

OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS

No. 27-20

May 2020

RESEARCH BRIEF

Achievement Gaps at NOVA: Student Success Metrics by Gender and Race/Ethnicity

Community colleges nationwide serve diverse populations of students, including many students from historically underrepresented groups. When they arrive on campus, these students in particular face a multitude of challenges that can directly impact their ability to make progress toward their academic goals. As a result, community colleges continue to observe alarming achievement gaps among various subgroups of students. The term "achievement gap" refers to "any significant and persistent disparity in academic performance or educational attainment between different groups of students." Therefore, Achieving the Dream (ATD) has encouraged member colleges to put equity at the forefront of completion efforts.²

Achieving the Dream at NOVA

Achieving the Dream (ATD) is a multi-year national initiative created to help community colleges close the achievement gap and improve success rates. Northern Virginia Community College (NOVA) joined ATD as a participating institution in 2007 as part of its work to identify student populations that disproportionately experience low success rates; develop interventions to improve outcomes; and measure changes in student success over time. With its participation in ATD, NOVA has further refined its evaluation and data-driven decision-making processes. This, in turn, helps NOVA to more effectively measure outcomes and determine ways the College can continually improve student success. In 2010, ATD recognized NOVA as an ATD Leader College, which identifies institutions that have implemented successful strategies aimed at improving student achievement. NOVA earned the ATD Leader College designation every year from 2007 to 2019. In 2020, ATD further recognized NOVA as an ATD Leader College of Distinction, which "honors colleges who have gone above and beyond in closing the gaps and increasing student success."3

This Research Brief presents data on several student success metrics for first-time in college. program-placed students at NOVA. In order to show where certain achievement gaps exist within these success metrics, data is disaggregated by the following two key student characteristics: gender and race/ethnicity.4

¹ (2013). Achievement Gap. The Glossary of Education Reform.

² Achieving the Dream Equity Statement. https://www.achievingthedream.org/focus-areas/equity

³ https://www.achievingthedream.org/leader-college-of-distinction

⁴ See Report 09-20 for more detailed data on this topic.

Key Findings: Changes in the Achievement Gaps over Time

Section 1. Fall-to-Fall Retention

- Gender: Between Fall 2014 and Fall 2017, the achievement gap between male and female students in fall-to-fall retention *widened* from a 3 percentage point to a 6 point difference.
- Race/Ethnicity: From Fall 2014 to Fall 2017, the achievement gap between Black students and Asian students (the groups with the lowest and highest fall-to-fall retention rates) decreased from a 26 percentage point difference in Fall 2014 to an 11 percentage point difference in Fall 2017.

Section 2. Gatekeeper Course Success: ENG 111

- **Gender:** The achievement gap between male and female students in ENG 111 success rates decreased between Fall 2015 and Fall 2018.
- † Race/Ethnicity: Between Fall 2015 and Fall 2018, the achievement gap between Black students (the lowest rate) and Asian students and White students (the highest rates) in ENG 111 success rates *decreased* slightly from a 14-16 point difference to an 13 point difference.

Section 3. Gatekeeper Course Success: MTH 151

- Gender: Between Fall 2015 and Fall 2018, the achievement gap between male and female students *increased* in MTH 151 success rates.
- → Race/Ethnicity: From Fall 2015 to Fall 2018, the achievement gap between the highest
 (White students) and the lowest (Black students) groups in MTH 151 success rates increased
 from a 6 percentage point difference to an 8 percentage point difference.

Section 4. Overall Course Success Rates

- → **Gender:** From Fall 2015 to Fall 2018, the achievement gap between male and female students *remained the same* at a 7 percentage point difference in overall course success rates.
- → Race/Ethnicity: From Fall 2015 to Fall 2018, the achievement gap between Asian students (highest overall course success rate) and Black students (lowest rate) increased from a 14 percentage point difference to a 16 percentage point difference.

Section 5. Four-Year NOVA Graduation Rates

- ↑ **Gender:** From Fall 2011 and Fall 2014, the achievement gap between male and female students *improved* from a 7 percentage point difference to a 4 percentage point difference in four-year NOVA graduation rates.
- Race/Ethnicity: From Fall 2011 to Fall 2014, four-year graduation rates of Black students decreased slightly during this time, *increasing* existing achievement gaps.

Section 6. Six-Year Bachelor's Degree Graduation Rates

- **Gender:** The achievement gap between male students and female students *improved* from a 12 to a 9 percentage point difference in six-year bachelor's graduation rates.
- **Race/Ethnicity:** While achievement gaps remain large between racial/ethnic groups, the six-year bachelor's degree graduation rate for Black students increased at a higher rate, which has led to a *decrease* in the achievement gap between groups.

Section 1. Fall-to-Fall Retention Rates

Retention is a critical measure of student achievement at Northern Virginia Community College (NOVA). The fall-to-fall retention rate is defined as the percentage of first-time in college, program-placed students who entered NOVA in the fall and either re-enrolled or successfully completed their program by the subsequent fall semester.

- ↓ Gender: Between Fall 2014 and Fall 2017, the achievement gap between male and female students widened from a 3 percentage point difference to a 6 point difference. This is due to an increase in the fall-to-fall retention rate for female students (+3 percentage points during this time), while the fall-to-fall retention rate for male students has remained the same.
- Race/Ethnicity: From Fall 2014 to Fall 2017, the achievement gap between Black students and Asian students (the groups with the lowest and highest fall-to-fall retention rates) *decreased* from a 26 percentage point difference in Fall 2014 to an 11 percentage point difference in Fall 2017.

Figure 1. Fall-to-Fall Retention Rates of First-Time in College, Program-Placed Students by Gender: Fall 2014 through Fall 2017 Cohorts

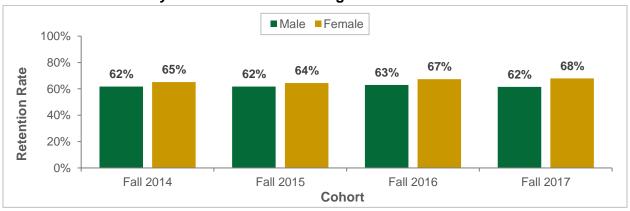
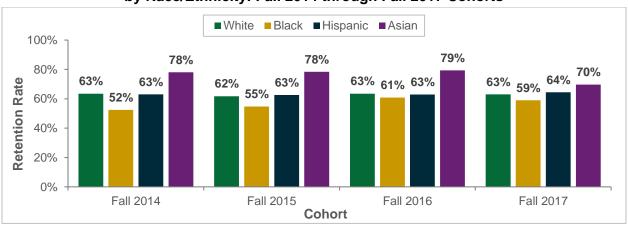


Figure 2. Fall-to-Fall Retention Rates of First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2014 through Fall 2017 Cohorts



Section 2. Gatekeeper Course Success Rates: ENG 111

Students who succeed in gatekeeper English (ENG 111) are able to subsequently enroll in advanced coursework and make progress towards their academic goals of graduation or transfer. Success is defined as the percentage of first-time in college, program-placed students enrolled in ENG 111 who successfully earn a grade of 'C' or better within one year of initial enrollment at NOVA.

- fender: The achievement gap between male and female students *decreased* between Fall 2015 and Fall 2018. However, it should be noted that this is due to the decline in ENG 111 success rates for female students (from 63 to 61 percent). The success rates for male students remained the same at 56 percent.
- Race/Ethnicity: Between Fall 2015 and Fall 2018, the achievement gap between Black students (the lowest rates) and Asian students and White students (the highest rates) decreased slightly (from a 14-16 point difference to an 13 point difference). However, it should be noted that the success rates of Asian students and White students decreased over this time period, while that of Black students remained the same.

Figure 3. Success Rates in ENG 111 for First-Time in College, Program-Placed Students by Gender: Fall 2015 through Fall 2018

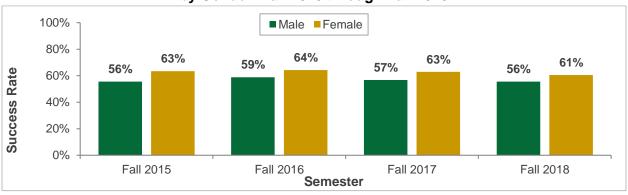
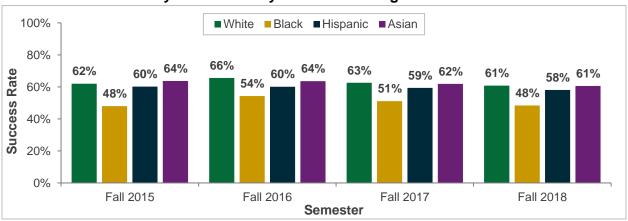


Figure 4. Success Rates in ENG 111 for First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2015 through Fall 2018

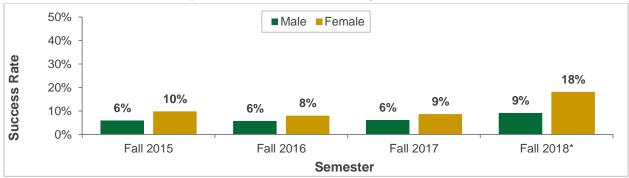


Section 3. Gatekeeper Course Success Rates: MTH 151

Students who succeed in gatekeeper math (MTH 151) are able to subsequently enroll in advanced coursework and make progress towards their academic goals of graduation or transfer. Success is defined as the percentage of first-time in college, program-placed students enrolled in Math 151 who successfully earn a grade of 'C' or better within one year of initial enrollment at NOVA.

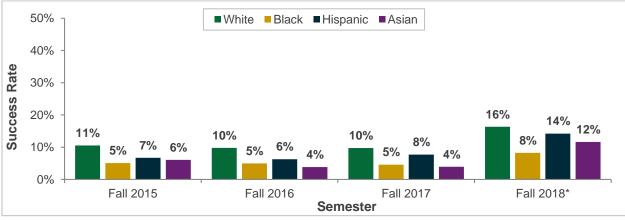
- Gender: Between Fall 2015 and Fall 2018, the achievement gap between male and female students *increased*. This is due in part by the large improvement in success rates for female students (from 10 to 18 percent), and smaller improvement in success rates for male students (from 6 to 9 percent).
- Race/Ethnicity: From Fall 2015 to Fall 2018, the achievement gap between the highest (White students) and the lowest (Black students) groups *increased* from a 6 percentage point difference to an 8 percentage point difference. Success rates improved at a slower rate for Black students, which exacerbated existing achievement gaps.

Figure 5. Success Rates in MTH 151 for First-Time in College, Program-Placed Students by Gender: Fall 2015 through Fall 2018



^{*}In Fall 2018, math courses were redesigned; Fall 2018 data includes both MTH 151 and MTH 154.

Figure 6. Success Rates in MTH 151 for First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2015 through Fall 2018



^{*}In Fall 2018, math courses were redesigned; Fall 2018 data includes both MTH 151 and MTH 154.

Section 4. Overall Course Success Rates

Course success is a critical measure of student achievement at NOVA. Students are considered successful in a course if they earn a grade of 'C' or higher in a credit-level course, or an 'S' in a developmental course.

- → **Gender:** From Fall 2015 to Fall 2018, the achievement gap between male and female students *remained the same* at a 7 percentage point difference in overall course success rates.
- Race/Ethnicity: From Fall 2015 to Fall 2018, the achievement gap between Asian students (highest course success rate) and Black students (lowest rate) *increased* from a 14 percentage point difference to a 16 percentage point difference.

Figure 7. Overall Course Success Rates for First-Time in College, Program-Placed Students by Gender: Fall 2015 through Fall 2018

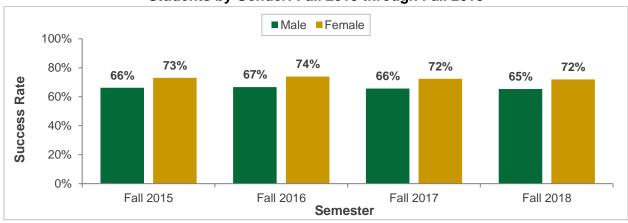
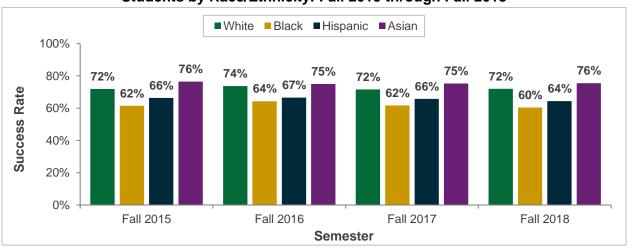


Figure 8. Overall Course Success Rates for First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2015 through Fall 2018



Section 5. Four-Year NOVA Graduation Rates

Graduation is a critical measure of student achievement at NOVA. The graduation rate is defined as the percentage of first-time, program-placed students who complete their program within four years of initial enrollment at the College.

- fender: From Fall 2011 and Fall 2014, the achievement gap between male and female students *improved* from a 7 percentage point difference to a 4 percentage point difference. This is due in part to the increase in graduation rates for male students, from 21 percent in Fall 2011 to 23 percent in Fall 2014.
- Race/Ethnicity: From Fall 2011 to Fall 2014, four-year graduation rates decreased by 1 percentage point for Black students, *increasing* existing achievement gaps.

Figure 9. Four-Year Graduation Rates of First-Time in College, Program-Placed Students by Gender: Fall 2011 through Fall 2014 Cohorts

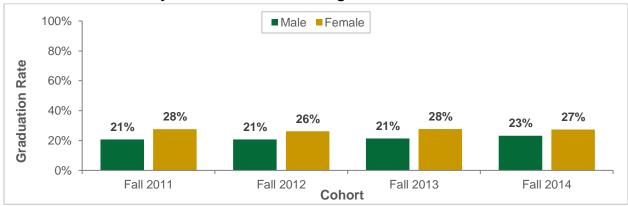
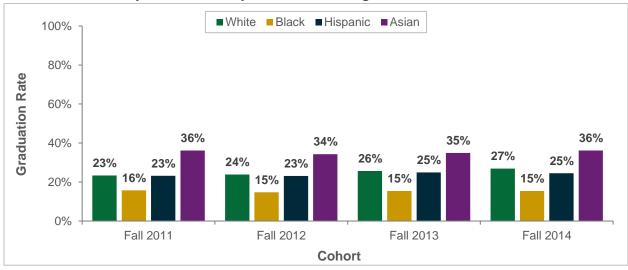


Figure 10. Four-Year Graduation Rates of First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2011 through Fall 2014 Cohorts



Section 6. Six-Year Bachelor's Degree Graduation Rates

Transfer is a critical measure of student achievement at NOVA. Generally, the goal for students who transfer from NOVA is to earn a bachelor's degree. Therefore, the bachelor's degree graduation rate is defined as the percentage of first-time in college, program-placed students who transfer to a four-year institution and earn a bachelor's degree within six years of initial enrollment at NOVA.

- **Gender:** The achievement gap between male students and female students *improved* from a 12 to a 9 percentage point difference.
- Race/Ethnicity: While achievement gaps remain large between racial/ethnic groups, the six-year bachelor's degree graduation rate increased at a higher rate for Black students (the group with the lowest graduation rate), which has led to a small *decrease* in the achievement gap between groups.

Figure 11. Six-Year Bachelor's Degree Graduation Rates for First-Time in College, Program-Placed Students by Gender: Fall 2009 through Fall 2012 Cohorts

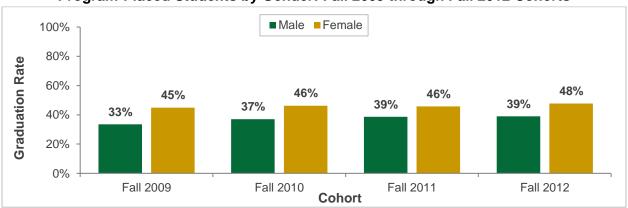


Figure 12. Six-Year Bachelor's Degree Graduation Rates for First-Time in College, Program-Placed Students by Race/Ethnicity: Fall 2009 through Fall 2012 Cohorts

