

Race and Ethnicity in Higher Education: A Status Report

CHAPTER 4



Enrollment in Graduate Education



Race and Ethnicity in Higher Education: A Status Report

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This chapter is part of a larger report by the American Council on Education (ACE) titled *Race and Ethnicity in Higher Education: A Status Report*. The report and its accompanying microsite provide a data-informed foundation for those working to close persistent equity gaps by providing a comprehensive review of the educational pathways of today's college students and the educators who serve them.

Race and Ethnicity in Higher Education: A Status Report and the microsite were made possible through the generous support of The Andrew W. Mellon Foundation.

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INTRODUCTION

Graduate education remains an important, and often required, stepping-stone for those interested in teaching, research, and professional practice careers. Moreover, in today's age of scientific, technological, and humanitarian discovery, graduate programs are integral—both for societal advancement in these areas, and to ensure that new discoveries of all kinds reflect the diversity of our citizenry in both outlook and outcome. For example, in recent years researchers have emphasized the need for educators and doctors with cultural competency, language diversity, and lived experiences they share with those they serve (Betancourt et al. 2003; Boutin-Foster, Foster, and Konopasek 2008).

From fall 1995 to fall 2015, graduate student enrollment in the United States increased from 2 million students to approximately 2.9 million students, an increase of 44.9 percent, and a rapid growth rate considering that undergraduate enrollment in the country increased 39.4 percent in this same period (NCES 2017a; NCES 2017b). Furthermore, according to the Council of Graduate Schools (2017), enrollment in graduate education is likely to increase as the workforce demands more master's degrees. In 2015–16, master's program enrollment accounted for three-quarters of students enrolled in graduate programs across the country.

While graduate enrollment of students of color increased between 1995–96 and 2015–16, Black,¹ Hispanic, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander students, in particular, remain underrepresented relative to their representation in undergraduate education and in society. Fortunately, and as shown in Chapter 3 of this report, “Enrollment in Undergraduate Education,” undergraduate enrollment has grown for students of color. Moreover, we see promising rates of enrollment, relative to other groups, in graduate education for students of color who recently completed bachelor's degrees.

A final and important point, when it comes to who enrolls in graduation education, concerns where students enroll and what they study—important indicators for individuals' income mobility and career advancement, and critical to the health and prosperity of our diverse nation. The data presented here prompt critical questions regarding disproportionate access by some groups to certain types of institutions, disciplines, and degree types.

KEY FINDINGS

- Whites represented 75.4 percent of all graduate students in 1995–96. While they remained the majority in 2015–16, their total share of all graduate students declined to a little over half (56.0 percent) as the graduate student body diversified.
- Across all racial and ethnic groups, women represented the majority of all graduate students enrolled in 2015–16. The widest gender gap was between Black women and Black men, where seven in 10 Black students enrolled in graduate education were women.
- Almost half of 2007–08 bachelor's degree recipients had enrolled in graduate school by 2011–12 (45.9 percent). The highest enrollment rates were 61.3 percent for Native Hawaiian or other Pacific Islander students and 57.7 percent for Black students. The lowest enrollment rates were 43.8 percent for White students and 46.5 percent for Hispanic students.
- Three-quarters of students enrolled in graduate education in 2015–16 were pursuing a master's degree.

1 The terms Black and African American are used interchangeably.

- The distribution of graduate students across postsecondary sectors² varied across racial and ethnic groups. For example, Black graduate students were much more likely than other groups to pursue their degrees at for-profit institutions, no matter the degree type. Half of Black students pursuing doctoral degrees³ enrolled at for-profit colleges.
- Business and management was the top field of study for graduate students pursuing a master's degree, followed by education. White students were more likely than other groups to pursue a master's degree in education, while Asian and international students⁴ were more likely to pursue a master's degree in STEM⁵ fields.
- The majority of most professional degree⁶ students were enrolled in a health program, with the exception of Hispanic students, of whom more than one-third were enrolled in a law program.
- More than half of international doctoral degree students were studying STEM fields in 2015–16. In contrast, fewer than one in five Hispanic students were in these fields. Black students were more likely than students of other groups to be in business and management, and education programs.

² Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

³ Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

⁴ The National Center for Education Statistics (NCES) defines a nonresident alien as "a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely." In this report, nonresident aliens are labeled as international students.

⁵ For graduate-level of study, STEM includes life and physical sciences, math, engineering, and computer science.

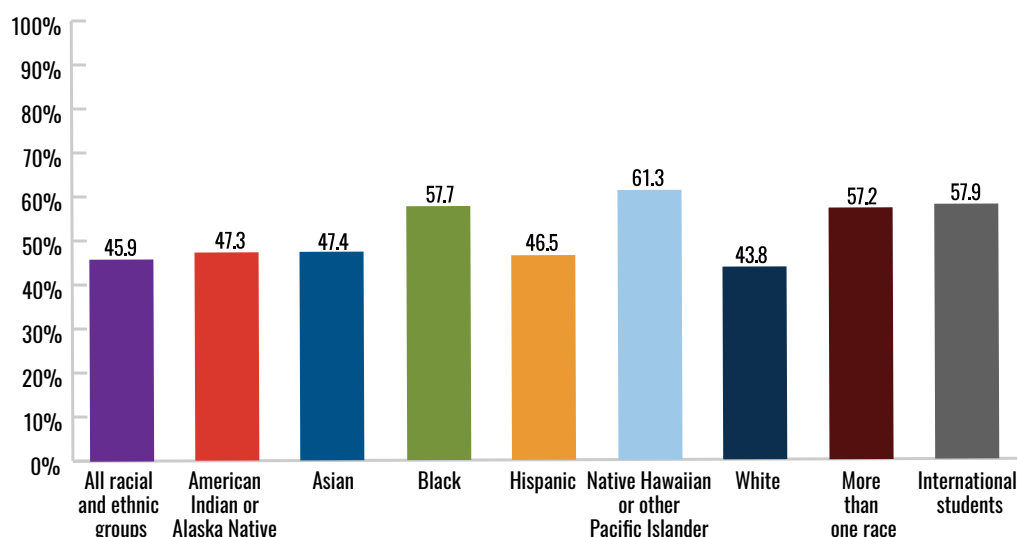
⁶ Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

GRADUATE ENROLLMENT RATES OF BACHELOR'S DEGREE RECIPIENTS

Data on the graduate enrollment rates of bachelor's degree recipients—those who enrolled in a graduate program following bachelor's degree attainment—come from the U.S. Department of Education's latest Baccalaureate and Beyond Study (B&B). The B&B data presented here will follow a cohort of students who earned bachelor's degrees in 2007–08 for 10 years after they completed college. The current dataset allows analysis of student activity four years after earning a bachelor's degree.

Nearly 46 percent of all 2007–08 bachelor's degree earners enrolled in a graduate program within four years of graduation, although there exists variation by race and ethnicity. Graduate enrollment rates of bachelor's degree earners were highest among Native Hawaiian or other Pacific Islander students (61.3 percent), international students (57.9 percent), Black students (57.7 percent), and students of more than one race (57.2 percent). The lowest graduate enrollment rate of bachelor's degree recipients was among White students (43.8 percent).

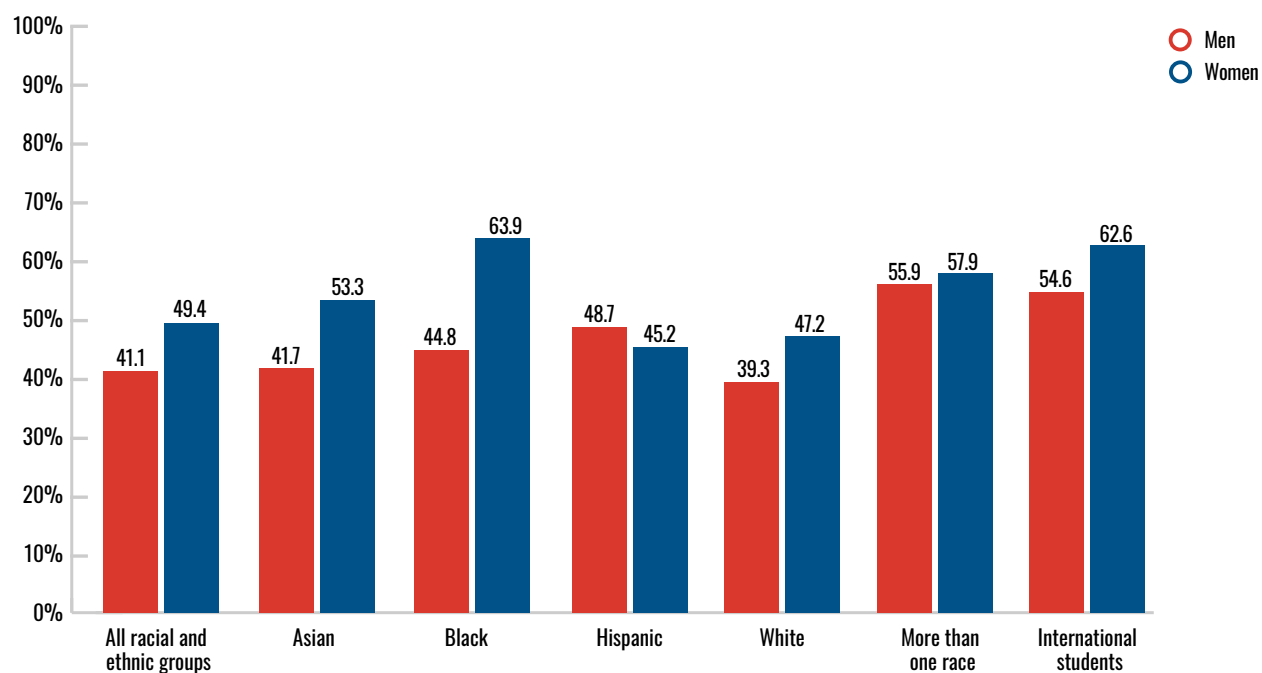
Figure 4.1: Graduate Enrollment Rates of 2007–08 Bachelor's Degree Recipients, by Race and Ethnicity: 2012



Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B: 08/12

Generally, the graduate enrollment rate of bachelor's degree recipients was higher among women than men, with the exception of Hispanic students, where men had a slightly higher enrollment rate (48.7 percent) than women (45.2 percent). The graduate enrollment rate of Black women was 19.1 percentage points higher than that of Black men—the largest gender gap within any racial or ethnic group.

Figure 4.2: Graduate Enrollment Rates of 2007–08 Bachelor's Degree Recipients, by Gender and Race and Ethnicity: 2012

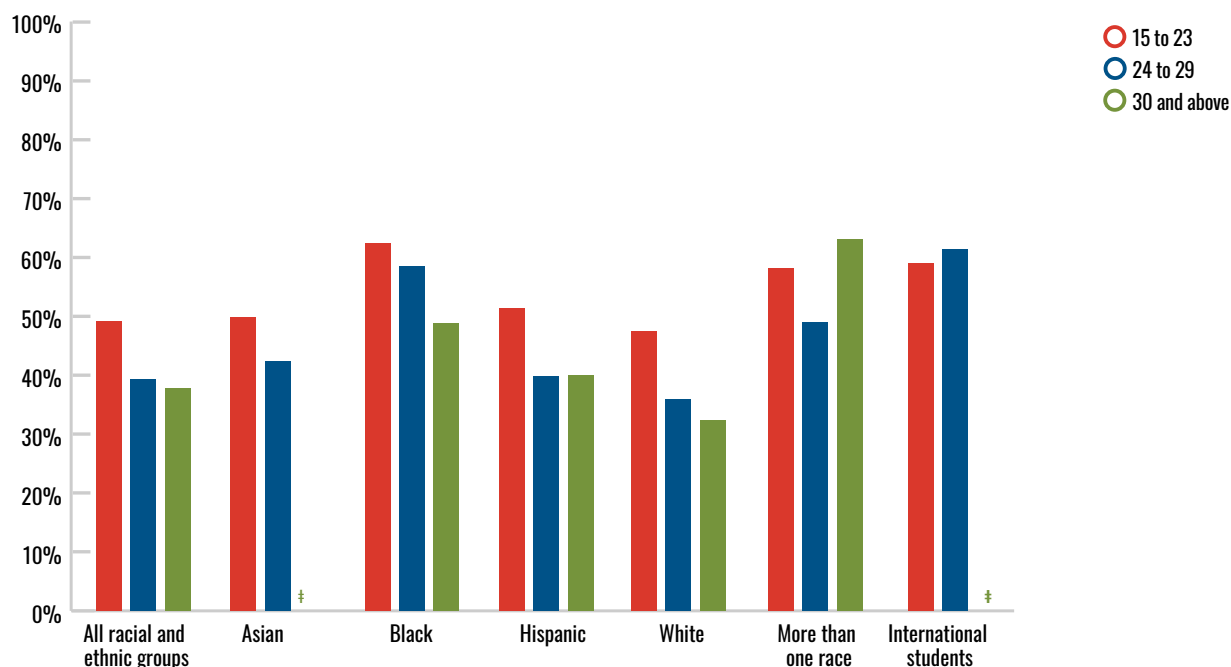


Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B 08/12

Note: Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or other Pacific Islander." Reporting standards not met.

Overall, nearly half of all bachelor's degree recipients between the ages of 15 and 23 (49.2 percent) enrolled in graduate education within four years, higher than the rate among 24- to 29-year-olds (39.3 percent) and those who graduated from college at ages 30 or older (37.7 percent). Across nearly every student group, 15- to 23-year-olds had higher graduate enrollment rates than older students, with the exception of individuals of more than one race and international students.

Figure 4.3: Graduate Enrollment Rates of 2007–08 Bachelor's Degree Recipients, by Age and Race and Ethnicity: 2012

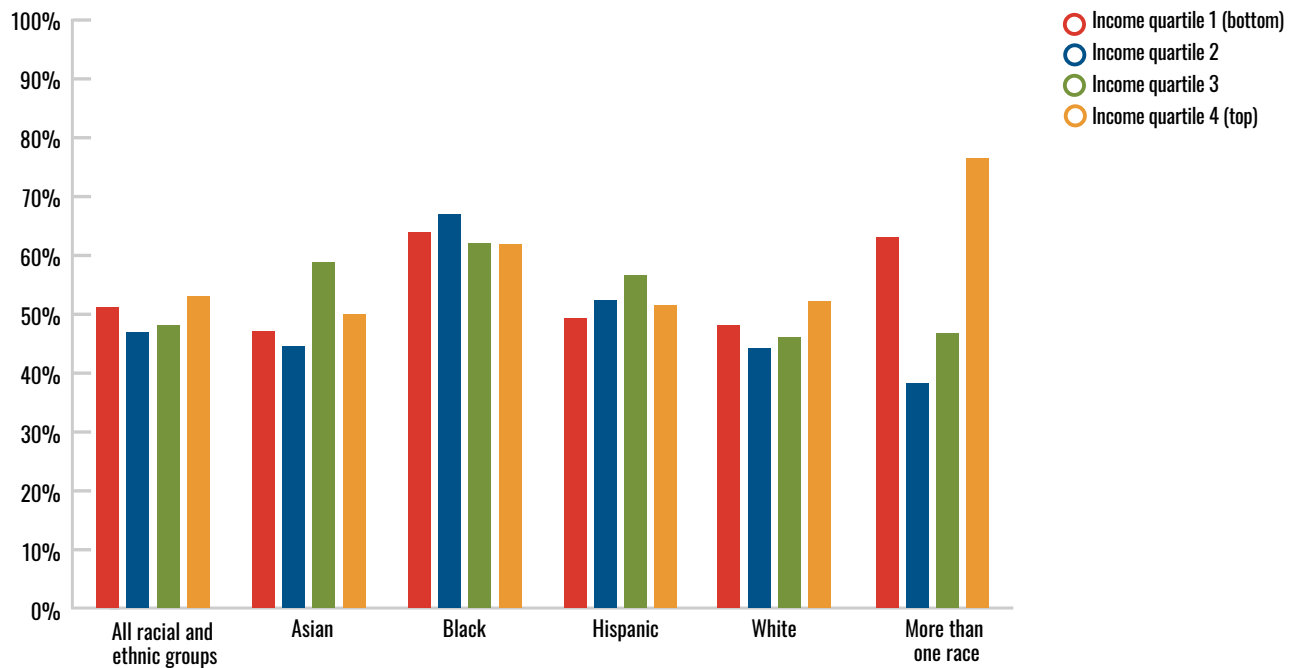


Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B 08/12

Notes: ‡ Estimate suppressed. Reporting standards not met. | Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or Pacific Islander." Reporting standards not met.

Among dependent students,⁷ graduate school enrollment rates did not differ substantially across income groups. In most groups, the lowest-income students were slightly less likely than the most affluent students to go to graduate school (51.0 percent and 52.9 percent, respectively). Among Black bachelor's degree recipients, the pattern was reversed, but the differences remained small, where 63.8 percent of lowest-income students compared with 61.7 percent of students from highest-income families enrolled in graduate school.

Figure 4.4: Graduate Enrollment Rates of 2007–08 Bachelor's Degree Recipients (Dependent Students), by Income and Race and Ethnicity: 2012



Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B: 08/12

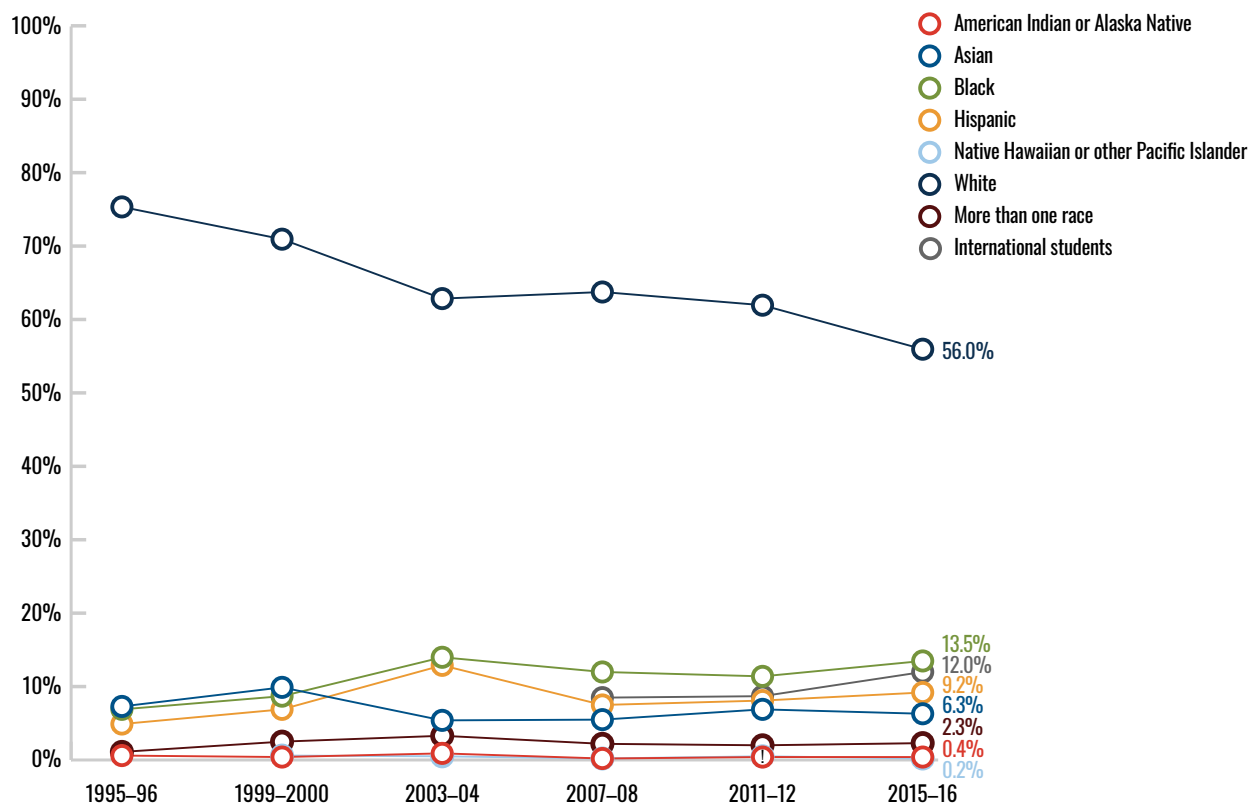
Note: Estimates suppressed for "American Indian or Alaska Native," "Native Hawaiian or other Pacific Islander," and "international students." Reporting standards not met.

⁷ Students in the National Postsecondary Student Aid Survey (NPSAS) are considered dependent if they are "under 24 years of age who are unmarried, do not have dependents, are not veterans or on active military duty, are not orphans or wards of the court, are not homeless or at risk of homelessness, and have not been deemed independent by a financial aid officer" (Radwin et al. 2018).

GRADUATE ENROLLMENT: 1995–96 TO 2015–16

Graduate students became a more diverse group between 1995–96 and 2015–16. As a share of total graduate enrollment, international student enrollment increased 8.2 percentage points, Black student enrollment increased by 6.7 percentage points, and Hispanic student enrollment increased 4.3 percentage points. White enrollment as a share of the total declined, but that group still represented the majority of graduate enrollment in the United States in 2015–16 (56.0 percent).

Figure 4.5: Graduate Enrollment, by Race and Ethnicity, Select Years: 1995–96 to 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996, 2000, 2004, 2008, 2012, and 2016

Notes: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | Students in NPSAS:00 and NPSAS:04 were not identified separately by international status. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

Women represented the majority of graduate students in 1995–96, both overall (53.6 percent) and within all groups other than Asian students, students of more than one race, and international students. However, by 2015–16, women were the majority in every group except international students, among whom 62.1 percent were men.

Table 4.1: Graduate Enrollment, by Gender and Race and Ethnicity: 1995–96 and 2015–16

		Men	Women
1995–96	All racial and ethnic groups	46.4%	53.6%
	American Indian or Alaska Native	38.0%	62.0%
	Asian	57.5%	42.5%
	Black	36.5%	63.5%
	Hispanic	44.3%	55.7%
	Native Hawaiian or other Pacific Islander	N/A	N/A
	White	45.1%	54.9%
	More than one race	54.2%	45.8%
	International students	70.4%	29.6%
2015–16	All racial and ethnic groups	40.7%	59.3%
	American Indian or Alaska Native	39.8%	60.2%
	Asian	42.6%	57.4%
	Black	29.8%	70.2%
	Hispanic	39.2%	60.8%
	Native Hawaiian or other Pacific Islander	41.5%!	58.5%
	White	38.9%	61.1%
	More than one race	37.9%	62.1%
	International students	62.1%	37.9%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996 and 2016

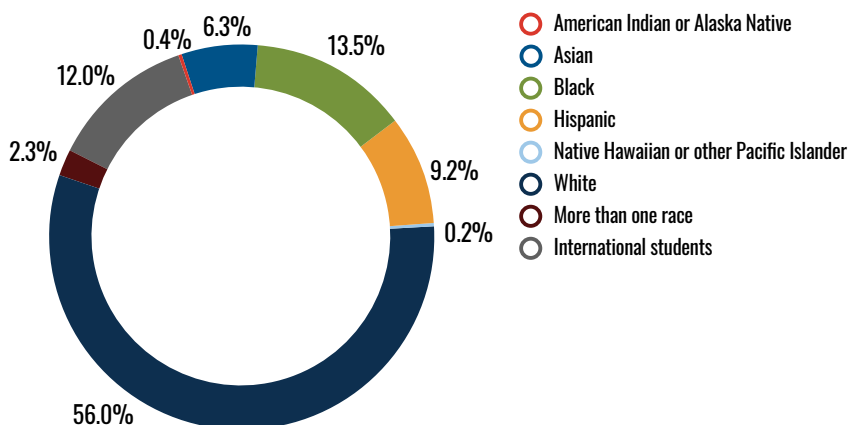
Notes: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among individuals of more than one race, women represented 62.1 percent in 2015–16, an increase from 45.8 percent in 1995–96, and the largest increase among all women during this period.
- The majority of all Asian graduate students in 2015–16 were women (57.4 percent), an increase of 14.9 percentage points from 1995–96.
- Between 1995–96 and 2015–16, the gap between Black men and Black women enrolled in graduate education widened from 26.9 percentage points to 40.4 percentage points.

GRADUATE ENROLLMENT: 2015–16

In 2015–16, 56.0 percent of all graduates students were White, 32.0 were domestic students of color,⁸ and 12.0 percent were international students.

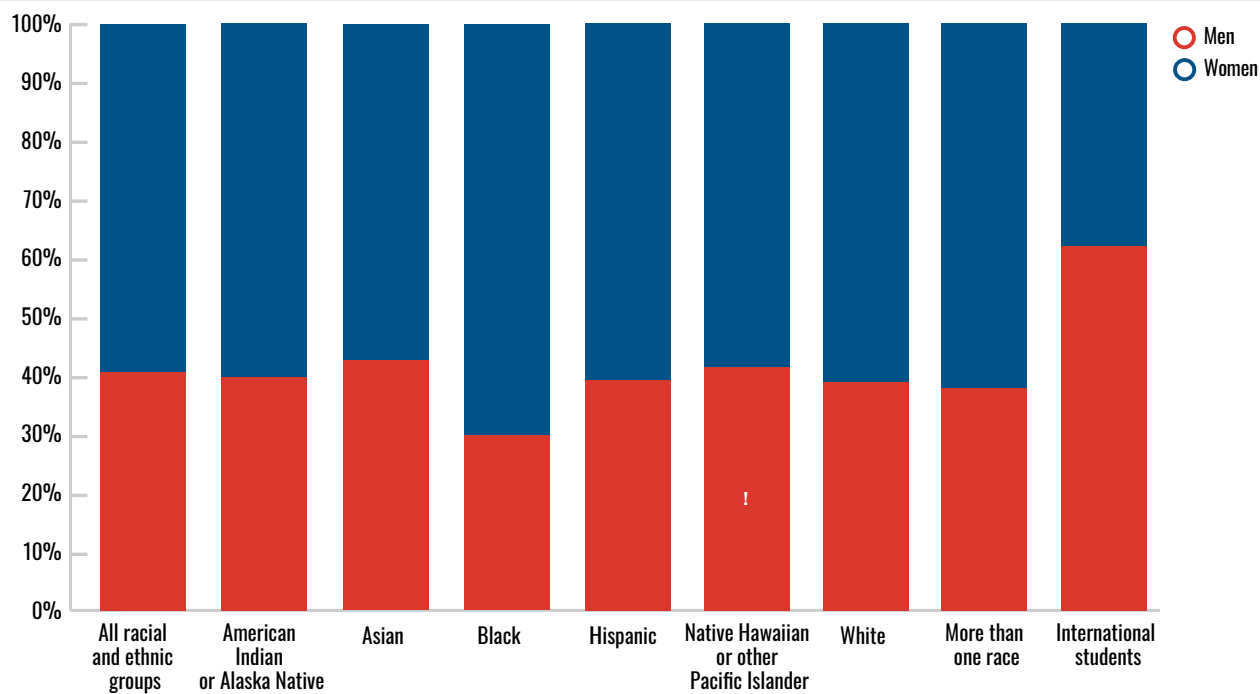
Figure 4.6: Graduate Enrollment, by Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Women represented over half of all graduate students in 2015–16 (59.3 percent), while men represented 40.7 percent. With the exception of international students, the majority of graduate students across all groups were women. The widest gap, by far, occurred for Black students, followed by students of more than one race, and by White, Hispanic, and American Indian or Alaska Native students.

Figure 4.7: Graduate Enrollment, by Gender and Race and Ethnicity: 2015–16



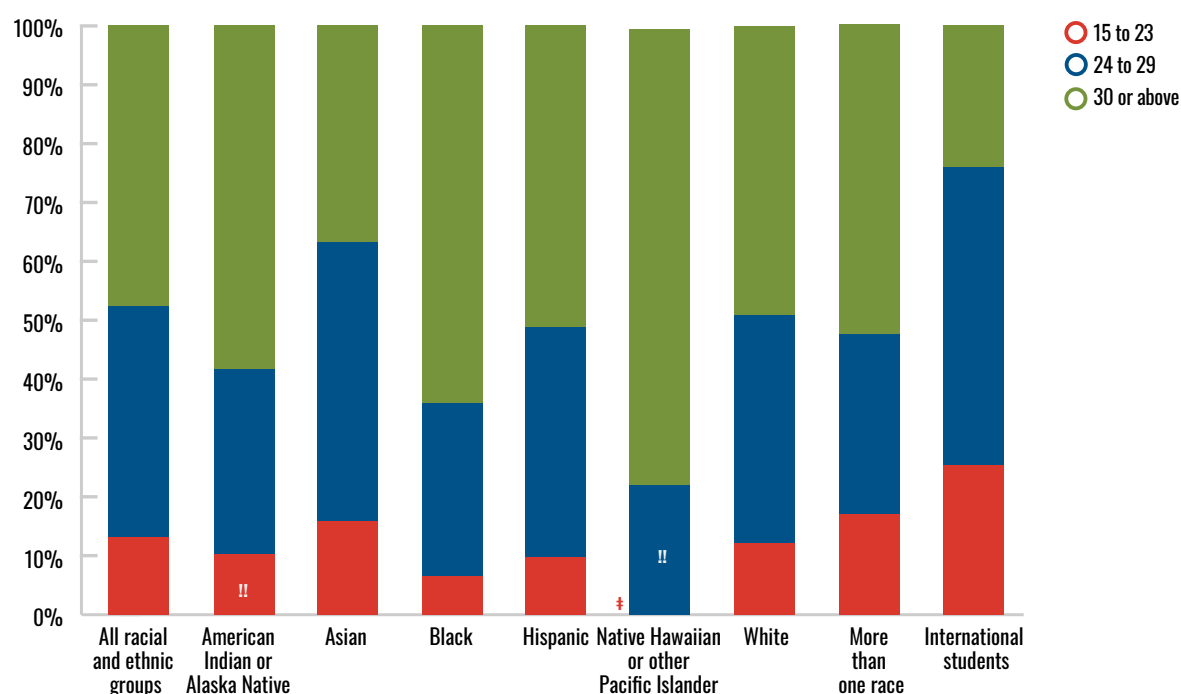
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016
Note: ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

⁸ The group students of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and students of more than one race.

- The widest gap in graduate enrollment occurred for Black students, among whom 70.2 percent were women and 29.8 percent were men.
- The smallest gender gap occurred for Asian students, where women represented 57.4 percent of graduate students in this group, compared with 42.6 percent men.
- The only group for which men represented the majority was international students, where men constituted 62.1 percent of graduate enrollment, compared with 37.9 percent women.

In 2015–16, more than half of all graduate students were under the age of 30 (52.3 percent): 39.2 percent were 24 to 29 years old and 13.1 percent between 15 and 23 years old. Adults ages 30 and older represented 47.7 percent of all graduate students.

Figure 4.8: Graduate Enrollment, by Age and Race and Ethnicity: 2015–16

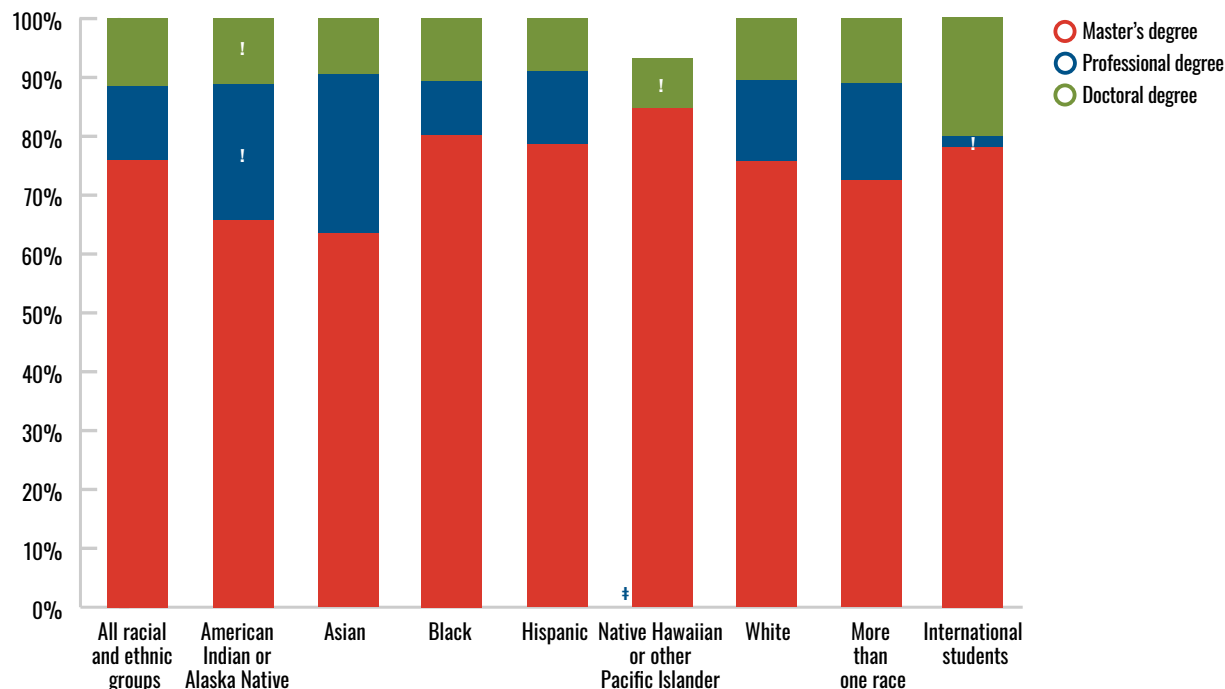


Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016
 Notes: ‡ Estimate suppressed. Reporting standards not met. | !! Interpret with caution. Ratio of standard error is > 50%.

- About one-quarter of all international graduate students were ages 23 or younger, a larger share than among any domestic racial or ethnic group. Only 6.5 percent of Black graduate students and 9.8 percent of Hispanic graduate students were this young, compared with 15.8 percent of Asian students.
- More than three-quarters of Native Hawaiian or other Pacific Islander graduate students and 64.1 percent of Black students were ages 30 or older. In contrast, 24.0 percent of international and 36.8 percent of Asian graduate students were in this older age range.
- Nearly half of all Asian graduate students were between 24 and 29 years old (47.4 percent).

In 2015–16, three-quarters of graduate students were enrolled in master’s degree programs (75.9 percent), 12.5 percent were in professional degree programs, and 11.6 percent were in doctoral degree programs.

Figure 4.9: Graduate Enrollment, by Program Level and Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

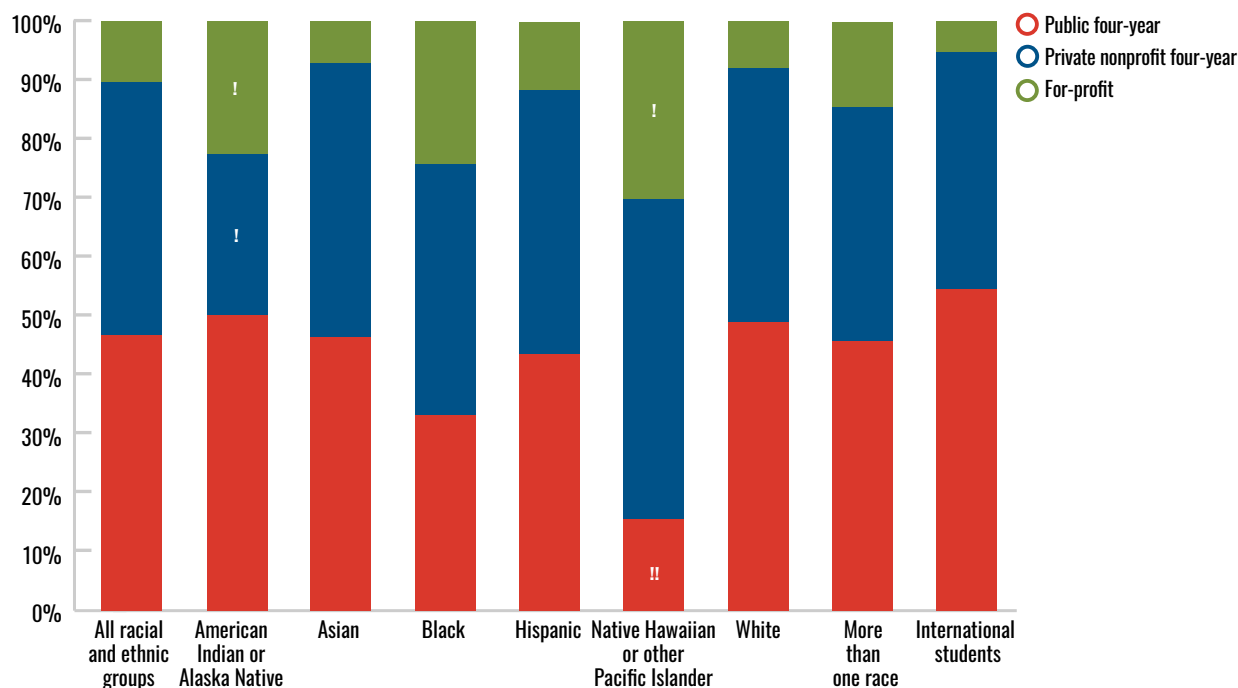
Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error is >30% but <50%.

- One in five international graduate students was enrolled in doctoral degree programs (20.2 percent)—the highest among all student groups.
- More than one-quarter of Asian students were enrolled in professional programs (27.0 percent)—the highest among all groups.
- Less than 10 percent of all Black graduate students were enrolled in professional programs—the lowest percent among all domestic graduate students.

GRADUATE ENROLLMENT ACROSS INSTITUTIONAL SECTORS

A little less than half of all 2015–16 graduate students were enrolled in public four-year universities (46.7 percent), 43.0 percent attended private nonprofit four-year universities, and 10.3 percent were in for-profit institutions. However, the distributions were quite different across racial and ethnic groups.

Figure 4.10: Graduate Enrollment Across Sectors, by Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Black graduate students were the least likely of any group to be enrolled in a public four-year institution. One-third of Black graduate students were enrolled in public four-year institutions (33.1 percent).
- Nearly one-quarter (24.3 percent) of Black graduate students attended a for-profit institution, compared with Hispanic (11.6 percent), White (7.9 percent), Asian (7.1 percent), and international (5.2 percent) students.

Men were slightly more likely than women to be enrolled in public four-year institutions (48.0 percent and 45.7 percent, respectively). Women were more likely to be enrolled in for-profit institutions than men (12.0 percent and 7.8 percent, respectively). Enrollment patterns differed by student group, particularly for enrollment in for-profit institutions.

Table 4.2: Graduate Enrollment Across Sectors, by Gender and Race and Ethnicity: 2015–16

		Public Four-Year	Private Nonprofit Four-Year	For-Profit
Men	Men Total	48.0%	44.1%	7.8%
	American Indian or Alaska Native	74.5%	13.0%!!	12.5%!!
	Asian	46.2%	47.1%	6.7%
	Black	35.3%	44.4%	20.3%
	Hispanic	46.2%	45.4%	8.3%
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	47.4%	45.8%	6.8%
	More than one race	48.6%	41.1%	10.1%
	International students	58.2%	38.2%	3.6%
Women	Women Total	45.7%	42.2%	12.0%
	American Indian or Alaska Native	34.0%!	36.7%!	29.3%!
	Asian	46.5%	46.1%	7.3%
	Black	32.2%	41.8%	26.0%
	Hispanic	41.9%	44.2%	13.8%
	Native Hawaiian or other Pacific Islander	21.3%!!	52.0%!!	26.8%!!
	White	49.9%	41.5%	8.6%
	More than one race	44.0%	38.8%	17.1%
	International students	48.5%	43.7%	7.7%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- The majority of international men were enrolled in public four-year institutions (58.2 percent), compared with just under half of all international women (48.5 percent).
- Over one-quarter of Black women were enrolled at for-profit institutions in 2015–16 (26.0 percent), compared with 7.3 percent of Asian women, 8.6 percent of White women, and 13.8 percent of Hispanic women.
- A smaller share of Black men (20.3 percent) than Black women attended for-profit institutions, but the patterns across groups were similar, with 6.7 percent of Asian men, 6.8 percent of White men, and 8.3 percent of Hispanic men enrolled in this sector.

The most notable difference in enrollment by age, race, and sector was in the type of institutions where older students chose to enroll. Namely, for students who were ages 30 or above, graduate enrollment in for-profit institutions grew, in some cases dramatically. About 16 percent of these students were enrolled in for-profit institutions, compared with graduate students ages 23 or younger (3.0 percent) and those 24 to 29 years old (5.6 percent).

Table 4.3: Graduate Enrollment Across Sectors, by Age and Race and Ethnicity: 2015–16

		Public Four-Year	Private Nonprofit Four-Year	For-Profit
15 to 23	15 to 23 Total	55.5%	41.4%	3.0%
	American Indian or Alaska Native	‡	‡	‡
	Asian	52.8%	45.5%	1.7%!
	Black	41.8%	48.9%	9.2%!!
	Hispanic	47.2%	47.7%	5.2%!!
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	57.2%	41.3%	1.5%
	More than one race	44.3%!	43.5%!	12.0%!!
	International students	60.5%	36.2%	3.2%
24 to 29	24 to 29 Total	49.9%	44.5%	5.6%
	American Indian or Alaska Native	‡	‡	‡
	Asian	48.0%	47.7%	4.3%
	Black	39.0%	46.5%	14.5%
	Hispanic	51.0%	43.4%	5.4%
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	51.1%	44.8%	4.1%
	More than one race	55.1%	33.9%	11.0%!!
	International students	52.1%	42.8%	5.0%
30 or Above	30 or Above Total	41.6%	42.2%	16.3%
	American Indian or Alaska Native	37.2%	32.4%!	30.3%
	Asian	41.5%	45.5%	13.0%
	Black	29.5%	40.1%	30.3%
	Hispanic	37.3%	45.1%	17.5%
	Native Hawaiian or other Pacific Islander	‡	60.0%	36.1%!
	White	45.1%	42.4%	12.5%
	More than one race	40.9%	41.9%	17.3%
	International students	53.1%	39.2%	7.7%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Older graduate students were less likely than younger students to be enrolled in public four-year universities. Among Hispanic graduate students, 51.0 percent of those ages 24 to 29 attended public four-year institutions in 2015–16, compared with 37.3 percent of those ages 30 or older. Similarly, these shares were 55.1 percent and 40.9 percent among those of more than one race.
- African American students were the most likely to choose for-profit institutions at later ages. In 2015–16, a little less than one-third of Black students ages 30 and older were enrolled in for-profit institutions (30.3 percent), compared with 14.5 percent of those ages 24 to 29.

GRADUATE ENROLLMENT BY PROGRAM TYPE

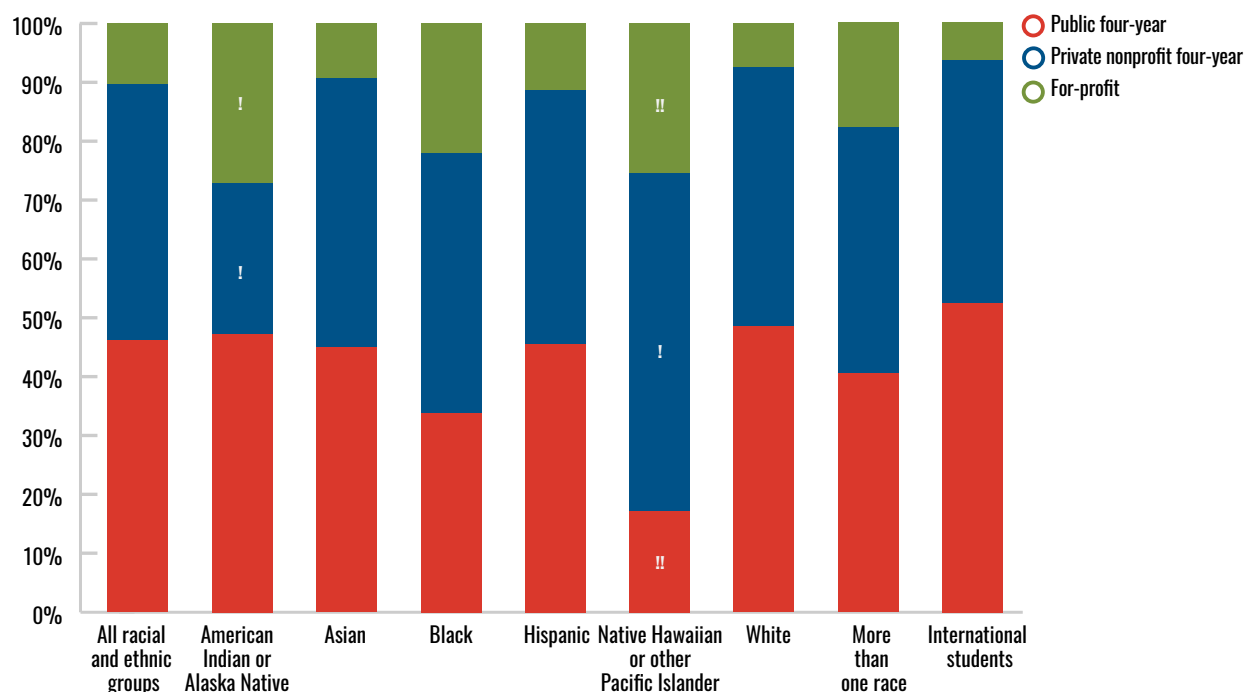
Similar to differences seen in undergraduate enrollment (as shown in Chapter 3 of this report, “Enrollment in Undergraduate Education”), we see great variation by student group in where, how, and which students enroll in graduate education. The most notable differences occurred at the intersection of race, gender, and international status.

Master’s Degree Programs

HIGHER EDUCATION SECTOR

By sector, all student groups predominantly enrolled in a master’s degree program at a public four-year (46.1 percent) or private nonprofit four-year (43.5 percent) institution, compared with for-profit institutions (10.3 percent) in 2015–16. Notable differences emerged when looking at enrollment by student group, particularly in the shares attending for-profit institutions.

Figure 4.11: Graduate Enrollment in Master’s Degree Programs Across Sectors, by Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50% | !! Interpret with caution. Ratio of standard error is > 50%.

- Over half of all international students in master’s degree programs were enrolled in public four-year institutions (52.5 percent), compared with 33.8 percent of all Black students.
- Larger shares of Black students (22.2 percent), those of more than one race (17.8 percent), and Hispanic students (11.5 percent) were enrolled at for-profit institutions. Comparatively, less than 10 percent of all Asian (9.3 percent), White (7.5 percent), and international (6.3 percent) students were enrolled at for-profit institutions in 2015–16.

FIELD OF STUDY

In 2015–16, students pursuing a master's degree were concentrated in business and management (21.4 percent), education (18.2 percent), and STEM (16.6 percent) programs. The differences between international and domestic students were sharp. In particular, international students were much more likely to be enrolled in programs in STEM and much less likely to be studying education.

Table 4.4: Graduate Enrollment in Master's Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	16.6%	21.4%	18.2%	16.0%	8.7%	6.5%	0.6%	12.0%
American Indian or Alaska Native	25.5%!!	15.8%!!	8.5%!!	15.9%!!	17.2%!!	‡	‡	10.1%!!
Asian	24.6%	24.5%	10.8%	19.2%	6.3%	6.5%!	1.2%!!	6.9%
Black	7.4%	22.2%	18.4%	19.8%	8.1%	6.8%	0.6%!!	16.7%
Hispanic	12.1%	25.4%	16.0%	15.2%	9.1%	10.0%	0.2%!!	11.9%
Native Hawaiian or other Pacific Islander	‡	21.7%!!	‡	32.9%!!	‡	‡	‡	6.1%!!
White	11.2%	19.9%	22.7%	17.5%	9.7%	6.6%	0.4%!	12.0%
More than one race	11.7%!	23.3%	21.1%!	10.1%	8.0%!	9.5%!	‡	16.1%
International students	51.0%	22.3%	3.4%	5.1%	5.8%	2.5%	1.5%!!	8.4%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50% | !! Interpret with caution. Ratio of standard error is > 50%.

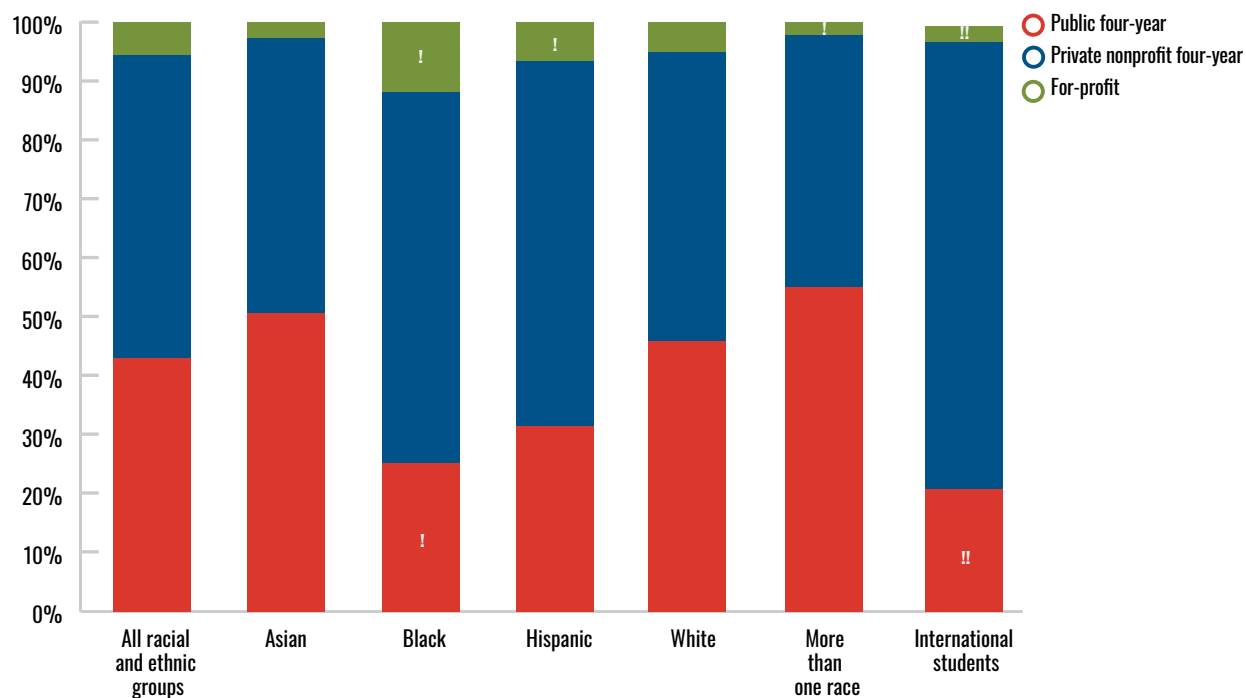
- Almost one-quarter of all Asian students (24.6 percent) and half of all international students (51.0 percent) seeking a master's degree were enrolled in STEM programs, compared with fewer than one in 10 Black students (7.4 percent).
- A larger share of White students sought master's degrees in education (22.7 percent), compared with only 10.8 percent of Asians and 3.4 percent of international students.

Professional Degree Programs

HIGHER EDUCATION SECTOR

More than half of students seeking professional degrees (e.g., law and medical fields) were enrolled in private nonprofit four-year institutions (51.4 percent) in 2015–16, 43.0 percent were enrolled in public four-year institutions, and 5.6 percent at for-profit institutions. As with other program types, there was great variation by race and ethnicity, as well as international status, as to where students were enrolled.

Figure 4.12: Graduate Enrollment in Professional Degree Programs Across Sectors, by Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or other Pacific Islander." Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- In 2015–16, three-quarters of international students seeking professional degrees attended private nonprofit four-year institutions (75.8 percent), the most of any group.
- The majority of Hispanic (61.8 percent) and Black students (62.9 percent) were also enrolled in private nonprofit four-year institutions.
- More than half of all students of more than one race (55.1 percent) and half of all Asian students (50.6 percent) were enrolled in public four-year institutions.

FIELD OF STUDY

Health fields and law were by far the most prevalent fields for students pursuing professional degrees in 2015–16. Over half of all students in these programs sought a health degree (57.2 percent) and more than one-quarter sought a law degree (27.1 percent). These patterns were similar across race and ethnicity and international status.

Table 4.5: Graduate Enrollment in Professional Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	7.2%	0.7%!	0.6%!	57.2%	1.9%	3.9%	27.1%	1.4%
American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡
Asian	13.7%	‡	‡	60.5%	0.9%!!	4.1%!!	19.1%	1.5%!!
Black	7.8%	1.2%!!	0.9%!!	57.4%	1.0%!!	3.6%!!	27.2%!	0.9%!!
Hispanic	4.4%!!	‡	0.8%!!	46.2%	2.4%!!	7.4%!!	37.6%	1.1%!!
Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡
White	6.5%	1.0%!	0.5%!!	57.5%	2.3%	3.3%	27.4%	1.5%!
More than one race	2.8%!!	‡	‡	54.6%	‡	8.2%!!	32.0%!	1.5%!!
International students	1.3%!!	‡	‡	80.4%	‡	‡	17.1%!!	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

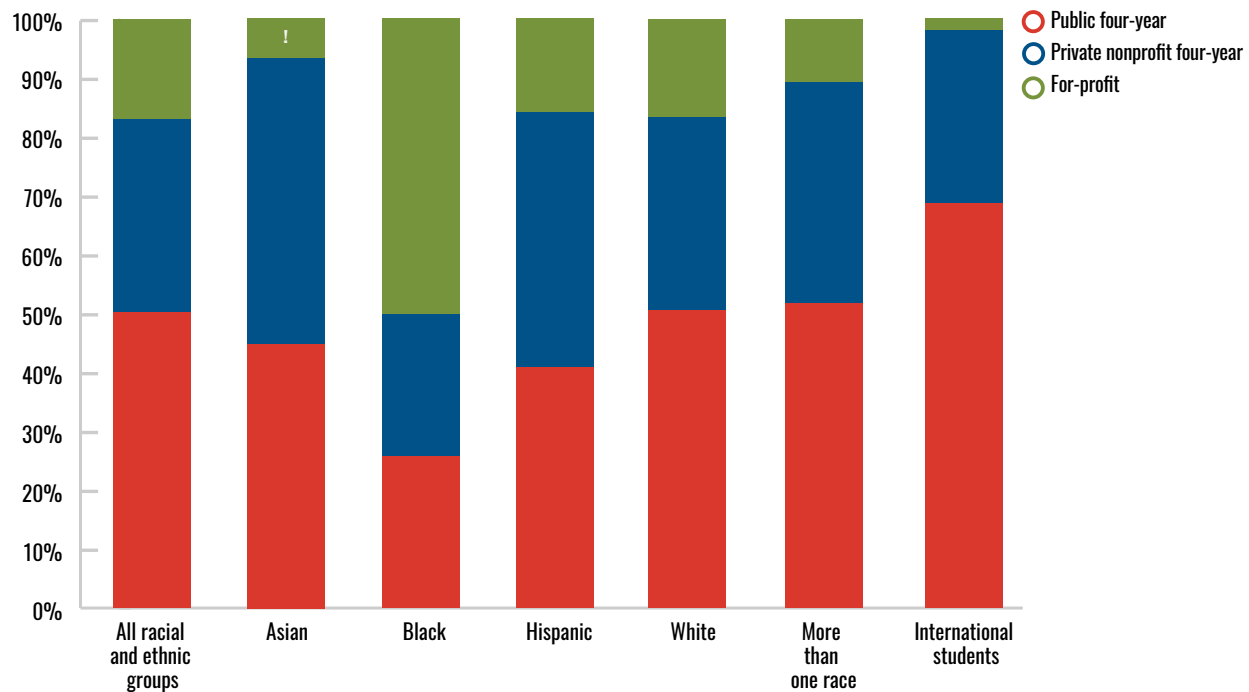
- The majority of international students who sought professional degrees were enrolled in health programs (80.4 percent), compared with less than half of all Hispanic students (46.2 percent).
- Hispanic students were more likely than other groups to pursue law degrees (37.6 percent).

Doctoral Degree Programs

HIGHER EDUCATION SECTOR

At the doctoral level, about half of all students were enrolled at public four-year institutions (50.2 percent). A little less than one-third were enrolled at private nonprofit four-year universities (32.7 percent), and 17.1 percent attended for-profit institutions. There was great variation by race, ethnicity, and international status.

Figure 4.13: Graduate Enrollment in Doctoral Degree Programs Across Sectors, by Race and Ethnicity: 2015–16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or other Pacific Islander." Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- In 2015–16, half of African American students were enrolled in a for-profit institution for their doctoral programs (50.1 percent)—a much higher share than for any other group. In contrast, 16.6 percent of White doctoral students, 15.8 percent of Hispanic students, and just 1.9 percent of international doctoral students were enrolled in this sector.
- International students were much more likely than other groups to be enrolled at public four-year institutions (68.6 percent).
- A larger share of Asian students were enrolled in private nonprofit four-year institutions than any other group (48.4 percent).

FIELD OF STUDY

Nearly one-third of all students pursuing a doctoral degree in 2015–16 enrolled in STEM fields (31.4 percent). Almost one in five were studying education (18.2 percent), 15.3 percent were in social and behavioral sciences, 10.6 percent were in humanities fields, and 9.9 percent were in health fields.

Table 4.6: Graduate Enrollment in Doctoral Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	31.4%	7.3%	18.2%	9.9%	10.6%	15.3%	0.5%!	6.8%
American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡
Asian	28.7%	4.7%!	7.5%!	18.0%!	5.7%!	22.9%	‡	12.4%!
Black	13.5%!	14.6%	30.0%	8.0%!	5.2%!	14.0%	‡	14.5%
Hispanic	18.3%	9.6%!	18.0%	17.2%	8.2%	25.1%	‡	3.2%!
Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡
White	27.0%	5.7%	22.8%	8.9%	12.4%	16.2%	0.6%!	6.3%
More than one race	21.6%	2.9%!	18.8%	4.2%!	20.8%	27.1%	‡	3.0%!
International students	59.0%	6.7%!	3.3%	9.5%!	10.9%!	7.1%	0.4%!	3.0%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- In 2015–16, slightly less than one-third of African Americans seeking doctoral degrees were enrolled in education (30.0 percent), compared with 22.8 percent of White students, 18.0 percent of Hispanic students, and only 3.3 percent of international students.
- The majority of international students were enrolled in STEM programs (59.0 percent), and more than one-quarter of Asian students (28.7 percent) and of White students (27.0 percent) were enrolled in these programs—the three groups most likely to be enrolled in STEM fields.
- A larger share of Hispanic students (25.1 percent) and students of more than one race (27.1 percent) were enrolled in social and behavioral sciences than White (16.2 percent), Black (14.0 percent), and international (7.1 percent) students.

REFERENCES

- Betancourt, Joseph R., Alexander R. Green, J. Emilio Carrillo, and Owusu Ananeh-Firempong II. 2003. "Defining Cultural Competence: A Practical Framework for Addressing Racial/Ethnic Disparities in Health and Health Care." *Public Health Reports* 118 (4): 293–302. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497553/pdf/12815076.pdf>.
- Boutin-Foster, Carla, Jordan C. Foster, and Lyuba Konopasek. 2008. "Viewpoint: Physician, Know Thyself: The Professional Culture of Medicine as a Framework for Teaching Cultural Competence." *Academic Medicine* 83 (1): 106–11. <https://pdfs.semanticscholar.org/fd95/f99052790785ecdc5c11c055304b3848c95.pdf>.
- Council of Graduate Schools. 2017. *Master's Degree Requirements and the U.S. Workforce*. Washington, DC: Council of Graduate Schools. [https://cgsnet.org/ckfinder/userfiles/files/Masters_Degree_Requirements_and_the_US_Workforce\(1\).pdf](https://cgsnet.org/ckfinder/userfiles/files/Masters_Degree_Requirements_and_the_US_Workforce(1).pdf).
- NCES (National Center for Education Statistics). 2017a. *Digest of Education Statistics 2017*, Table 303.70. Washington, DC: U.S. Department of Education, NCES. https://nces.ed.gov/programs/digest/d17/tables/dt17_303.70.asp.
- NCES (National Center for Education Statistics). 2017b. *Digest of Education Statistics 2017*, Table 303.80. Washington, DC: U.S. Department of Education, NCES. https://nces.ed.gov/programs/digest/d17/tables/dt17_303.80.asp.
- Radwin, David, Johnathan G. Conzelmann, Annaliza Nunnery, T. Austin Lacy, Joanna Wu, Stephen Lew, Jennifer Wine, and Peter Siegel. 2018. *2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16*. NCES 2018-466. Washington, DC: U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>.