June 2019

Closing the College Graduation Gap

Enrollment and Completion Outcomes by Race/Ethnicity and Gender
Introduction

NCAN, with the help of its members, engaged in a five-year project to examine the postsecondary enrollment and completion outcomes of students served by college access and success programs. The Benchmarking Project found that NCAN member-served students’ postsecondary enrollment outcomes exceed those of their peers and students from most high school types nationally. Member-served students’ completion outcomes exceed those of their peers but have consistently trailed behind national benchmarks. The Benchmarking Project represents an important commitment to measuring and reporting outcomes. Its findings are suggestive that NCAN members are making progress toward their mission of helping students underrepresented on college campuses.

Although NCAN has released race/ethnicity and gender benchmarks for students served by members and compared these against national benchmarks for the past five years, this brief includes, for the first time, outcomes cross-tabulated by race/ethnicity and gender and by starting institution type. Members’ programming may benefit from having race by gender benchmarks against which they can compare their own outcomes.

Data and Comparison of Samples

Data for this brief primarily come from two sources. The first is NCAN’s 2018 National College Access and Success Benchmarking Report. This report from the fifth round of NCAN’s Benchmarking Project includes data from 69 member organizations and over 108,000 students from the high school classes of 2011 and 2016. The NCAN members that participated in the Benchmarking Project submitted student-level data through the StudentTracker service from the National Student Clearinghouse (NSC). The National Student Clearinghouse Research Center (NSCRC) matched the student data submitted by NCAN members with NSC enrollment and completion information for those same students and aggregated these data to create enrollment and completion rates for students served by these programs. NSCRC also identified the characteristics of the postsecondary institution at which the students first enrolled. NCAN members also submitted information on students’ demographics and services received.

The second source of data is the NSCRC’s Signature Report No. 14 “Completing College: A National View of Student Completion Rates – Fall 2011 Cohort.”2,3 This report examines the six-year outcomes of students who began their postsecondary education in fall 2011. The sample for this report includes about 2.3 million students from across the country. The NSCRC describes its sample as “near-census national coverage” given that the NSC’s data include more than 3,600 institutions and nearly 97% of enrollments in the U.S.

Before presenting the race/ethnicity by gender benchmarks, we first compare the NCAN Benchmarking Project sample to the NSCRC sample. Both samples examine students who first enrolled in postsecondary education in the fall of 2011. In the NCAN sample, these are all students from the high school class of 2011, but the NSCRC is defined instead by when students started their postsecondary careers. Figure 1 shows the percentage of students in each sample who started at two- and four-year public institutions and four-year private, nonprofit institutions.4

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3 Wherever this brief refers to the NSCRC sample, this is the report being referenced.

4 We restrict this comparison to these three institution types because of their overwhelming prevalence in both samples. For example, just 1% of students in the NCAN class of 2011 sample attended an institution outside of one of these three types.
Among fall 2011 enrollers in the NCAN sample, 29% enrolled at public two-year institutions, a rate lower than the 33% seen in the corresponding NSCRC sample. NCAN member-served students were 12 percentage points more likely to attend four-year public institutions than students in the NSCRC sample. Fewer students in the NCAN sample—just 12%—first enrolled at private, four-year, nonprofit institutions. Overall, this pattern likely reflects a preference among NCAN member programs of steering students toward both bachelor’s degrees and more affordable postsecondary pathways; paying in-state tuition at a four-year public institution is the pathway that best satisfies this preference.

We also consider differences in the samples’ racial and ethnic composition. This comparison appears in Figure 2.
The racial/ethnic composition varies widely between the NCAN and NSCRC samples. The proportion of White students in the NSCRC sample (66%) more than triples the portion of White students in the NCAN sample (18%), reflecting members’ commitments to serving students underrepresented in postsecondary education. Hispanic students (47%) and Black students (25%) are those predominantly served by members, and these two groups comprise nearly 75% of the NCAN sample. In the NSCRC’s national comparison, these groups together make up less than one-third of the sample. The proportion of Asian students in the NCAN sample is slightly higher than the national comparison.

The differential composition of the two samples has implications for comparing the Benchmarking Project’s six-year completion rate with a similar rate at the national level. Although NCAN members have succeeded in helping students of color complete at rates higher than their peers nationally, these students still complete at rates lower than White students nationally, who also comprise a much larger proportion of the national sample. This arithmetical challenge makes closing the completion gap between the NCAN and the national completion rate more difficult than it would be if the samples were composed similarly.

The NSCRC sample does not include American Indian students because of an insufficient sample size, which makes it impossible to compare the postsecondary outcomes of member-served American Indian students to those nationally. American
Indian students comprise less than 1% of the NCAN sample. Despite this, NCAN still chooses to provide the enrollment rates of American Indian students in this report to: 1) identify potential gender-based enrollment disparities within the group and 2) compare American Indian students’ enrollment outcomes to those of other racial/ethnic groups. Because this group is often excluded from national analyses and NCAN possesses a sample size sufficient for reporting, this brief includes American Indian students' outcomes in the hope that groups serving these students will find having some kind of benchmark valuable. Note that the American Indian student sample is drawn from a smaller number of member programs that serve these students. These findings consequently represent a smaller number of students than other racial and ethnic group samples.

Figure 3 demonstrates that there are also substantial differences in the gender composition of the two samples. The NSCRC sample is more evenly split between male (46%) and female students (54%). In contrast, the NCAN sample has a much larger percentage of female students (64%) than male students (36%). NCAN may examine this phenomenon in future research.

Now that we have compared the two samples and identified their substantial differences, we will proceed to examining enrollment outcomes by race/ethnicity and gender.

Two-Year Public Institutions
Overall, 33% of the NSCRC sample and 29% of the NCAN sample seamlessly first enrolled at a two-year public institution in fall 2011. Figure 4 examines the two samples’ community college enrollment by race/ethnicity and gender. Male and female students from the two samples enrolled in community colleges at comparable rates. Comparing the samples by racial/ethnic groups, male enrollment at community colleges exceeded female student enrollment, but in each case by fewer than 5 percentage points. There was one one exception: American Indian male and female students in the NCAN sample. American Indian female students served by NCAN member organizations enrolled in community colleges at a rate 8 percentage points higher than male students (34% to 26%). While there is no comparison group for American Indian students within the NSCRC sample, we include the figures for NCAN member-served students in Figure 4 because of a general lack of availability in the field of enrollment rate benchmarks for this student group.

Comparing the racial/ethnic and gender combinations between the NCAN and NSCRC samples, the enrollment imbalances are more pronounced. Black male students in the NSCRC sample were 13 percentage points more likely to enroll in two-year, public
institutions than Black male students in the NCAN sample. Similarly, Black female students in the national sample were 16 percentage points more likely to enroll at two-year public institutions than NCAN member-served Black female students. A similar trend exists for Asian and Hispanic students wherein NCAN member-served students from these groups were less likely to enroll in community college than students in the NSCRC sample. This trend did not hold for White students. White male and female students in the NCAN sample enrolled at two-year, public institutions at rates relatively similar to the national benchmark.

In the NSCRC sample, Black and Hispanic students attended public two-year colleges at much higher rates than White and Asian students. NCAN member organizations apparently shifted the matriculation patterns of Black and Hispanic students, which make up the two largest percentages of the NCAN sample. White and Hispanic NCAN member-served students both attended community college at the same rate (30%), and 23% of member-served Black students enrolled in community college. Black and Hispanic students have a long history of attending less selective institutions (often open access community colleges) than they are qualified to attend. This is known as undermatching, and it has been linked to less favorable retention and completion rates. The findings in Figure 4 suggest that NCAN member organizations are working with students to reduce undermatching and increase students’ chances of postsecondary success.

**Four-Year Public Institutions**

Figure 5 shows students served by NCAN member organizations were more likely to enroll in four-year public institutions than students in the NSCRC’s national sample. In the NCAN fall 2011 enrollees sample, 59% of students enrolled in these institutions, compared to 47% of students in the NSCRC sample. Students of all race and gender combinations served by NCAN member organizations exceeded, often by a wide margin, the NSCRC’s national benchmark for enrolling in four-year public institutions. For example, there were enrollment rate gaps of at least 15 percentage points between Black and Hispanic male and female students between the NCAN and NSCRC samples. Additionally, among Asian students served by NCAN members, both male and female students enrolled at four-year, public institutions at rates 17 percentage points higher than the NSCRC sample. Overall, larger percentages of Asian students enrolled in four-year public institutions than any other racial/ethnic group.
This analysis finds that holding race/ethnicity constant, male and female students were about as likely to enroll in these institutions. Within both the NCAN and NSCRC samples, female students of each racial/ethnic group enrolled in four-year, public institutions at rates within 5 percentage points of their male counterparts.

Evidenced by increased enrollment at public four-year institutions, NCAN members appear to be helping traditionally underrepresented students access higher education at higher rates than students in the national sample. For example, Black female enrollment at four-year public institutions lagged behind White female enrollment in the national sample. With holistic advising and other supports provided by NCAN members, Black female student enrollment at four-year public institutions exceeded that of White female students – closing enrollment gaps between White and Black/Hispanic students.

This is important for these members’ missions (and NCAN’s) because four-year public institutions often yield better completion outcomes than community colleges. These results also suggest that NCAN members may be steering students to select four-year public institutions; compared to the national sample, enrollment at four-year, private, nonprofit institutions is less frequent for NCAN member-served students than at four-
year public institutions. There are a number of potential reasons for this, including affordability and likelihood of acceptance, which are ripe for further research.

**Four-Year Private Nonprofit Institutions**

**Figure 6. Enrollment at Four-Year Private Nonprofit Institutions for Fall 2011 First-Time Enrollers by Race/Ethnicity and Gender**

Figure 6 shows that, generally, NCAN member-served students are less likely to attend four-year, private, nonprofit institutions than students nationally. Holding race/ethnicity constant, gender gaps in enrollment at private four-year institutions differed by less than four percentage points in both samples with two exceptions. In the NCAN sample, Asian male enrollment at four-year private institutions lagged six percentage points behind Asian female enrollment. American Indian male enrollment also surpassed American Indian female enrollment by six percentage points.

Other inequities exist in enrollment trends when comparing NCAN member-served students and students in the NSCRC’s national sample. Asian women in the NSCRC enrolled at a four-year, private, nonprofit institutions at a rate 8 percentage points higher than in the students in the NCAN sample. Additionally, Asian male member-served students’ enrollment at these institutions trailed the national benchmark by 10
percentage points. The enrollment of NCAN member-served White students also trailed the national benchmark by 10 and 9 percentage points for male and female students, respectively.

The difference in enrollment trends for White students at this institution type across the NCAN and NSCRC sample is substantial. We may attribute this partially to the much larger proportion of White students included in the NSCRC sample than the NCAN sample, but a more likely cause is that the White students in the NCAN sample are more likely to be low-income than in the NSCRC sample. The composition of the NSCRC’s White student subsample is more likely to be reflective of higher wealth as well as lower information barriers and likelihood of being first-generation than students typically served by NCAN members. Given the higher completion rates, on average, at four-year, private, nonprofit institutions, the disparity in enrollment trends between the NCAN and NSCRC samples at these institutions, and the much larger proportion of White students in the NSCRC sample who are less likely to be low-income, it is likely that we have identified a cause of the persistent difficulty in closing the completion gap between NCAN members and this key national benchmark.

Appendix A combines the data from Figures 4 through 6 into a chart containing NCAN and NSCRC first institutions by race/ethnicity and gender.

Overall, this section reiterates a finding that has been consistent throughout the Benchmarking Project: NCAN member-served students' enrollment outcomes, especially those of underrepresented students, compare favorably to national benchmarks. This lends support to the idea that NCAN members are largely succeeding with the access portion of their mission, but this brief also considers completion outcomes.

**Six-Year Outcomes for Fall 2011 First-Time Enrollers**

This brief has so far concentrated on enrollment outcomes, but it now turns toward the six-year completion outcomes of fall 2011 first-time enrollers. Figures 7 and 8 compare the outcomes of students in the NCAN and NSCRC samples by race/ethnicity for male and female students, respectively. Outcomes are categorized into completed, still enrolled, or stopped out. Note again that American Indian students only have data from the NCAN sample.
Figure 7. Six-year Outcomes for Fall 2011 First-Time Enrollers, NCAN Benchmarking vs. NSCRC Signature Report, Male by Race/Ethnicity

Figure 8. Six-year Outcomes for Fall 2011 First-Time Enrollers, NCAN Benchmarking vs. NSCRC Signature Report, Female by Race/Ethnicity
Female students’ six-year completion rates are higher than male students’ in almost every racial/ethnic group in both the NCAN and NSCRC samples. The largest disparities between genders within the same race/ethnicity exist between Black students. In the NSCRC and NCAN samples, the completion gaps between Black male and female students are 9 and 11 percentage points, respectively. Black males in both samples were 11 percentage points more likely to stop out of their degree programs within six years than Black female students. A similar pattern exists between male and female students in both samples for Asian, Hispanic, and White students. Differences in outcomes between American Indian male and female students were minimal within the NCAN sample.

Comparing students across samples, Figures 7 and 8 demonstrate that NCAN member-served Black male students completed more often and stopped out less often than their counterparts in the national benchmark. Black women in the NCAN sample saw similar gains over the NSCRC sample. These outcomes are very encouraging but perhaps unsurprising considering NCAN members work to increase opportunity for students historically underrepresented in higher education. Comparing the average Black student in the NSCRC sample to their counterpart in the NCAN sample, the latter is receiving more supports specifically targeted at helping them access and complete a postsecondary education.

It is also somewhat surprising that NCAN member-served Hispanic students’ completion outcomes only exceed the national benchmark by one and four percentage points for male and female students, respectively. Consider that for Black students, member-served students exceed the national benchmark by six and seven percentage points for male and female students, respectively. There are two potential (and interacting) explanations for this.

First, data from round 5 of the Benchmarking Project show that Hispanic students were 33% more likely than Black students to first enroll at a community college (32% vs. 24%) and half as likely to first enroll at a four-year, private, nonprofit institution (14% vs. 7%). Hispanic students were about as likely as White and Black students to first enroll in four-year public institutions. This indicates that Hispanic students in the NCAN sample may be systematically undermatching into institutions that on average have lower completion rates. This undermatch demands further research, which NCAN looks forward to conducting.

The second explanation is that Hispanic students’ postsecondary outcomes nationally have improved significantly in recent decades. In 1980, Hispanic students comprised 8% of the 18-24 year-old population and represented 2% of bachelor’s degrees and 4% of associate degrees conferred that year. By 2017, Hispanic students comprised 22% of the 18-24 year-old population (2.5 times what it was in 1980). However, in 2017 these students received 14% of the bachelor’s degrees and 21% of the associate degrees.
conferred. These percentages represent 7 and 5.25 times the 1980 proportion.\textsuperscript{5} Long story short: Hispanic postsecondary attainment is outpacing their population share. When we consider that encouraging success among Hispanic students in general, it also means it will be hard for NCAN member-served students to significantly outperform their peers nationally. When a comparison group is doing well overall, it becomes much more difficult to exceed that group’s performance.

As seen with enrollment outcomes, White member-served students had less favorable completion outcomes than the national average. The completion rate of member-served White men lagged behind that of White men in the NSCRC sample by 11 percentage points. As noted earlier, White students comprise a much smaller proportion of students in the NCAN sample than the NSCRC sample. White students in the NCAN sample are also more likely to be first-generation college students and from low-income backgrounds. These two facts likely contribute to the disparity between NCAN member-served students’ six-year completion rates and those of students’ nationally.

This section is also in line with findings from other Benchmarking Project products. Black and Hispanic students served by NCAN member programs generally outperform their peers, while Asian students slightly and White students significantly trail their peers. This brief illuminates for the first time the gaps that exist between the NCAN and NSCRC samples between genders within race/ethnicity groups.

**Conclusion**

This brief demonstrates the educational value of disaggregating data. It also demonstrates the continued value of NCAN’s Benchmarking Project, which has been an important collaboration with members. NCAN looks forward to continuing to glean valuable insights from this data set, and others, and delivering them to members.

Appendix A: Additional Data Visualizations

Figure 9. Fall 2011 First-Time Enrollers by Race/Ethnicity, Gender, and Type of First Institution Attended

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Legend:
- Two-year Public
- Four-Year Public
- Four Year Private