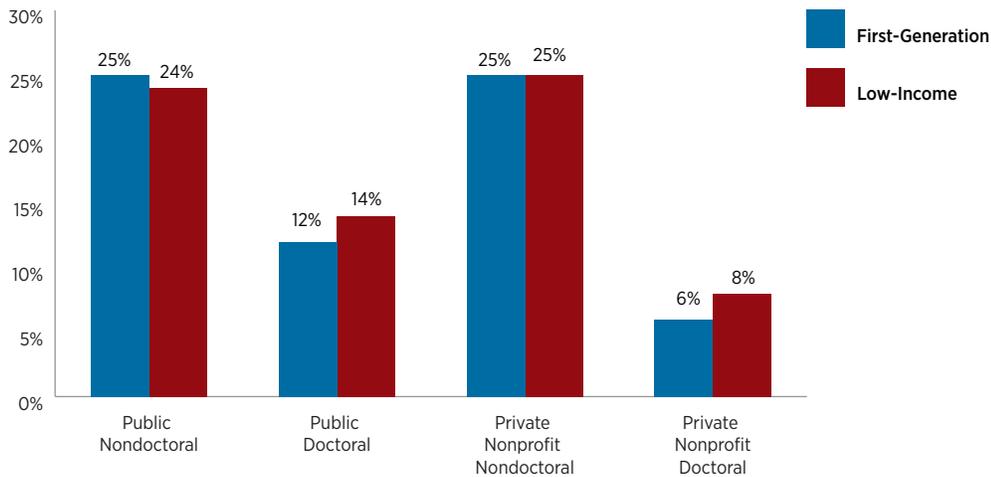
Figure 2 presents by sector the proportion of first-generation and low-income enrollees who earned a high school GPA of 2.9 or lower. The figures demonstrate that smaller private colleges not only enroll students from a wide range of family educational and socioeconomic backgrounds, but they also enroll first-generation and low-income students with diverse levels of academic preparation and ability. In fact, these institutions enrolled a larger proportion of first-generation students (25 percent) who earned a high school GPA of 2.9 or lower than public and private nonprofit doctoral institutions, and they enrolled a larger proportion of low-income students (25 percent) with lower academic achievement than all other sectors. In addition, smaller private colleges enrolled a larger proportion of first-generation (50 percent) and low-income (57 percent) students who scored in the lowest two quartiles of standardized admissions tests than did public and private doctoral universities (see Appendix B, Table 4).

College Affordability

Increases in college costs remain an important issue for families, students, and policy makers. College

FIGURE 2

Proportions of First-Generation and Low-Income Students Enrolled with a High School Grade Point Average of 2.9 or Below by Sector



affordability is of acute concern to low-income and first-generation students, who often lack the family knowledge and support needed to navigate the complexity of the financial aid process (Long and Riley 2007) and who often make college decisions without a complete understanding of financial aid options (Cabrera and La Nasa 2000; Horn, Chen, and Chapman 2003). College affordability affects persistence as well as access; research has shown that financial aid packages that reduce net tuition, such as institutional aid, tend to narrow the dropout gap between low-income students and their more affluent peers (Chen 2012).

Colleges and universities, both public and private, rarely meet the full demonstrated financial need of all students and families, which results in a financial aid “gap” that students and families must cover, often through loans. This financial aid gap is the difference between the expected family contribution (EFC) and the cost of attendance after aid has been awarded. Private institutions typically charge more for tuition than their public peers, resulting in a higher net cost of attendance. Yet because first-generation and low-income students attending private colleges receive larger

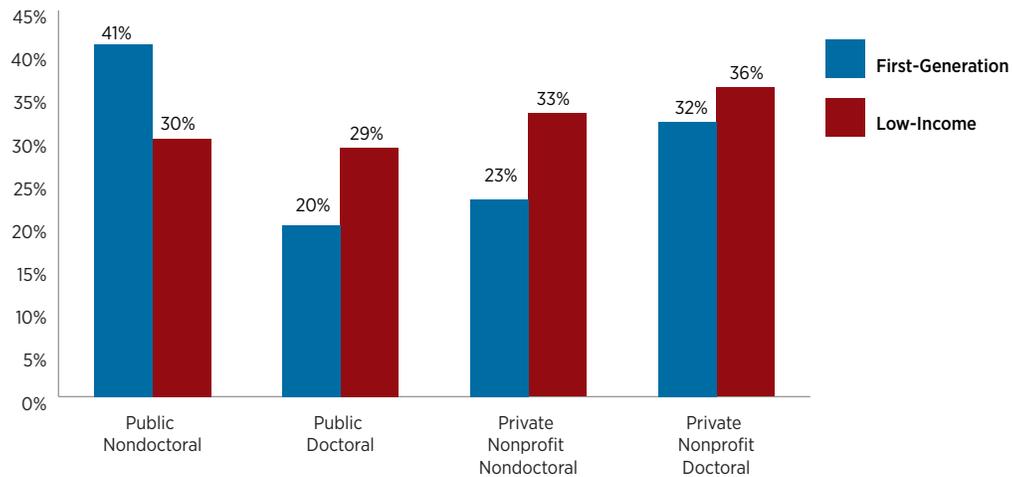
financial aid awards than do those at public universities, the difference in the gap is minimal. For example, the annual gap for low-income students at private nondoctoral colleges is only \$2,000 higher on average than at public doctoral universities, and first-generation students at small private colleges only pay \$1,000 more out of pocket than their peers at public research universities (see Appendix B, Table 5).

A higher proportion of low-income and first-generation students graduate with no debt at smaller private colleges than at public research universities.

Another concern for policy makers, families, and students is the rise in student loan debt. As one might expect from the differences by sector in the financial aid gap detailed above, low-income and first-generation graduates of smaller private colleges tend to borrow more than their peers at public institutions. Yet, a

FIGURE 3

Proportion of College Graduates Who Have No Student Loan Debt by Sector



higher proportion of low-income and first-generation students graduate with no debt at smaller private colleges than at public research universities. In fact, Figure 3 demonstrates that a third of all low-income students at private nondoctoral colleges graduate with no debt, a proportion greater than that of public doctoral and public nondoctoral universities.

HIGHLIGHTS: Access to Higher Education

- Smaller private colleges enroll students from a wide variety of family backgrounds, with higher proportions of first-generation and low-income students than public and private doctoral universities.
- After financial aid, low-income students at smaller private colleges pay on average only \$2,000 more per year than similar students at public research universities. For first-generation students, the difference is only \$1,000.
- Although tuition at smaller private colleges may be higher than at public research universities, a higher proportion of low-income and first-generation students graduate from smaller private colleges with no debt.



College Experiences

Numerous studies have documented that the college experiences of first-generation and low-income students differ from the experiences of students whose parents attended college or who come from middle- or upper-income families. Less well-known is how the first-generation and low-income student experience varies across sectors of higher education. These differences can be assessed on three dimensions: academic environment, educational experiences, and extracurricular involvement.

Academic Environment

Classroom teaching is a core competency of smaller private colleges, and these institutions take great pride in offering a personalized academic experience to all students. Faculty members at smaller private colleges are more likely to exhibit instructional organization and pedagogical clarity, and students at smaller private colleges are more likely to report high-quality faculty interactions than their peers in other higher education sectors (Pascarella et al. 2004a). Positive stu-

dent-faculty interactions have been found to enhance cognitive skills, self-efficacy, and academic motivation (Seifert et al. 2008; Seifert et al. 2010). Further, engaging in high-quality informal interactions with faculty members can enhance the cultural and social capital of first-generation and low-income students (Hahs-Vaughn 2004; Terenzini et al. 1996; Walpole 2003).

Figures 4 and 5 confirm that first-generation and low-income students are more likely to experience a personalized academic environment at smaller private colleges than at other types of institutions. In their first year of college, nearly half of all first-generation (47 percent) and low-income (48 percent) students at private nondoctoral colleges reported never having large classes, and approximately three-quarters (75 and 73 percent) said that they never had a graduate student instructor for a class. At a point so critical to student persistence and success—the first year of college—students at smaller private colleges were more likely to be taught by a faculty member and to experience classroom environments more conducive to learning (Pascarella

FIGURE 4

Characteristics of a Personalized Academic Environment

Results for First-Generation Students by Sector

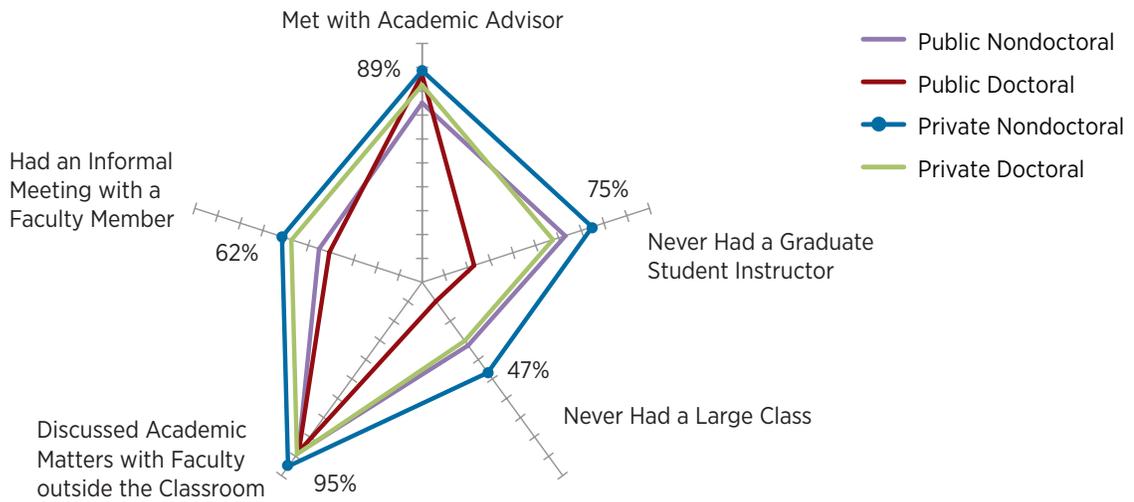
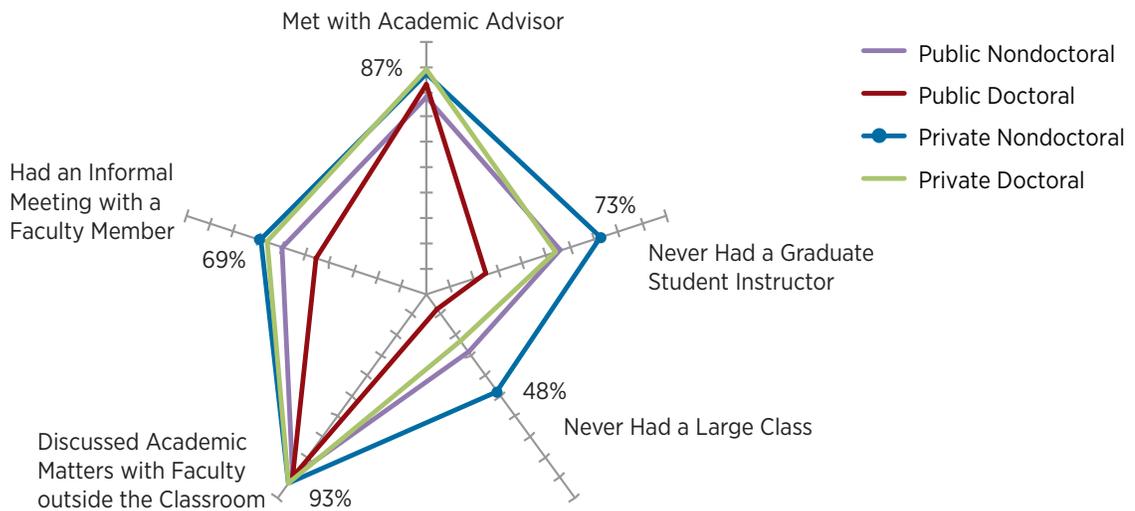


FIGURE 5

Characteristics of a Personalized Academic Environment

Results for Low-Income Students by Sector



and Terenzini 2005; Light 2001) than at any other institutional type. Furthermore, it appears that this enriched academic environment extends beyond the classroom at smaller private colleges. First-generation and low-income students at these institutions were more likely than their peers at public doctoral and nondoctoral universities to report meeting with an academic advisor in their first year and having informal meetings and discussing academic matters with faculty members outside of the classroom by their junior year.

Educational Experiences

Smaller private colleges are committed to providing an education that is both personal and rigorous. Research has shown that baccalaureate-granting colleges are more likely to engage students in active learning and high-impact educational practices, such as extensive written assignments and essay exams (Kuh 2008; Pascarella et al. 2004a; Seifert et al. 2010). It is little surprise, then, that over half of all first-generation

(52 percent) and low-income (55 percent) freshmen at smaller private colleges reported that they regularly were given essay exams, and more than three-quarters reported regularly having to write papers for their

At a point so critical to student persistence and success—the first year of college—students at smaller private colleges are more likely to be taught by a faculty member and to experience classroom environments more conducive to learning than at any other institutional type.

college courses (77 and 80 percent; see Figures 6 and 7)—larger proportions than at public doctoral and nondoctoral universities. Institutional size may contribute to this phenomenon. Essay exams and term papers are time-intensive instructional strategies, and the smaller

FIGURE 6

Characteristics of a Rigorous Educational Experience Results for First-Generation Students by Sector

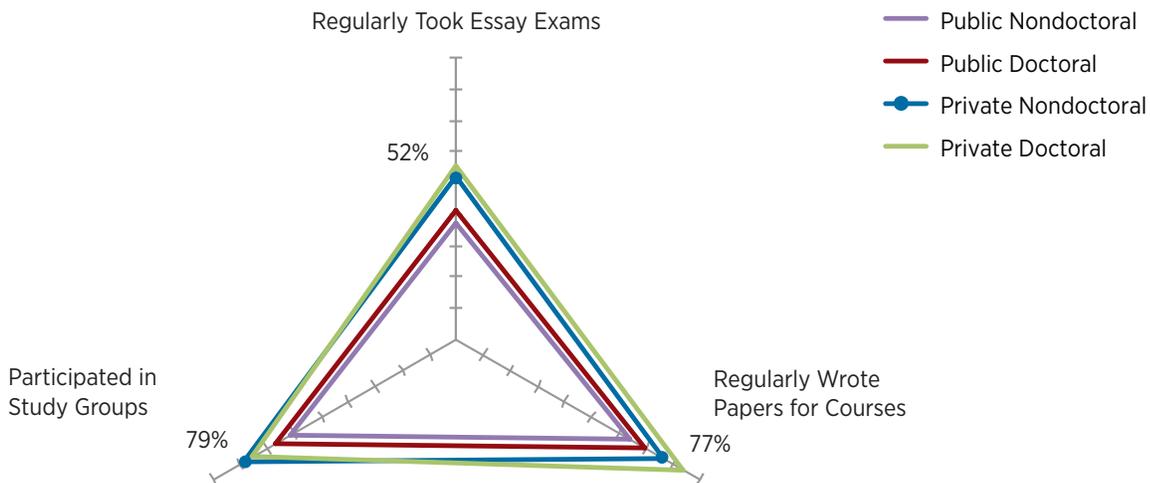
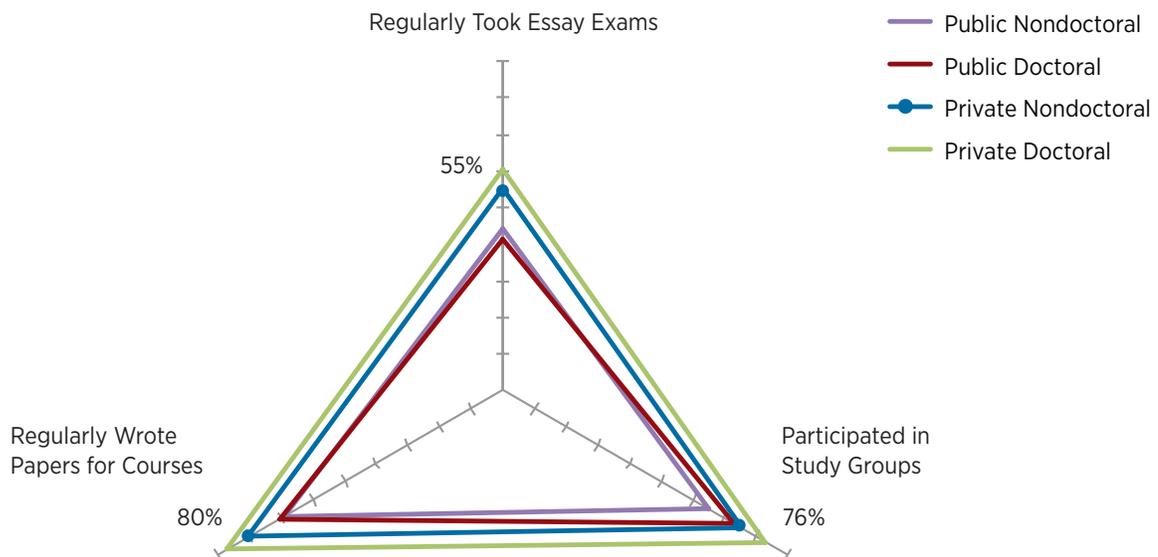


FIGURE 7

Characteristics of a Rigorous Educational Experience*Results for Low-Income Students by Sector*

classes and lower student-faculty ratios typically found in smaller private colleges may serve as structural supports that enable faculty members to invest in these high-impact educational practices.

Institutional size also may play a role in facilitating academic engagement among students in their first year of college. A higher percentage of first-generation (79 percent) and low-income (76 percent) first-year students reported participating in study groups at

private nondoctoral colleges than at public institutions of higher education, both doctoral and nondoctoral. Thus, in addition to being more likely to experience high-impact educational practices than their peers at public institutions, first-generation and low-income students who attended smaller private colleges also were more likely to engage with their peers around academic matters.

Service learning is another high-impact educational approach (Kuh 2008) practiced more often in smaller private college settings. Service learning provides students the opportunity to apply classroom knowledge in real-world settings, give back to their local communities, and practice the behaviors of good citizenship. In their junior year, first-generation and low-income students who attended private nondoctoral colleges were nearly three times as likely as their peers in public universities to report becoming involved in community service or volunteer work because it was a class requirement (see Appendix B, Table 16).

In addition to being more likely to experience high-impact educational practices than their peers at public institutions, first-generation and low-income students who attended smaller private colleges also are more likely to engage with their peers around academic matters.

Extracurricular Involvement

Extracurricular involvement is a consequential aspect of the college experience. Campus engagement has been found to strengthen student success, retention, and persistence (Pascarella et al. 2011; Pike and Kuh 2005; Seifert et al. 2010). Unfortunately, first-generation and low-income college students tend to have less time to participate in campus life and extracurricular activities, often because of financial and familial obligations (Pascarella et al. 2004b; Walpole 2003).

It is often assumed that the smaller private college setting offers more opportunity to participate in extracurricular activities. A smaller student body means a better chance to make the college football team, join the school orchestra, or take a leadership role in student government. Results of this study indicate first-generation and low-income students who attend smaller private colleges are more likely to participate in a range of extracurricular activities than their peers at other types of institutions (see Figures 8 and 9). For

example, more than 60 percent of students from these underrepresented backgrounds participated in school clubs at private nondoctoral institutions, a proportion greater than that of students at public nondoctoral and doctoral institutions. In addition, first-generation and low-income students also were more likely to participate in intercollegiate, club, or intramural athletics (43 and 44 percent) and to attend fine arts performances (63 and 60 percent) at smaller private colleges than at large public universities.

The smaller private college setting offers more opportunity to participate in extracurricular activities. A smaller student body means a better chance to make the college football team, join the school orchestra, or take a leadership role in student government.

FIGURE 8

Indicators of Extracurricular Engagement

Results for First-Generation Students by Sector

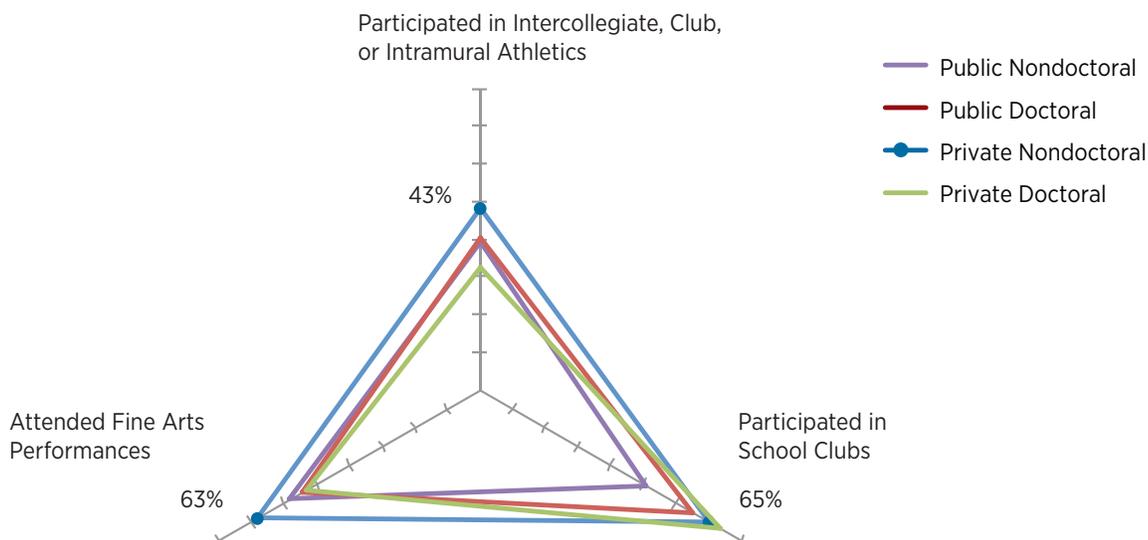
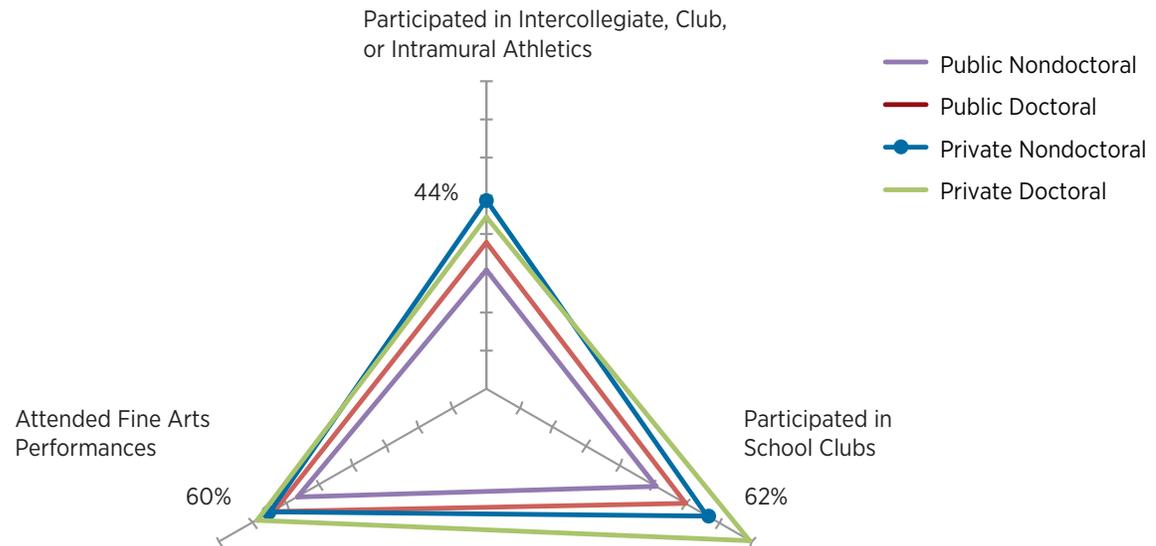


FIGURE 9

Indicators of Extracurricular Engagement*Results for Low-Income Students by Sector***HIGHLIGHTS: College Experiences**

- First-generation and low-income students are more likely to experience high-quality interactions with faculty members if they attend a smaller private college. Positive student-faculty interactions can increase students' cognitive skills, self-confidence, and academic motivation.
- First-generation and low-income students who attend smaller private colleges engage in high-impact educational practices (such as writing papers for courses and taking essay exams) more often than their peers at public universities.
- Although involvement in campus activities has been found to strengthen students' success, retention, and persistence, first-generation and low-income students often have less time available to participate in campus life because of financial and family obligations. These students, however, tend to experience more on-campus extracurricular engagement when they attend smaller private colleges.



College Outcomes

The final, and perhaps most important, measure of a sector's success is its student outcomes. Are first-generation and low-income students more likely to finish college and go on to lead productive, civically-engaged lives if they attend a particular type of postsecondary institution? This section compares results for civic participation, degree attainment, and post-graduation outcomes across four sectors of higher education.

Civic Participation

American colleges were founded to prepare young people for lives of engaged citizenship and social responsibility, and findings suggest that this legacy endures at smaller private colleges. Across sectors, the desire of first-generation and low-income students to influence the political structure and serve as community leaders tends to wane from the first to junior years and beyond graduation, and at times this decline is more pronounced among students at private nondoctoral institutions (see Appendix B, Tables 20 and 21). First-generation and low income graduates of smaller

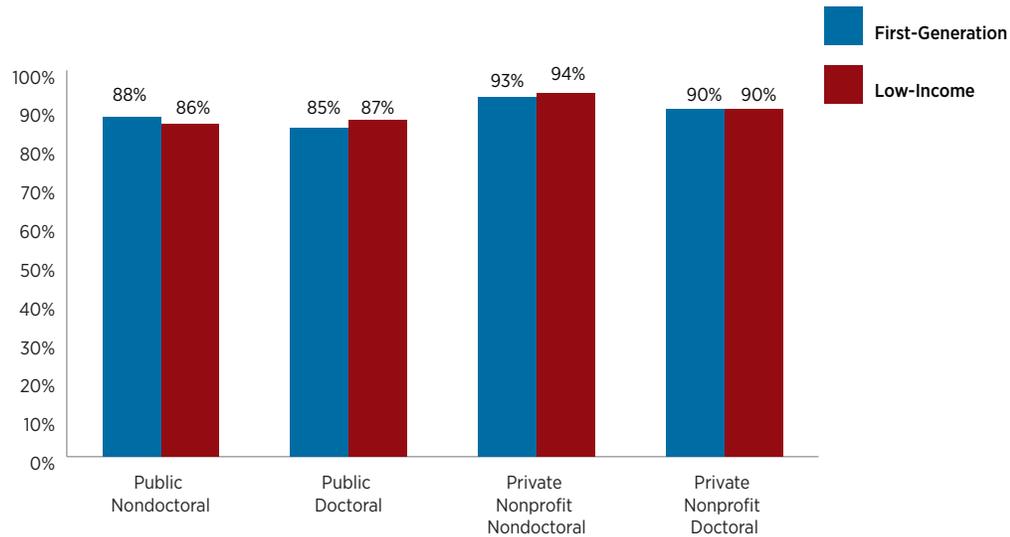
private colleges, however, tend to be more civically-engaged than their peers at other types of institutions. As Figure 10 demonstrates, first-generation (93 percent) and low-income (94 percent) graduates were more likely to vote six years after beginning their postsecondary career if they attended a private nondoctoral institution. First-generation graduates of smaller private colleges were more likely to continue volunteer

American colleges were founded to prepare young people for lives of engaged citizenship and social responsibility. This legacy endures at smaller private colleges.

activities begun during their undergraduate years (see Appendix B, Table 23), and a higher proportion of low-income graduates from private nondoctoral colleges maintained these service commitments than did their peers from public nondoctoral universities.

FIGURE 10

Voting Participation of Graduates by Sector



Degree Attainment

Bachelor degree completion has been found to be positively influenced by attending a private institution (Titus 2006). First-generation and low-income students attending private institutions are more likely to graduate within five years than peer students at public colleges and universities (Balz and Esten 1998). Both of these trends have been confirmed by this study.

Figures 11 and 12 illustrate that a much higher percentage of first-generation and low-income students graduate within four years at smaller private colleges than at larger public universities. In fact, the proportion of first-generation and low-income students who grad-

uate in four years is twice as high at private nondoctoral colleges than it is at public nondoctoral institutions. Moreover, a higher percentage of low-income students completed their bachelor's degree in four years at private nondoctoral colleges than they did in five years at public universities, both doctoral and nondoctoral. Study results also indicate that first-generation students are more likely to complete their bachelor's degree in four years at a smaller private college than they are in six years at a public nondoctoral university.

Figure 13 presents the percentage of graduates in each sector who completed their undergraduate degrees within four years. Again, smaller private colleges graduate a higher proportion of their students on time than larger public universities do. Time to degree is an important metric for students to consider, as the cost of a degree—in tuition, fees, and lost wages—rises the longer a student remains enrolled in college. First-generation and low-income students who attend smaller private colleges increase their odds of successful and timely completion of a bachelor's degree.

First-generation students are more likely to complete their bachelor's degree in four years at a smaller private college than they are in six years at a public nondoctoral university.

FIGURE 11

Four-, Five-, and Six-Year Graduation Rates for First-Generation Students by Sector

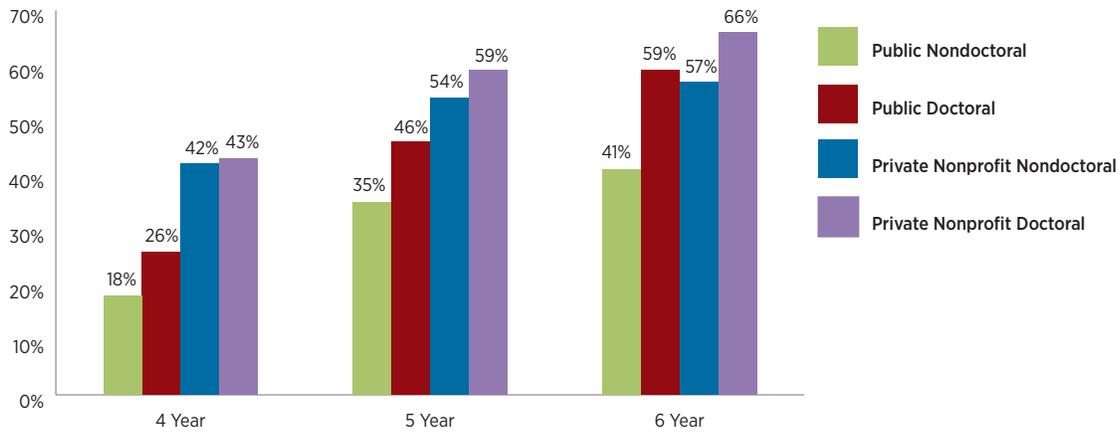


FIGURE 12

Four-, Five-, and Six-Year Graduation Rates for Low-Income Students by Sector

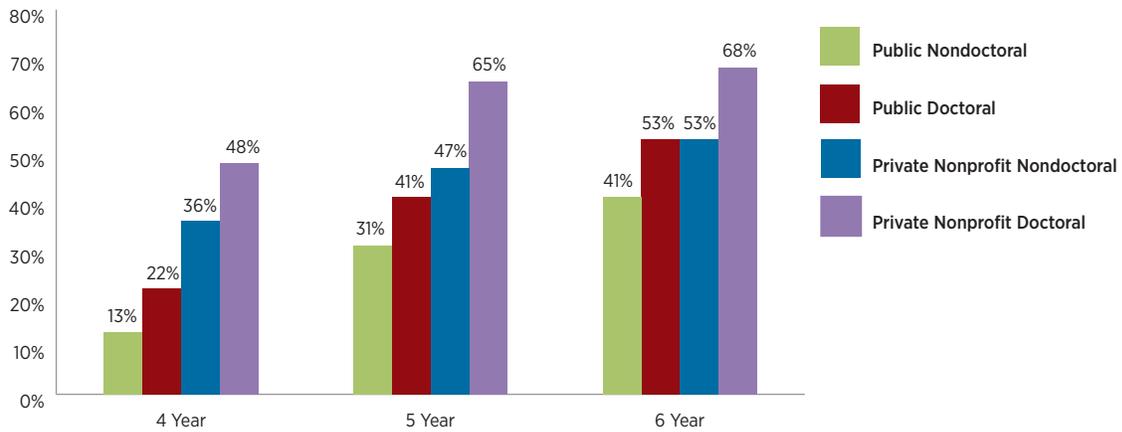
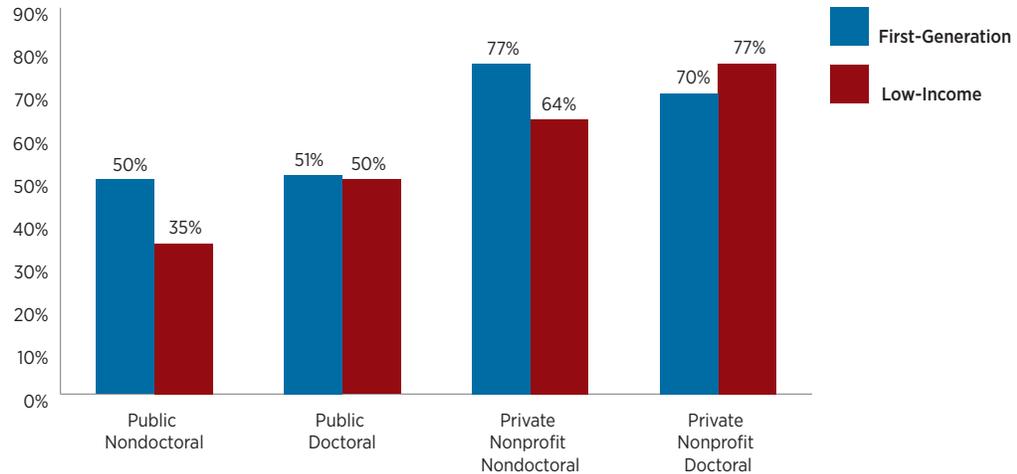


FIGURE 13

Proportions of First-Generation and Low-Income Graduates Who Complete Bachelor's Degrees in 48 Months or Fewer by Sector



As at other institutional types, first-generation and low-income students at private nondoctoral institutions tend to moderate their degree expectations over time, and, unfortunately, the decline in the proportion of students who expect to earn a graduate degree tends to be greater at smaller private colleges (see Appendix B, Table 27).

Post-Graduation Outcomes

The overwhelming majority of students at smaller private colleges express satisfaction with the quality of their undergraduate education six years after matricu-

lation. In particular, first-generation and low-income students at private nondoctoral colleges are more likely to be satisfied with their undergraduate education than their peers from public doctoral and nondoctoral universities (see Appendix B, Table 28). Interestingly, satisfaction was slightly higher among first-generation students than the overall percentage for all students at smaller private colleges, while satisfaction for low-income students at the same institutions was slightly lower than overall totals. Previous studies have found that first-generation and low-income graduates are less likely to report satisfaction with their undergraduate college experience than their peers (Balz and Esten 1998; Pascarella and Terenzini 2005).

Findings related to post-graduation employment were mostly mixed with few discernable trends. For example, first-generation graduates of private nondoctoral colleges were more likely to be employed than their peers from private doctoral and public nondoctoral universities, but low-income graduates were less likely to be employed if they graduated from a smaller private

First-generation and low-income students at private nondoctoral colleges are more likely to be satisfied with their undergraduate education than their peers from public doctoral and nondoctoral universities.

college (see Appendix B, Table 29). Low-income graduates from private nondoctoral colleges, however, were more likely than their peers from any other institutional type to report that their current jobs were related to their undergraduate major (see Appendix B, Table 30). In addition, a higher proportion of first-generation and low-income smaller private college graduates reported that their undergraduate coursework was related to their current jobs than first-generation and low-income graduates of public doctoral universities reported (see Appendix B, Table 31).

First-generation and low-income students were more likely to say that they did not consider their current job as the start of a career if they graduated from a private nondoctoral institution, and, generally speaking, these students were slightly less satisfied with their current job than their peers from other institutional types (see Appendix B, Tables 32 and 33). These findings may reflect an intention to enter graduate school eventually, as previous studies have suggested that students who attended baccalaureate colleges are more likely to pursue graduate education than their peers from every other postsecondary type, except universities that exhibit a very high level of research activity (Fiegener and Proudfoot 2013).

HIGHLIGHTS: College Outcomes

- First-generation and low-income graduates of smaller private colleges are more engaged in the civic lives of their communities than their peers from other types of institution.
- First-generation and low-income students are more likely to graduate—and to do so on time—from smaller private colleges than from larger public universities.
- The level of satisfaction with one's undergraduate education tends to be higher among first-generation and low-income students if they attended a smaller private college rather than a public university.



Conclusion

General Findings

Contrary to reports in the popular media and common portrayals in Hollywood movies and television programs, students of all academic and social backgrounds attend smaller private colleges. Moreover, these institutions provide educational opportunities to students with varying degrees of academic preparation, not just those who have had access to the best high schools and socioeconomic support structures. First-generation and low-income students receive an excellent education at smaller private colleges, which provide a more personalized, rigorous, and engaged college experience than larger public universities provide—and at a fraction of the cost to society.

First-generation and low-income students achieve similar, and, in key areas, superior outcomes at smaller private colleges compared with other types of institutions. Perhaps most notably, first-generation and low-income students who attend smaller private colleges are far more likely to graduate—and to do so on time—than their peers at larger public universities. In addition, first-generation and low-income graduates of smaller

private colleges tend to stay civically-engaged through voting and volunteering in their communities.

Recommendations for Policy and Practice

As we strive as a nation to reduce educational disparity, restore social mobility, and retain national competitiveness, a number of practical steps can be taken to move us closer to achieving these goals.

At the local level, student advisors, such as high school guidance counselors, should encourage first-generation and low-income students to consider enrollment at the institutions where they are most likely to flourish, namely smaller private colleges. Early in the college search process, first-generation and low-income students should be made aware of the affordability, accessibility, quality, and effectiveness of these institutions. Increased communication between smaller private college admissions offices and area high school guidance counselors can facilitate raised awareness, as can

increased coordination between smaller private colleges and national organizations devoted to increasing college access for underserved populations, such as the federal TRIO program Upward Bound.

At the state level, policy makers should view smaller private colleges as part of a larger postsecondary ecosystem in which constituent institutions may use different means and methods but ultimately contribute to the same public purposes. Consequently, state initiatives to increase access and opportunity for underrepresented populations should include smaller private colleges in both their design and execution, as these institutions have demonstrated tremendous success in these areas. In the context of limited public resources, it is critical to include all relevant voices in policy decisions to ensure optimal results. In addition, state legislators should revisit policies that discourage first-generation and low-income students from attending institutions where they are most likely to succeed. For example, the common practice of limiting the amount of state financial aid that can be applied to private college tuition can actually undermine public priorities for college completion because it creates a disincentive for students from low-income backgrounds to attend the very institutions best equipped to foster their educational success.

At the federal level, policy makers should recognize the private nondoctoral sector as a highly effective vehicle for expanding opportunity to and fostering the social mobility of first-generation and low-income students. Smaller private colleges should be viewed as priority partners in accomplishing the federal government's

graduation goals as set forth by the College Completion initiative, and, consequently, federal financial aid policy should reward those institutions that successfully graduate underrepresented student populations. Furthermore, as federal policy makers seek to bolster national competitiveness through increased college completion rates,

Initiatives to increase access and opportunity for underrepresented populations should include smaller private colleges in both their design and execution, as these institutions have demonstrated tremendous success in these areas.

they should look first to the many small and mid-sized private colleges that have excess capacity for enrollment and are eager to serve more first-generation and low-income students. Steps that can be taken on the federal level include providing competitive grants to institutions that employ innovative practices to support college completion among first-generation and low-income students and building formal linkages between community colleges and local smaller private colleges to smooth pathways for transfer students.

Working in tandem with small and mid-sized private colleges, local, state, and federal officials can create conditions that ensure these providers of educational opportunity and success can maximize their contribution not just to achieving national priorities for college completion, but even to restoring the social mobility essential to securing America's future.

HIGHLIGHTS: Conclusion

- First-generation and low-income students achieve similar to superior outcomes at smaller private colleges than at other types of institutions.
- High school guidance counselors should encourage their first-generation and low-income students to consider enrolling in a smaller private college.
- State policy makers should view smaller private colleges as part of a larger postsecondary ecosystem in which institutions may use different means and methods but ultimately contribute to the same public purposes.
- Federal policy makers should view smaller private colleges as priority partners in increasing the college completion of underrepresented students.



APPENDIX A: Complete Methodology

Data Source

Data analyzed in this report come from the National Center for Education Statistics' (NCES) Beginning Postsecondary Students Longitudinal Study (BPS). A cohort of first-time beginning college students is surveyed at three intervals (first year, third year, and sixth year) after enrolling in college. Data are collected on a variety of topics, including student demographics, academic and work experiences, retention, civic engagement, and degree attainment. This report utilizes the most recent Beginning Postsecondary Students Longitudinal Study (BPS: 04/09). Respondents were surveyed at the completion of their first academic year (2003–2004), and follow-up surveys were conducted at the end of the third (2005–2006) and sixth (2008–2009) years after their initial first-time enrollment.

Analysis Strategy

Populations Examined

This study reviews the college-going experiences and outcomes of first-time, full-time college students. BPS study participants include only first-time college students who have not previously enrolled in postsecondary study. In 2008–2009, 72.3 percent of first-time students who attended CIC member institutions were enrolled full-time (IPEDS, 2013). Therefore, to ensure representative results, analyses performed for this study were limited to first-time college students who were enrolled full-time throughout their entire undergraduate career. In addition, low-income college students were defined as having an annual family income of \$25,000 or less, in accordance with the income threshold used by the BPS variable for federal TRIO program eligibility. First-generation college students were defined as persons whose parents did not attain formal education beyond a high school diploma or the equivalent (Saenz et al. 2007).

Sectors Examined

This study examines student experiences across four sectors of nonprofit higher education: public nondoctoral, public doctoral, private nondoctoral, and private doctoral institutions. These sector definitions are based

on Carnegie Classifications (2000) of institutional control (public or private not-for-profit) and degree granting (doctoral or nondoctoral). The nondoctoral category included four classifications: Baccalaureate Colleges—Liberal Arts; Baccalaureate Colleges—General; Master's Colleges and Universities I; and Master's Colleges and Universities II. The doctoral category included two classifications: Doctoral/Research Universities—Intensive; and Doctoral/Research Universities—Extensive. The nondoctoral category is a useful proxy for CIC's membership because 93 percent of its member institutions can be classified as baccalaureate- or master's-level institutions. The four-part sector schema used by this study allows for areas of sector distinction to emerge between both public and private institutions and doctoral and nondoctoral universities.

Analytical Procedures

The BPS survey data were analyzed using the NCES PowerStats website, which allows for descriptive statistical analysis of all three data collection points of BPS:04/09. In each case, the recommended weight was used to counter potential bias of results, often the variable WTB000, which included a sample of approximately 16,100 college students. Study analyses compared various outcomes for first-generation and low-income students across four main institutional sectors (public nondoctoral, public doctoral, private nondoctoral, private doctoral). In cases where the standard error represents more than 30 percent of the estimate, a single exclamation point follows the figure provided in the tables of Appendix B. In cases where the standard error represents more than 50 percent of the estimate, two exclamation points follow the figure provided. A hyphen indicates those rare cases where the reporting standard was not met for a particular cell.

Variables Examined

Table 1 provides a list of the BPS variables used in the analysis for this study.

TABLE 1

Beginning Postsecondary Students Longitudinal Study (BPS) Variable List**INSTITUTION VARIABLES**

CC2000	The 2000 Carnegie Classification of institution 2003–2004
FCONTROL	The control of the first institution attended

STUDENT VARIABLES

PAREduc	Parents' highest level of education
DEPINC	Dependent student's family income 2003–2004
ENINPT6Y	Pattern of enrollment intensity for all months enrolled through June 2009

ACCESS VARIABLES

HCGPAREP	High school grade point average
TESATDER	Admissions test scores (SAT or converted ACT)
SNEED1	Student budget minus EFC 2003–2004
SNEED2	Student budget minus EFC minus total aid 2003–2004
TOTAID	Total Aid 2003–2004
CUMOWE096	Cumulative total student loan amount owed in 2009

COLLEGE EXPERIENCES VARIABLES

FREQ04C	Frequency met with academic advisor 2004
ACAD04C	Had large classes 2004
ACAD04A	Had graduate student instructors 2004
FREQ06A	Frequency had informal faculty meeting 2006
FREQ06B	Frequency talked with faculty outside class 2006
ACAD04D	Wrote papers for courses 2004
ACAD04B	Took essay exams 2004
FREQ04G	Frequency 2004: Study groups
VLTR06A	Volunteer reason 2006: Required as part of program
FREQ04E	Frequency participated in school clubs 2004
FREQ06E	Frequency participated in school clubs 2006
FREQ04F	Frequency participated in school sports 2004
FREQ06F	Frequency participated in school sports 2006
FREQ04D	Frequency attended fine arts activities 2004
FREQ06D	Frequency attended fine arts activities 2006

COLLEGE OUTCOMES VARIABLES

IMPT04E	Importance of influencing political structure 2003–2004
IMPT06E	Importance of influencing political structure 2005–2006
IMPT04B	Importance of being a community leader 2003–2004
IMPT06B	Importance of being a community leader 2005–2006

continued »

TABLE 1 *continued***Beginning Postsecondary Students Longitudinal Study (BPS) Variable List****COLLEGE OUTCOMES VARIABLES** *continued*

VOTEVE09	Ever voted 2009
VLTR09B	Volunteering started through a school-related activity 2009
PROUTF4	Cumulative retention and attainment at first institution 2006–2007
PROUTF5	Cumulative retention and attainment at first institution 2007–2008
PROUTF6	Cumulative retention and attainment at first institution 2008–2009
QDFA2BCH	Elapsed time from entry to postsecondary education to first bachelor's degree (in months)
HIGHLVEX	Highest degree ever expected to complete 2004
DGEVR06	Highest degree ever expected 2006
DGEVR09	Highest degree ever expected 2009
SATUG09	Satisfaction with quality of undergraduate education 2009
JOBSTB09	Employment status (includes looking for employment) 2009
JOBRLM09	Job related to major 2009
JOBRCR09	Job related to coursework 2009
JOBCAR09	Job considered start of career 2009
JOBS09G	Job satisfaction overall 2009

APPENDIX B: Data Tables

The data source for the following tables is the National Center for Education Statistics' Beginning Postsecondary Students Longitudinal Study (BPS:04/09). In cases where the standard error represents more than 30 percent of the estimate, a single exclamation point follows the figure provided in the tables. In cases where the standard error represents more than 50 percent of the estimate, two exclamation points follow the figure provided. A hyphen indicates those rare cases where the reporting standard was not met for a particular cell.

TABLE 1

**College Students with Full-Time Enrollment,
by Institutional Type and Parental Education Level in 2003–2004**

Institution type	High school diploma, equivalent, or less (%)	Vocational or technical training (%)	Associate's degree (%)	Some college, no degree (%)	Bachelor's degree (%)	Master's or professional degree (%)	Doctoral degree or equivalent (%)	Parental education level unknown (%)
Public nondoctoral	26.5	4.3	8.3	14.2	26.1	16.6	2.2	1.7 !
Public doctoral	15.2	3.3	5.9	10.0	30.7	27.0	7.1	0.9
Private nonprofit nondoctoral	16.8	3.8	6.7	11.7	28.0	25.7	6.7	0.7 !!
Private nonprofit doctoral	11.0	1.4	3.7	7.3	27.0	36.5	12.4	0.7 !

TABLE 2

**College Students with Full-Time Enrollment,
by Institutional Type and Family Income in 2003–2004**

Institution type	Less than \$25,000 (%)	\$25,000–\$44,999 (%)	\$45,000–\$64,999 (%)	\$65,000–\$84,999 (%)	\$85,000–\$104,999 (%)	More than \$105,000 (%)
Public nondoctoral	18.8	22.2	17.9	14.8	10.7	15.7
Public doctoral	11.2	14.9	16.2	17.4	13.2	27.7
Private nonprofit nondoctoral	14.6	18.4	15.0	14.9	14.4	22.7
Private nonprofit doctoral	11.1	14.3	12.6	11.3	13.4	37.3

TABLE 3

High School Grade Point Average of College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	0.5–2.9 (D- to B) (%)	3.0–4.0 (B to A) (%)
Public nondoctoral		
<i>First-generation</i>	25.4	74.6
<i>Low-income</i>	23.6	76.4
<i>All students</i>	20.2	79.8
Public doctoral		
<i>First-generation</i>	12.0	88.0
<i>Low-income</i>	14.1	85.9
<i>All students</i>	9.5	90.5
Private nondoctoral		
<i>First-generation</i>	25.2	74.8
<i>Low-income</i>	24.9	75.1
<i>All students</i>	15.5	84.5
Private doctoral		
<i>First-generation</i>	5.8 !!	94.2
<i>Low-income</i>	8.4 !!	91.6
<i>All students</i>	5.7	94.3

TABLE 4

Admissions Test Score (SAT or Converted ACT) of College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Lowest (400–800) (%)	Low middle (850–990) (%)	High middle (1000–1130) (%)	Highest (1140–1600) (%)
Public nondoctoral				
<i>First-generation</i>	34.4	35.4	23.5	6.7
<i>Low-income</i>	36.5	38.4	18.3	6.8 !
<i>All students</i>	17.3	33.3	30.3	19.1
Public doctoral				
<i>First-generation</i>	10.5	34.9	25.7	28.9
<i>Low-income</i>	14.9	28.1	23.4	33.6
<i>All students</i>	5.5	18.3	28.6	47.6
Private nondoctoral				
<i>First-generation</i>	18.4	31.3	23.9	26.4
<i>Low-income</i>	24.3	32.5	15.0	28.1
<i>All students</i>	10.6	22.2	26.8	40.5
Private doctoral				
<i>First-generation</i>	20.0 !	17.7 !	29.9	32.4
<i>Low-income</i>	14.5 !	11.9	21.1	52.6
<i>All students</i>	2.9 !	7.1	17.7	72.3

TABLE 5

Financial Aid for College Students with Full-Time Enrollment, by Institutional Type in 2003–2004

Institution type	Average student budget minus expected family contribution (EFC)	Average total aid	Average student budget minus EFC minus total aid
Public nondoctoral			
<i>First-generation</i>	\$8,803	\$6,357	\$3,026
<i>Low-income</i>	\$11,505	\$7,524	\$4,074
<i>All students</i>	\$6,482	\$5,474	\$2,328
Public doctoral			
<i>First-generation</i>	\$10,192	\$8,664	\$2,931
<i>Low-income</i>	\$14,032	\$9,231	\$4,893
<i>All students</i>	\$6,885	\$6,533	\$2,578
Private nondoctoral			
<i>First-generation</i>	\$17,350	\$15,472	\$3,863
<i>Low-income</i>	\$21,107	\$14,308	\$6,851
<i>All students</i>	\$15,493	\$14,371	\$4,307
Private doctoral			
<i>First-generation</i>	\$25,566	\$16,828	\$9,048
<i>Low-income</i>	\$31,503	\$19,731	\$11,970
<i>All students</i>	\$19,430	\$14,389	\$7,994

TABLE 6

Cumulative Total Student Loan Amount Owed by College Graduates with Full-Time Enrollment, by Institutional Type in 2009

Institution type	No debt (%)	\$1–\$9,999 (%)	\$10,000–\$19,999 (%)	\$20,000–\$29,999 (%)	\$30,000–\$39,999 (%)	More than \$40,000 (%)
Public nondoctoral						
<i>First-generation</i>	40.7	12.0	22.8	10.0 !	9.8	4.7 !
<i>Low-income</i>	30.0	15.4	24.5	14.5	7.2 !	8.4 !
<i>All students</i>	41.2	13.4	24.3	11.1	5.6	4.3
Public doctoral						
<i>First-generation</i>	20.3	16.5	32.6	13.8	7.0 !	9.8
<i>Low-income</i>	28.8	16.1	19.2	19.1	9.2	7.6 !
<i>All students</i>	47.7	11.7	19.6	11.2	4.7	5.2
Private nondoctoral						
<i>First-generation</i>	22.9	6.6 !!	22.2	15.3	13.8	19.1
<i>Low-income</i>	32.8	10.8 !	13.0 !	12.4	16.5	14.5
<i>All students</i>	37.3	7.8	23.3	12.9	7.4	11.3
Private doctoral						
<i>First-generation</i>	31.7	5.4 !!	7.4 !!	19.9 !	9.5 !	26.2
<i>Low-income</i>	35.9	13.5 !	4.2 !!	15.6 !	5.2 !	25.7
<i>All students</i>	49.0	9.2	13.2	12.9	3.7	12.1

TABLE 7

Average Cumulative Total Student Loan Amount Owed by College Graduates with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Average cumulative total student loan amount owed (all students)	Average cumulative total student loan amount owed (borrowers only)
Public nondoctoral		
<i>First-generation</i>	\$12,438	\$20,989
<i>Low-income</i>	\$14,190	\$20,272
<i>All students</i>	\$11,173	\$18,994
Public doctoral		
<i>First-generation</i>	\$16,441	\$20,623
<i>Low-income</i>	\$15,311	\$21,505
<i>All students</i>	\$10,663	\$20,372
Private nondoctoral		
<i>First-generation</i>	\$21,642	\$28,083
<i>Low-income</i>	\$18,148	\$27,000
<i>All students</i>	\$15,838	\$25,251
Private doctoral		
<i>First-generation</i>	\$23,756	\$34,802
<i>Low-income</i>	\$18,750	\$29,232
<i>All students</i>	\$14,240	\$27,920

TABLE 8

Frequency of Large Classes among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	28.2	39.1	32.6
<i>Low-income</i>	37.6	33.7	28.7
<i>All students</i>	32.2	40.8	30.0
Public doctoral			
<i>First-generation</i>	58.0	32.2	9.8
<i>Low-income</i>	63.0	28.9	8.0
<i>All students</i>	62.0	32.8	5.2
Private nondoctoral			
<i>First-generation</i>	20.8	32.5	46.7
<i>Low-income</i>	18.4	33.9	47.7
<i>All students</i>	14.8	36.8	48.4
Private doctoral			
<i>First-generation</i>	41.1	28.7	30.3
<i>Low-income</i>	31.4	44.9	23.6
<i>All students</i>	43.0	43.2	13.8

TABLE 9

Frequency of Meeting with an Academic Advisor among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	22.6	52.5	24.9
<i>Low-income</i>	22.2	55.9	21.9
<i>All students</i>	20.6	59.9	19.5
Public doctoral			
<i>First-generation</i>	23.6	63.2	13.2
<i>Low-income</i>	24.1	58.6	17.4
<i>All students</i>	22.2	63.0	14.8
Private nondoctoral			
<i>First-generation</i>	25.9	62.8	11.3
<i>Low-income</i>	32.7	54.3	13.0
<i>All students</i>	29.7	60.2	10.0
Private doctoral			
<i>First-generation</i>	27.9	54.6	17.6
<i>Low-income</i>	40.0	49.2	10.9
<i>All students</i>	28.4	62.0	9.6

TABLE 10

Frequency of Graduate Student Instructors among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	11.8	25.2	63.0
<i>Low-income</i>	19.6	24.1	56.3
<i>All students</i>	12.9	27.3	59.8
Public doctoral			
<i>First-generation</i>	26.4	50.7	23.0
<i>Low-income</i>	29.2	45.6	25.2
<i>All students</i>	30.3	48.4	21.2
Private nondoctoral			
<i>First-generation</i>	5.5 !	19.7	74.8
<i>Low-income</i>	8.2 !	18.7	73.1
<i>All students</i>	6.7	13.7	79.6
Private doctoral			
<i>First-generation</i>	11.0 !	31.4	57.6
<i>Low-income</i>	12.1 !	33.9	54.0
<i>All students</i>	17.1	44.7	38.2

TABLE 11

Frequency of Discussion with Faculty Members outside of Class among College Students with Full-Time Enrollment, by Institutional Type in 2006

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	36.4	51.7	12.0
<i>Low-income</i>	32.9	57.0	10.1 !
<i>All students</i>	35.0	57.0	8.1
Public doctoral			
<i>First-generation</i>	28.3	59.2	12.5
<i>Low-income</i>	27.3	62.5	10.1
<i>All students</i>	31.6	59.1	9.3
Private nondoctoral			
<i>First-generation</i>	47.3	47.9	4.8 !
<i>Low-income</i>	45.2	47.7	7.1 !
<i>All students</i>	48.0	46.7	5.3
Private doctoral			
<i>First-generation</i>	30.8	58.1	11.1 !!
<i>Low-income</i>	40.5	52.5	7.0 !!
<i>All students</i>	37.7	56.5	5.7

TABLE 12

Frequency of Informal Meetings with Faculty Members among College Students with Full-Time Enrollment, by Institutional Type in 2006

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	13.8	31.5	54.7
<i>Low-income</i>	12.5	47.0	40.5
<i>All students</i>	11.2	37.7	51.1
Public doctoral			
<i>First-generation</i>	5.3	35.5	59.2
<i>Low-income</i>	8.3	37.8	53.9
<i>All students</i>	7.8	39.7	52.5
Private nondoctoral			
<i>First-generation</i>	19.4	42.1	38.5
<i>Low-income</i>	23.8	45.2	31.0
<i>All students</i>	20.7	50.2	29.1
Private doctoral			
<i>First-generation</i>	12.1 !	45.3	42.6
<i>Low-income</i>	19.7	46.7	33.5
<i>All students</i>	12.4	49.3	38.2

TABLE 13

Frequency of Writing Papers for Courses among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	64.1	32.2	3.7 !
<i>Low-income</i>	69.2	26.8	4.0 !
<i>All students</i>	70.0	27.7	2.3 !
Public doctoral			
<i>First-generation</i>	69.8	29.3	0.9 !!
<i>Low-income</i>	70.5	26.0	3.5 !
<i>All students</i>	64.2	33.2	2.6
Private nondoctoral			
<i>First-generation</i>	76.5	20.0	3.5 !
<i>Low-income</i>	80.3	16.4 !	3.3 !
<i>All students</i>	81.6	16.8	1.6 !
Private doctoral			
<i>First-generation</i>	84.0	14.6 !	1.4 !!
<i>Low-income</i>	87.1	11.0 !	1.9 !!
<i>All students</i>	78.0	21.1	0.9 !

TABLE 14

Frequency of Essay Exams among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	37.4	53.0	9.7
<i>Low-income</i>	44.0	47.6	8.4 !
<i>All students</i>	44.3	48.3	7.3
Public doctoral			
<i>First-generation</i>	41.4	48.1	10.5
<i>Low-income</i>	41.3	47.5	11.2 !
<i>All students</i>	37.4	51.4	11.2
Private nondoctoral			
<i>First-generation</i>	52.1	40.2	7.8 !
<i>Low-income</i>	55.0	37.5	7.5 !
<i>All students</i>	57.2	39.1	3.7
Private doctoral			
<i>First-generation</i>	55.8	36.4	7.8 !
<i>Low-income</i>	60.7	32.6	6.7 !
<i>All students</i>	54.4	39.0	6.6

TABLE 15

Frequency of Study Group Participation among College Students with Full-Time Enrollment, by Institutional Type in 2004

Institution type	Often (%)	Sometimes (%)	Never (%)
Public nondoctoral			
<i>First-generation</i>	16.5	45.1	38.4
<i>Low-income</i>	12.6	52.6	34.8
<i>All students</i>	11.9	53.0	35.1
Public doctoral			
<i>First-generation</i>	16.3	50.5	33.2
<i>Low-income</i>	17.5	55.5	27.0
<i>All students</i>	16.3	58.6	25.1
Private nondoctoral			
<i>First-generation</i>	17.4	61.2	21.3
<i>Low-income</i>	14.3	61.2	24.5
<i>All students</i>	19.3	63.4	17.3
Private doctoral			
<i>First-generation</i>	11.1	64.6	24.3
<i>Low-income</i>	20.8	62.1	17.1
<i>All students</i>	19.0	63.2	17.8

TABLE 16

Volunteering Required as Part of a Program among College Students with Full-Time Enrollment, by Institutional Type in 2006

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	9.1 !	90.9
<i>Low-income</i>	9.0 !	91.0
<i>All students</i>	8.1	91.9
Public doctoral		
<i>First-generation</i>	4.9	95.1
<i>Low-income</i>	6.5	93.5
<i>All students</i>	8.4	91.6
Private nondoctoral		
<i>First-generation</i>	14.5	85.5
<i>Low-income</i>	17.0	83.0
<i>All students</i>	17.0	83.0
Private doctoral		
<i>First-generation</i>	5.2 !	94.8
<i>Low-income</i>	5.4 !!	94.6
<i>All students</i>	6.6	93.4

TABLE 17

**School Club Participation among College Students with Full-Time Enrollment,
by Institutional Type in 2004 and 2006**

Year	Institution type	Often (%)	Sometimes (%)	Never (%)
2004	Public nondoctoral			
	<i>First-generation</i>	11.1	20.4	68.5
	<i>Low-income</i>	15.5	21.5	63.1
	<i>All students</i>	13.3	25.5	61.3
	Public doctoral			
	<i>First-generation</i>	13.1	30.3	56.7
	<i>Low-income</i>	11.4	33.7	54.9
	<i>All students</i>	17.4	31.6	50.9
	Private nondoctoral			
	<i>First-generation</i>	14.4	38.4	47.2
	<i>Low-income</i>	22.3	36.2	41.4
	<i>All students</i>	23.4	38.6	38.1
	Private doctoral			
	<i>First-generation</i>	18.7	40.7	40.6
	<i>Low-income</i>	26.5	37.4	36.1
<i>All students</i>	27.5	43.6	28.9	
2006	Public nondoctoral			
	<i>First-generation</i>	23.4	22.6	53.9
	<i>Low-income</i>	22.9	23.4	53.7
	<i>All students</i>	24.1	31.5	44.5
	Public doctoral			
	<i>First-generation</i>	21.2	39.2	39.6
	<i>Low-income</i>	18.9	36.0	45.1
	<i>All students</i>	27.6	38.1	34.3
	Private nondoctoral			
	<i>First-generation</i>	30.3	35.0	34.7
	<i>Low-income</i>	30.6	30.9	38.5
	<i>All students</i>	34.2	36.5	29.4
	Private doctoral			
	<i>First-generation</i>	26.7	42.2	31.0
	<i>Low-income</i>	32.2	41.9	25.9
<i>All students</i>	37.3	38.9	23.8	

TABLE 18

Intercollegiate, Club, or Intramural Athletics Participation among College Students with Full-Time Enrollment, by Institutional Type in 2004 and 2006

Year	Institution type	Often (%)	Sometimes (%)	Never (%)
2004	Public nondoctoral			
	<i>First-generation</i>	13.6	20.2	66.2
	<i>Low-income</i>	14.1	12.5	73.4
	<i>All students</i>	16.9	18.6	64.8
	Public doctoral			
	<i>First-generation</i>	9.7	18.5	71.8
	<i>Low-income</i>	11.1	15.0	73.9
	<i>All students</i>	16.8	23.9	59.3
	Private nondoctoral			
	<i>First-generation</i>	24.4	19.3	56.3
	<i>Low-income</i>	23.8	21.8	54.4
	<i>All students</i>	32.0	20.5	47.5
	Private doctoral			
	<i>First-generation</i>	18.2	15.2	66.6
	<i>Low-income</i>	25.9	16.9	57.3
<i>All students</i>	25.6	24.3	50.1	
2006	Public nondoctoral			
	<i>First-generation</i>	15.4	19.0	65.6
	<i>Low-income</i>	12.8	13.2	74.0
	<i>All students</i>	18.7	20.9	60.4
	Public doctoral			
	<i>First-generation</i>	17.6	17.9	64.6
	<i>Low-income</i>	10.8	22.4	66.8
	<i>All students</i>	18.3	26.2	55.5
	Private nondoctoral			
	<i>First-generation</i>	25.4	17.6	57.0
	<i>Low-income</i>	27.3	16.6	56.1
	<i>All students</i>	29.1	22.3	48.6
	Private doctoral			
	<i>First-generation</i>	11.6	15.8	72.5
	<i>Low-income</i>	14.5	25.2	60.3
<i>All students</i>	23.7	26.5	49.8	

TABLE 19

**Fine Arts Performance Attendance among College Students with Full-Time Enrollment,
by Institutional Type in 2004 and 2006**

Year	Institution type	Often (%)	Sometimes (%)	Never (%)
2004	Public nondoctoral			
	<i>First-generation</i>	9.0	33.1	57.9
	<i>Low-income</i>	9.4	34.6	55.9
	<i>All students</i>	12.4	39.8	47.8
	Public doctoral			
	<i>First-generation</i>	8.4	42.0	49.6
	<i>Low-income</i>	10.0	38.4	51.5
	<i>All students</i>	10.3	41.1	48.6
	Private nondoctoral			
	<i>First-generation</i>	20.3	41.0	38.8
	<i>Low-income</i>	19.7	41.0	39.3
	<i>All students</i>	22.1	43.8	34.2
	Private doctoral			
	<i>First-generation</i>	11.5	25.8	62.6
	<i>Low-income</i>	10.9	44.3	44.9
<i>All students</i>	17.4	43.1	39.5	
2006	Public nondoctoral			
	<i>First-generation</i>	16.1	36.9	47.0
	<i>Low-income</i>	10.8	40.8	48.4
	<i>All students</i>	13.4	42.1	44.5
	Public doctoral			
	<i>First-generation</i>	6.8	42.4	50.7
	<i>Low-income</i>	9.4	49.5	41.1
	<i>All students</i>	10.0	47.2	42.7
	Private nondoctoral			
	<i>First-generation</i>	21.5	41.4	37.1
	<i>Low-income</i>	14.2	45.4	40.4
	<i>All students</i>	21.1	44.3	34.6
	Private doctoral			
	<i>First-generation</i>	7.2	41.0	51.8
	<i>Low-income</i>	13.9	49.6	36.5
<i>All students</i>	16.4	49.2	34.4	

TABLE 20

Importance of Influencing Political Structure among College Students with Full-Time Enrollment, by Institutional Type in 2004 and 2006

Year	Institution type	Yes (%)	No (%)
2004	Public nondoctoral		
	<i>First-generation</i>	26.0	74.0
	<i>Low-income</i>	28.5	71.5
	<i>All students</i>	25.2	74.8
	Public doctoral		
	<i>First-generation</i>	28.1	71.9
	<i>Low-income</i>	34.8	65.2
	<i>All students</i>	24.7	75.3
	Private nondoctoral		
	<i>First-generation</i>	20.3	79.7
	<i>Low-income</i>	27.4	72.6
	<i>All students</i>	25.1	74.9
	Private doctoral		
	<i>First-generation</i>	30.4	69.6
	<i>Low-income</i>	35.2	64.8
<i>All students</i>	30.4	69.6	
2006	Public nondoctoral		
	<i>First-generation</i>	27.3	72.7
	<i>Low-income</i>	27.5	72.5
	<i>All students</i>	22.0	78.0
	Public doctoral		
	<i>First-generation</i>	19.1	80.9
	<i>Low-income</i>	24.5	75.5
	<i>All students</i>	20.3	79.7
	Private nondoctoral		
	<i>First-generation</i>	17.4	82.6
	<i>Low-income</i>	23.1	76.9
	<i>All students</i>	21.0	79.0
	Private doctoral		
	<i>First-generation</i>	28.6	71.4
	<i>Low-income</i>	32.7	67.3
<i>All students</i>	24.6	75.4	

TABLE 21

Importance of Being a Community Leader among College Students with Full-Time Enrollment, by Institutional Type in 2004 and 2006

Year	Institution type	Yes (%)	No (%)
2004	Public nondoctoral		
	<i>First-generation</i>	51.3	48.7
	<i>Low-income</i>	51.4	48.6
	<i>All students</i>	46.6	53.4
	Public doctoral		
	<i>First-generation</i>	50.0	50.0
	<i>Low-income</i>	49.8	50.2
	<i>All students</i>	46.2	53.8
	Private nondoctoral		
	<i>First-generation</i>	49.7	50.3
	<i>Low-income</i>	53.0	47.0
	<i>All students</i>	48.4	51.6
	Private doctoral		
	<i>First-generation</i>	57.3	42.7
	<i>Low-income</i>	55.7	44.3
<i>All students</i>	53.5	46.5	
2006	Public nondoctoral		
	<i>First-generation</i>	49.3	50.7
	<i>Low-income</i>	45.5	54.5
	<i>All students</i>	43.5	56.5
	Public doctoral		
	<i>First-generation</i>	40.1	59.9
	<i>Low-income</i>	37.6	62.4
	<i>All students</i>	40.3	59.7
	Private nondoctoral		
	<i>First-generation</i>	39.7	60.3
	<i>Low-income</i>	43.4	56.6
	<i>All students</i>	43.6	56.4
	Private doctoral		
	<i>First-generation</i>	54.3	45.7
	<i>Low-income</i>	63.4	36.6
<i>All students</i>	41.9	58.1	

TABLE 22

Voter Participation among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	87.6	12.4 !
<i>Low-income</i>	85.9	14.1
<i>All students</i>	89.0	11.0
Public doctoral		
<i>First-generation</i>	85.4	14.6
<i>Low-income</i>	87.2	12.8
<i>All students</i>	91.6	8.4
Private nondoctoral		
<i>First-generation</i>	92.6	7.4
<i>Low-income</i>	93.9	6.1
<i>All students</i>	92.7	7.3
Private doctoral		
<i>First-generation</i>	90.3	9.7
<i>Low-income</i>	90.4	9.6 !
<i>All students</i>	92.2	7.8

TABLE 23

Volunteer Participation Started via a School-Related Activity among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	12.5	87.5
<i>Low-income</i>	11.8	88.2
<i>All students</i>	13.3	86.7
Public doctoral		
<i>First-generation</i>	14.7	85.3
<i>Low-income</i>	18.9	81.1
<i>All students</i>	16.6	83.4
Private nondoctoral		
<i>First-generation</i>	19.3	80.7
<i>Low-income</i>	15.9	84.1
<i>All students</i>	17.6	82.4
Private doctoral		
<i>First-generation</i>	10.3	89.7
<i>Low-income</i>	21.7	78.3
<i>All students</i>	17.6	82.4

TABLE 24

Persistence and Completion of a Bachelor Degree among College Students with Full-Time Enrollment, by Institutional Type in 2006–2007, 2007–2008, and 2008–2009

Year	Institution type	Attained bachelor's degree (%)	Attained associate's degree or certificate (%)	No degree, still enrolled (%)	No degree, transferred (%)	No degree, not enrolled, or left without return (%)	
4 Year	Public nondoctoral						
	<i>First-generation</i>	18.4	0.7	31.1	17.3	32.5	
	<i>Low-income</i>	12.7	2.4	35.8	21.7	27.3	
	<i>All students</i>	27.1	1.6 !!	32.2	20.7	8.4	
	Public doctoral						
	<i>First-generation</i>	26.3	1.0	40.1	22.2	10.4	
	<i>Low-income</i>	22.0	0.6	38.6	21.8	17.0	
	<i>All students</i>	39.8	0.4 !	34.4	17.8	7.5	
	Private nondoctoral						
	<i>First-generation</i>	42.3	3.5	16.6	23.2	14.5	
	<i>Low-income</i>	36.1	3.5	21.3	21.1	18.0	
	<i>All students</i>	52.7	1.5 !!	15.3	20.8	9.7 !	
	Private doctoral						
	<i>First-generation</i>	42.6	2.1	23.1	28.7	3.4	
	<i>Low-income</i>	47.9	0.2	23.0	25.1	3.8	
	<i>All students</i>	63.2	0.3 !!	18.5	12.5	5.5 !!	
	5 Year	Public nondoctoral					
		<i>First-generation</i>	34.6	0.7	12.0	17.6	35.0
<i>Low-income</i>		31.3	2.4	15.9	22.0	28.5	
<i>All students</i>		46.5	1.3 !!	11.6	20.8	19.9 !	
Public doctoral							
<i>First-generation</i>		46.3	1.0	19.7	22.2	10.9	
<i>Low-income</i>		41.4	0.9	16.8	21.8	19.1	
<i>All students</i>		61.8	0.4 !!	11.3	17.9	8.6 !	
Private nondoctoral							
<i>First-generation</i>		54.2	3.5	3.7	23.2	15.4	
<i>Low-income</i>		47.4	3.5	8.8	21.1	19.2	
<i>All students</i>		63.3	1.3 !!	3.9	20.9	10.5 !	
Private doctoral							
<i>First-generation</i>		59.0	2.1	6.7	28.7	3.4	
<i>Low-income</i>		65.0	0.0	5.0	25.1	4.9	
<i>All students</i>		75.7	0.5 !!	5.3	12.6	1.4 !!	
6 Year		Public nondoctoral					
		<i>First-generation</i>	41.1	0.9	6.4	17.6	33.9
	<i>Low-income</i>	41.1	1.9	5.6	22.0	29.5	
	<i>All students</i>	54.4	1.1 !!	3.8	20.8	19.9	
	Public doctoral						
	<i>First-generation</i>	58.8	0.9	7.1	22.2	11.0	
	<i>Low-income</i>	53.3	0.6	5.2	21.8	19.1	
	<i>All students</i>	70.2	0.3 !!	3.2	18.0	8.3	
	Private nondoctoral						
	<i>First-generation</i>	57.4	3.1	1.3	23.2	15.1	
	<i>Low-income</i>	52.7	3.0	2.7	21.1	20.5	
	<i>All students</i>	66.4	1.1 !!	0.9 !	20.9	10.7	
	Private doctoral						
	<i>First-generation</i>	65.7	2.1	0.0	28.7	3.4	
	<i>Low-income</i>	68.3	0.0	2.8	25.1	3.8	
	<i>All students</i>	80.3	0.5 !!	1.4 !!	12.6	5.2	

TABLE 25

Completion of a Bachelor's Degree among College Students with Full-Time Enrollment, by Institutional Type 2007–2009

Institution type	Four-year (%)	Five-year (%)	Six-year (%)
Public nondoctoral			
<i>First-generation</i>	18.4	34.6	41.1
<i>Low-income</i>	12.7	31.3	41.1
<i>All students</i>	27.1	46.5	54.4
Public doctoral			
<i>First-generation</i>	26.3	46.3	58.8
<i>Low-income</i>	22.0	41.4	53.3
<i>All students</i>	39.8	61.8	70.2
Private nondoctoral			
<i>First-generation</i>	42.3	54.2	57.4
<i>Low-income</i>	36.1	47.4	52.7
<i>All students</i>	52.7	63.3	66.4
Private doctoral			
<i>First-generation</i>	42.6	59.0	65.7
<i>Low-income</i>	47.9	65.0	68.3
<i>All students</i>	63.2	75.7	80.3

TABLE 26

Time to Bachelor's Degree (in Months) of College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	48 or fewer (%)	49 or more (%)
Public nondoctoral		
<i>First-generation</i>	49.7	50.3
<i>Low-income</i>	35.3	64.7
<i>All students</i>	55.8	44.2
Public doctoral		
<i>First-generation</i>	50.6	49.4
<i>Low-income</i>	50.4	49.6
<i>All students</i>	60.6	39.4
Private nondoctoral		
<i>First-generation</i>	76.6	23.4
<i>Low-income</i>	63.8	36.2
<i>All students</i>	77.9	22.1
Private doctoral		
<i>First-generation</i>	70.4	29.6
<i>Low-income</i>	77.3	22.7 !
<i>All students</i>	84.9	15.1

TABLE 27

**Highest Degree Expected among College Students with Full-Time Enrollment,
by Institutional Type in 2004, 2006, and 2009**

Year	Institution type	Associate's degree (%)	Bachelor's degree (%)	Master's degree (%)	Professional degree (%)	Doctoral degree (%)	Other degree or certificate (%)
2004	Public nondoctoral						
	<i>First-generation</i>	4.0	36.4	38.6	4.5	14.7	1.9
	<i>Low-income</i>	1.6	32.9	38.2	8.1	17.8	1.4
	<i>All students</i>	1.4 !!	30.2	47.7	5.1	14.2	1.4 !!
	Public doctoral						
	<i>First-generation</i>	1.7	22.1	47.3	11.7	16.9	0.3
	<i>Low-income</i>	1.5	14.8	42.3	14.1	26.2	1.2
	<i>All students</i>	0.4 !	18.0	47.5	11.9	21.6	0.6 !!
	Private nondoctoral						
	<i>First-generation</i>	1.8	13.8	53.3	7.2	23.7	0.1
	<i>Low-income</i>	1.8	18.2	47.8	6.3	25.4	0.5
	<i>All students</i>	0.3 !!	19.4	47.3	8.3	24.2	0.5 !
	Private doctoral						
	<i>First-generation</i>	0.0	15.1	49.0	12.6	22.0	1.2
	<i>Low-income</i>	0.0	14.9	37.1	21.7	26.3	0.0
<i>All students</i>	0.0	12.9	44.3	17.1	25.3	0.4 !!	
2006	Public nondoctoral						
	<i>First-generation</i>	4.8	41.2	32.1	7.1	8.4	6.4
	<i>Low-income</i>	3.3	32.6	36.7	7.2	14.4	5.9
	<i>All students</i>	3.1	33.5	39.9	5.8	12.7	5.0 !!
	Public doctoral						
	<i>First-generation</i>	5.2	30.0	42.4	6.9	11.7	3.9
	<i>Low-income</i>	3.8	22.5	36.7	9.5	20.6	6.9
	<i>All students</i>	1.6	24.1	43.1	11.9	16.1	3.2 !!
	Private nondoctoral						
	<i>First-generation</i>	2.3	24.4	45.6	6.0	15.5	6.2
	<i>Low-income</i>	3.8	21.8	38.5	8.5	20.4	7.1
	<i>All students</i>	2.0 !	20.3	43.7	10.0	19.5	4.5 !
	Private doctoral						
	<i>First-generation</i>	0.0	17.2	49.3	12.3	11.9	9.2
	<i>Low-income</i>	0.0	18.5	48.7	13.3	17.9	1.5
<i>All students</i>	0.8 !!	15.5	44.1	17.1	18.6	3.9 !!	
2009	Public nondoctoral						
	<i>First-generation</i>	4.1	34.4	36.8	3.4	10.9	10.3
	<i>Low-income</i>	5.3	30.6	33.2	5.7	13.2	12.0
	<i>All students</i>	3.1	27.3	45.2	4.8	11.9	7.7 !
	Public doctoral						
	<i>First-generation</i>	1.9	23.5	48.4	7.5	13.0	5.6
	<i>Low-income</i>	1.6	15.6	44.2	9.6	21.7	7.2
	<i>All students</i>	0.7	20.6	48.7	10.9	14.6	4.5 !
	Private nondoctoral						
	<i>First-generation</i>	2.5	24.5	45.9	5.0	15.3	6.9
	<i>Low-income</i>	3.3	27.5	37.9	5.1	21.1	5.1
	<i>All students</i>	1.6 !	19.6	46.5	8.9	17.8	5.6 !
	Private doctoral						
	<i>First-generation</i>	0.0	18.1	53.4	11.3	13.9	3.3
	<i>Low-income</i>	0.0	21.0	45.3	17.2	10.4	6.0
<i>All students</i>	0.1 !!	15.7	44.7	17.9	17.3	4.3 !!	

TABLE 28

Satisfaction with the Quality of Undergraduate Education among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Satisfied (%)	Not satisfied (%)
Public nondoctoral		
<i>First-generation</i>	90.4	9.6
<i>Low-income</i>	87.9	12.1
<i>All students</i>	89.8	10.2
Public doctoral		
<i>First-generation</i>	88.1	11.9
<i>Low-income</i>	86.6	13.7
<i>All students</i>	92.4	7.6
Private nondoctoral		
<i>First-generation</i>	92.3	7.7
<i>Low-income</i>	89.1	10.9
<i>All students</i>	92.1	7.9
Private doctoral		
<i>First-generation</i>	91.4	8.6 !!
<i>Low-income</i>	93.8	6.2 !!
<i>All students</i>	94.6	5.4

TABLE 29

Employment Status among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Employed (%)	Not employed, currently seeking employment (%)	Not employed, not currently seeking employment (%)
Public nondoctoral			
<i>First-generation</i>	84.3	7.7	8.0
<i>Low-income</i>	83.2	12.4	4.4
<i>All students</i>	86.4	8.8	4.8
Public doctoral			
<i>First-generation</i>	93.0	4.4	2.6
<i>Low-income</i>	88.0	7.6	4.4
<i>All students</i>	87.2	8.1	4.7
Private nondoctoral			
<i>First-generation</i>	86.0	9.0	5.0
<i>Low-income</i>	77.8	16.8	5.5
<i>All students</i>	85.1	12.1	2.8
Private doctoral			
<i>First-generation</i>	85.4	14.6	0.0
<i>Low-income</i>	79.1	16.1	4.8
<i>All students</i>	83.0	11.4	5.6

TABLE 30

Current Job Is Related to Undergraduate Major among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	64.5	35.5
<i>Low-income</i>	66.1	33.9
<i>All students</i>	64.7	35.3
Public doctoral		
<i>First-generation</i>	63.9	36.1
<i>Low-income</i>	62.8	37.2
<i>All students</i>	68.6	31.4
Private nondoctoral		
<i>First-generation</i>	63.7	36.3
<i>Low-income</i>	69.9	30.1
<i>All students</i>	65.7	34.3
Private doctoral		
<i>First-generation</i>	63.7	36.3
<i>Low-income</i>	67.7	32.3 !
<i>All students</i>	67.0	33.0

TABLE 31

Current Job Is Related to Undergraduate Coursework among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	29.2	70.8
<i>Low-income</i>	42.5	57.5
<i>All students</i>	30.9	69.1
Public doctoral		
<i>First-generation</i>	31.7	68.3
<i>Low-income</i>	31.9	68.1
<i>All students</i>	36.8	63.2
Private nondoctoral		
<i>First-generation</i>	40.3	59.7
<i>Low-income</i>	38.0	62.0
<i>All students</i>	42.2	57.8
Private doctoral*		
<i>First-generation</i>	-	-
<i>Low-income</i>	-	-
<i>All students</i>	34.1	65.9

* Reporting standard not met.

TABLE 32

Consider Current Job as the Start of a Career among College Students with Full-Time Enrollment (Enrolled in 2003–2004), by Institutional Type in 2009

Institution type	Do not consider job start of career (%)	Consider current job start of career (%)	Already part of an established career (%)
Public nondoctoral			
<i>First-generation</i>	31.3	58.3	10.3
<i>Low-income</i>	36.0	55.6	8.3
<i>All students</i>	38.2	54.9	6.8
Public doctoral			
<i>First-generation</i>	31.8	60.3	7.8
<i>Low-income</i>	34.6	59.1	6.1
<i>All students</i>	27.9	65.8	6.3
Private nondoctoral			
<i>First-generation</i>	33.6	55.0	11.3
<i>Low-income</i>	36.2	55.5	8.3
<i>All students</i>	30.4	61.2	8.4
Private doctoral			
<i>First-generation</i>	29.0	53.9	17.1
<i>Low-income</i>	33.1	52.1	14.8
<i>All students</i>	30.0	64.7	5.3

TABLE 33

Job Satisfaction among College Students with Full-Time Enrollment, by Institutional Type in 2009

Institution type	Yes (%)	No (%)
Public nondoctoral		
<i>First-generation</i>	75.0	25.0
<i>Low-income</i>	82.4	17.6
<i>All students</i>	73.6	26.4
Public doctoral		
<i>First-generation</i>	76.1	23.9
<i>Low-income</i>	68.7	31.3
<i>All students</i>	79.1	20.9
Private nondoctoral		
<i>First-generation</i>	73.8	26.2
<i>Low-income</i>	78.8	21.2
<i>All students</i>	78.0	22.0
Private doctoral		
<i>First-generation</i>	88.5	11.5
<i>Low-income</i>	83.4	16.6
<i>All students</i>	80.8	19.2



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