

First Generation Students at NOVA: Fall 2013 through Fall 2017

Research Report No. 39-18

Office of Institutional Effectiveness and Student Success
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NORTHERN VIRGINIA COMMUNITY COLLEGE
OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS

The purpose of the Office of Institutional Effectiveness and Student Success is to conduct analytical studies and provide information in support of institutional planning, policy formulation, and decision making. In addition, the office provides leadership and support in research related activities to members of the NOVA community engaged in planning and evaluating the institution's success in accomplishing its mission.

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Introduction

At Northern Virginia Community College (NOVA), approximately one-fifth of the student population are first generation, or students who are the first in their family to attend college. This report presents information regarding the characteristics of this first generation student population at NOVA, as well as their academic success compared to continuing generation students. It also includes a discussion of the challenges faced by first generation students and suggests possible strategies to support this population.

Definition of First Generation Student

In higher education research, there are differing definitions of what it means to be a “first generation” college student. The most common definition of a first generation student is a student with neither parents attending or having attended college. However, other research in higher education includes students whose parents may have attended college but did not earn a degree, students with only one parent who did not earn a degree, and others consider the college experiences of non-biological parents, and so on.¹

According to the Virginia Community College System (VCCS), a first generation student is a student who indicated on the online admission application that *both* parents did not attend a post-secondary institution.

Challenges Faced by First Generation Students²

First generation students can face significant financial, cultural, and educational barriers, which can make navigating the college experience difficult. For example, research shows that many first generation students lack familiarity and understanding regarding college preparedness. In other words, first generation students are more likely to be academically under-prepared for college and less likely to have sufficient knowledge of how to apply for college and how to seek financial assistance. These students have more difficulty acclimating to college and are more at-risk of not completing a degree.

A host of barriers can impede a first generation student’s choice to attend college and/or ability to complete their academic goal. Many of these barriers disproportionately affect first generation students in comparison to their continuing generation counterparts. Barriers may include:

- A lack of financial, professional, psychological, and/or academic resources
- The overwhelming and discouraging cost of a college education
- A low family household income
- Full- or part-time employment
- Family responsibilities, such as taking care of younger siblings or aging grandparents

¹ Smith, Ashley A. (2015). *Who’s in First (Generation)?* Inside Higher Ed.

² Mangan, Katherine. (2015). *The Challenge of the First-Generation Student*. The Chronicle of Higher Education.

- A lack of familiarity with typical college processes, such as how to make an academic plan, fill out financial aid forms, and/or access campus resources
- Parents who are also unfamiliar with college processes, such as completing financial aid forms and accessing funds to pay for college, and are unable to help
- Academic under-preparedness for the rigors of a college curriculum, which may require remediation courses before earning college credit

Supporting First Generation College Students

Colleges can use targeted interventions to recruit first generation students and better facilitate their academic success.

Mentoring: Research consistently shows that first generation students start college with less preparation than their peers. Mentoring can be a powerful tool to close the gap between first generation students and their continuing generation peers. NOVA may consider implementing programs that connect students with faculty and peer mentors, engage students in faculty-supervised research, and create a network of academic and social support and encouragement. NOVA could offer additional education and support to prospective and incoming students about the resources available on our campuses.

Community Partnerships: Many community-based organizations (CBOs) serve under-resourced and first generation prospective students. Partnerships with these organizations could increase student access to and enrollment at NOVA. For example, CBOs can provide coaching and mentoring services for students from under-resourced high schools, with the goal of encouraging them to apply to a broader range of colleges, including those that might seem a stretch. In partnership with these organizations, NOVA can help families see beyond the sticker price of college and believe that higher education at NOVA is within their reach.

In addition, it is worth noting the following best practices for serving first generation students from an article in *The Chronicle of Higher Education*.³

- Identify, actively recruit, and continually track first generation students
- Bring first generation students to campus early
- Focus on the distinctive features of first generation students
- Develop a variety of programs that meet students' continuing needs
- Use mentors
- Institutionalize a commitment to first generation students
- Build community, promote engagement, and make it fun
- Involve families (but keep expectations realistic)
- Acknowledge financial pressures and ease them when possible
- Keep track of the institution's successes and failures: What works and what does not?

³ Doubleday, Justin. (2013). *10 'Best Practices' for Serving First-Generation Students*. *The Chronicle of Higher Education*.

Key Findings about First Generation Students at NOVA

- **Demographics of First Generation Students at NOVA:** Compared to continuing generation students, a higher proportion of first generation students at NOVA were female, enrolled full-time, a returning student, program placed, in an older age group, of a minority race or ethnicity (particularly Hispanic/Latino), and a recipient of a Pell grant.
- **More Placed into Developmental Education:** A higher proportion of first generation students were placed into developmental math and English compared to continuing generation students.
- **Comparable Developmental Success:** On average, first generation students at NOVA were comparable to continuing generation students in their success rates in developmental math and English.
- **Developmental Math Students Performed Lower in College-Level Math:** Developmental math first generation students did not perform as well as their continuing generation counterparts in gatekeeper math.
- **Developmental English Students Performed Better in College-Level English:** Developmental English first generation students performed better than their continuing generation counterparts in gatekeeper English.
- **College-Ready Students were Comparable in Gatekeeper Math and English:** College-ready first generation students were comparable to college-ready continuing generation students in gatekeeper math and English.
- **Performed Better in Three of Five Gatekeeper Courses:** First generation students performed better than continuing generation students in ENG 111, MTH 151, MTH 163, but lower in ACC 211 and BIO 101.
- **Comparable on Most Student Success Outcomes:** Fall-to-spring retention, fall-to-fall retention, three-year graduation rates (from NOVA), and overall course success rates were comparable for both first generation and continuing generation students.
- **Lower Transfer Rate:** A lower percentage of first generation students transferred to a four-year institution within three years compared to continuing generation students.

Summary of Findings

Demographics of First Generation Students at NOVA

First Generation Students at NOVA (Figure 1)

- One-fifth of NOVA students were the first generation in their family to attend college.

Gender (Figure 2)

- Fifty-six percent of first generation students were female, but only 50 percent of continuing generation students were female.

Enrollment Status (Figure 3)

- Although the majority of both groups were enrolled part-time, a higher percentage of first generation students were enrolled full-time than continuing generation students.
- An average of 37 percent of first generation students were enrolled at NOVA full-time compared to an average of 35 percent of continuing generation students.

Student Type (Figure 4)

- A smaller percentage of first generation students were first-time to college students compared to continuing generation students, particularly for the recent cohort (22 versus 27 percent, respectively, for Fall 2017).
- Conversely, first generation students had somewhat higher percentage of returning students, especially for the recent Fall 2017 cohort (73 vs. 67 percent, respectively).

Program Placement (Figure 5)

- A higher proportion of first generation students were program placed (90 percent on average) than continuing generation students (81 percent on average).

Age Group (Figure 6)

- A higher proportion of first generation students were aged 25 or older (39 percent on average) than continuing generation students (34 percent on average).

Race/Ethnicity (Figure 7)

- Overall, a higher proportion of first generation students were of a minority race or ethnicity, compared to continuing generation students (an average of 75 percent versus 57 percent, respectively).
- In particular, a higher proportion of first generation students were Hispanic/Latino (36 percent on average) compared to continuing generation students (18 percent on average).

Underserved Populations (USP) (Figure 8)

- A larger percentage of first generation students received Pell Grants (37 percent on average) than continuing generation students (23 percent on average).

Dual Enrollment (Figure 9)

- A smaller percentage of first generation FTIC students were dual enrolled (14 percent on average) as compared to continuing generation FTIC students (31 percent on average).

Developmental Math Placement and Success

Developmental Math Placement (Figure 10)

- A higher proportion of first generation students were placed into developmental math (49 percent on average) compared to continuing generation students (45 percent on average).

Success Rates in Developmental Math (Figure 11)

- Success rates in developmental math within two years of initial enrollment were the same for both first generation and continuing generation students (40 percent on average).

Gatekeeper Math Success Rates of Developmental Math Students (Figure 12)

- Of students placed in developmental math, a smaller proportion of first generation students succeeded in gatekeeper math within two years, compared to continuing generation students (an average of 69 versus 74 percent, respectively).

Gatekeeper Math Success Rates of College-Ready Math Students (Figure 13)

- College-ready math students who were first generation students succeeded in gatekeeper math at a similar or slightly higher rate than their continuing generation counterparts (average of 70 percent compared to average of 69 percent).

Developmental English Placement and Success

Developmental English Placement (Figure 14)

- A higher proportion of first generation students were placed into developmental English, compared to continuing generation students (28 percent versus 25 percent, respectively).

Success Rates in Developmental English (Figure 15)

- First generation students were successful in developmental English within two years of initial enrollment at NOVA at an average rate slightly lower than continuing generation students (an average of 75 versus 76 percent, respectively).

Gatekeeper English Success Rates of Developmental English Students (Figure 16)

- Among students placed into developmental English, first generation students went on to succeed in ENG 111 at higher rates on average than continuing generation students (89 percent versus 85 percent, respectively).

Gatekeeper English Success Rates by College-Ready English Students (Figure 17)

- Among college-ready English students (students who did not place into developmental-level English or who were exempt from taking the English placement test), those who were

first generation students succeeded in ENG 111 at a slightly higher rate on average than continuing generation students (79 percent versus 78 percent).

Success Outcomes

Retention Rates (Figures 18 & 19)

- Fall-to-spring retention rates fluctuated at or around 80 percent for both first generation and continuing generation students.
- From Fall 2013 to Fall 2016, fall-to-fall retention rates increased from 59 percent to 64 percent for both first generation and continuing generation students.

Graduation and Transfer Rates (Figures 20 & 21)

- The three-year NOVA graduation rate was around 17 percent for both first generation and continuing generation students.
- The three-year transfer rate to four-year institutions was considerably lower for first generation students than continuing generation students (16 percent versus 22 percent).

Overall Course Success Rates (Figure 22)

- Across all courses at NOVA, course success rates were around 73 percent for both first generation and continuing generation students.

Gatekeeper Course Success Rates within One Year of Initial Enrollment (Figures 23-27)

- On average, first generation students' success rate in ACC 211 was lower, 58 percent compared to 62 percent for continuing generation students in these four cohorts.
- On average, first generation students succeeded in BIO 101 at a rate slightly lower than continuing generation students (71 compared to 72 percent).
- On average, first generation students succeeded in ENG 111 at a rate slightly higher than continuing generation students (76 compared to 75 percent).
- On average, first generation students succeeded in MTH 151 at higher rate than continuing generation students (70 compared to 68 percent).
- On average, first generation students succeeded in MTH 163 at a higher rate than continuing generation students (59 compared to 57 percent).

Student Engagement

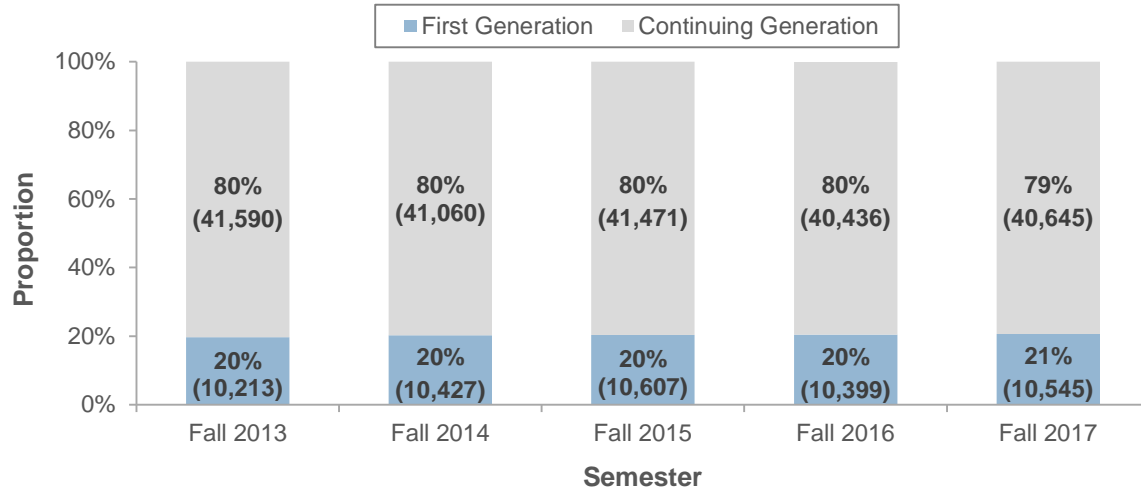
NOVA Benchmark Scores on the Community College Survey of Student Engagement (CCSSE) Survey (Figure 28)

- First generation students rated NOVA higher than continuing generation students on four of the five benchmarks: Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners.
- First generation students rated NOVA higher than the national average on two benchmarks: Student Effort and Support for Learners.
- Continuing generation students rated NOVA at or below the national average on all five benchmarks.

A. Demographics of First Generation Students at NOVA

This section presents information regarding the demographic characteristics of first generation students at NOVA. Overall, one-fifth of NOVA students (over 10,000 enrolled students) are the first generation in their family to attend college.

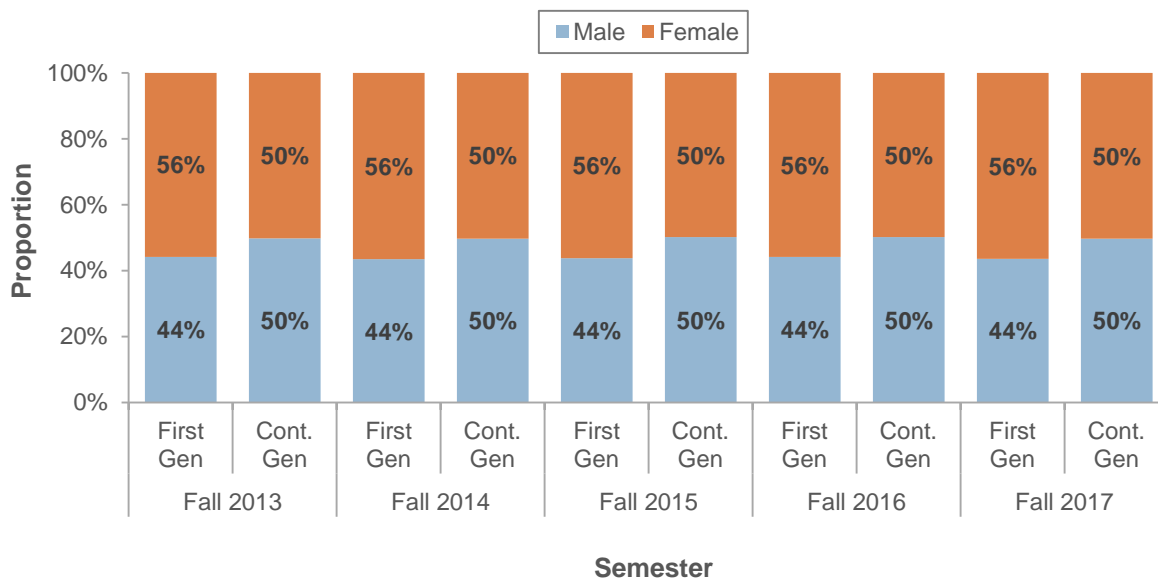
Figure 1. First Generation Status: Fall 2013 through Fall 2017



Gender

Fifty-six percent of first generation students were female, but only 50 percent of continuing generation students were female.

Figure 2. First Generation Status by Gender: Fall 2013 through Fall 2017

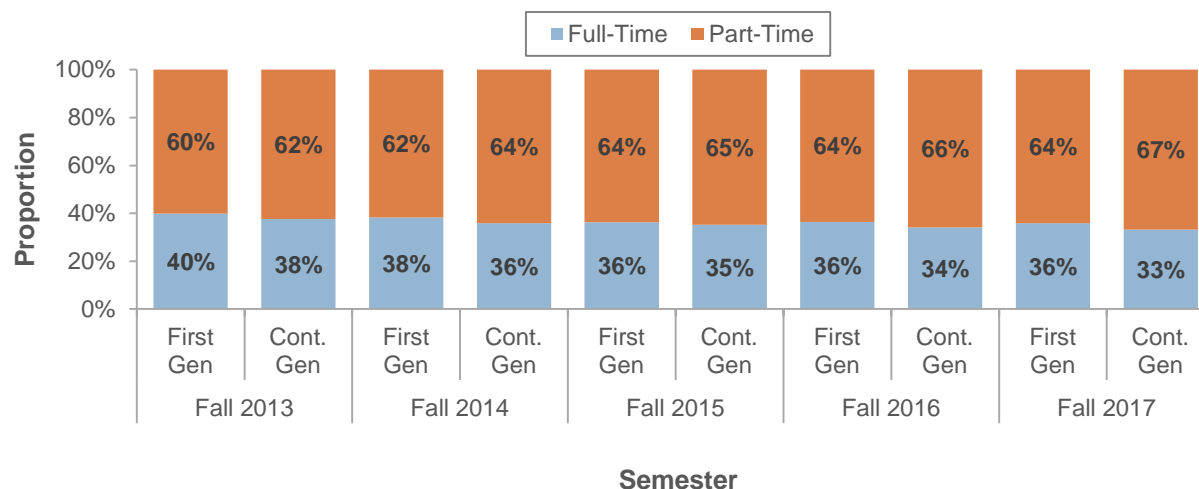


Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Enrollment Status

- Although the majority of both groups were enrolled part-time, a higher percentage of first generation students were enrolled full-time than their continuing generation counterparts.
- Across the past five fall semesters, an average of 37 percent of first generation students were enrolled full-time, compared to 35 percent of continuing generation students.

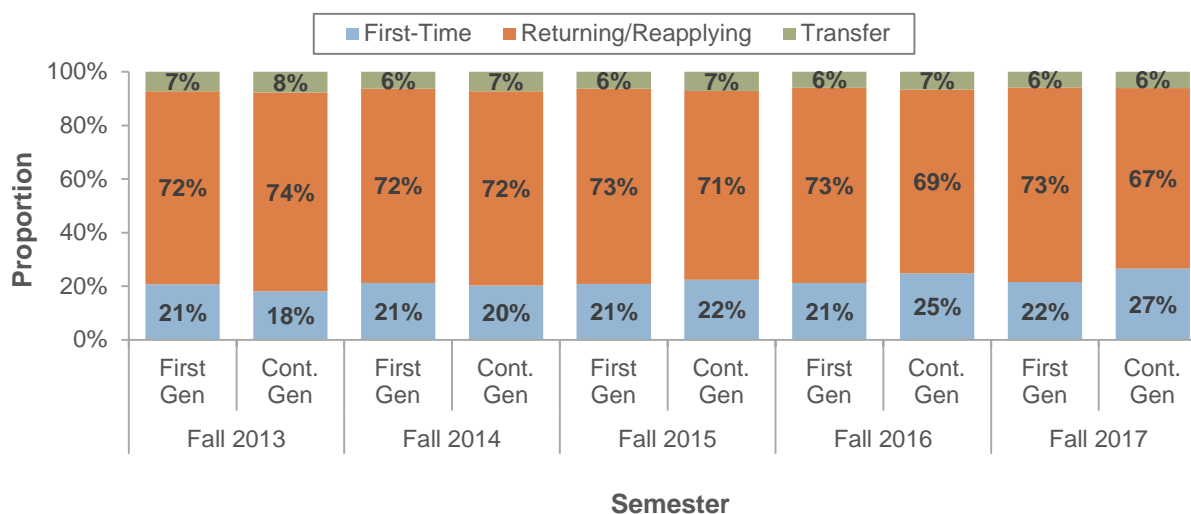
Figure 3. First Generation Status by Enrollment Status: Fall 2013 through Fall 2017



Student Type

- A smaller proportion of first generation students were first-time to college students compared to continuing generation students, particularly for the recent Fall 2017 cohort (22 versus 27 percent, respectively).
- Conversely, a higher proportion of first generation students were returning students, especially for the recent Fall 2017 cohort (73 versus 67 percent, respectively).

Figure 4. First Generation Status by Student Type: Fall 2013 through Fall 2017

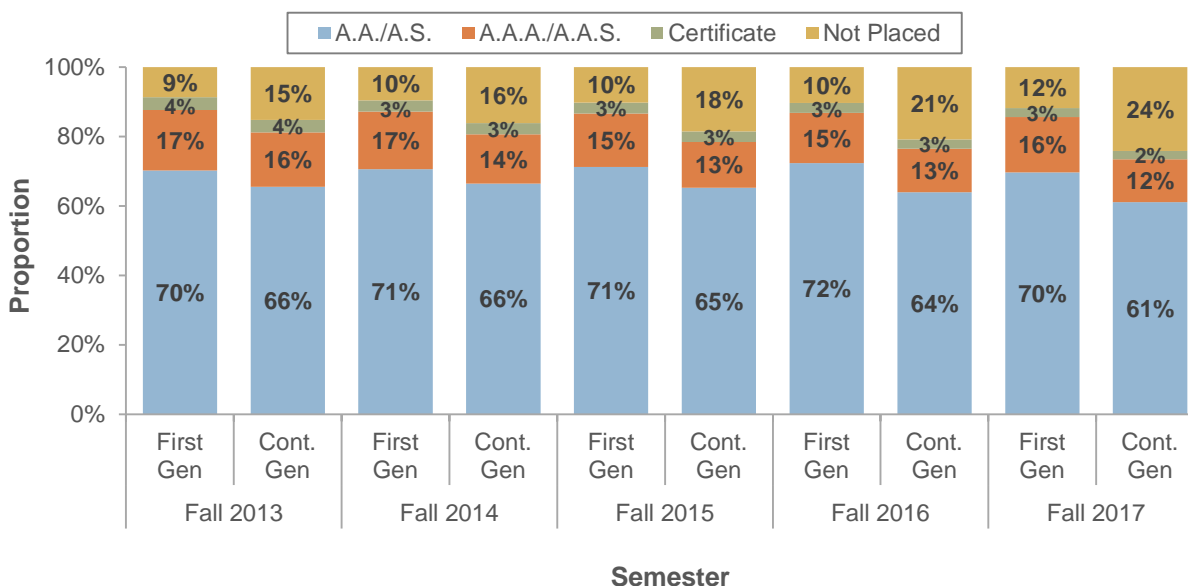


Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Program Placement

A higher proportion of first generation students were program placed (an average of 90 percent across the past five cohorts) than continuing generation students (81 percent on average).

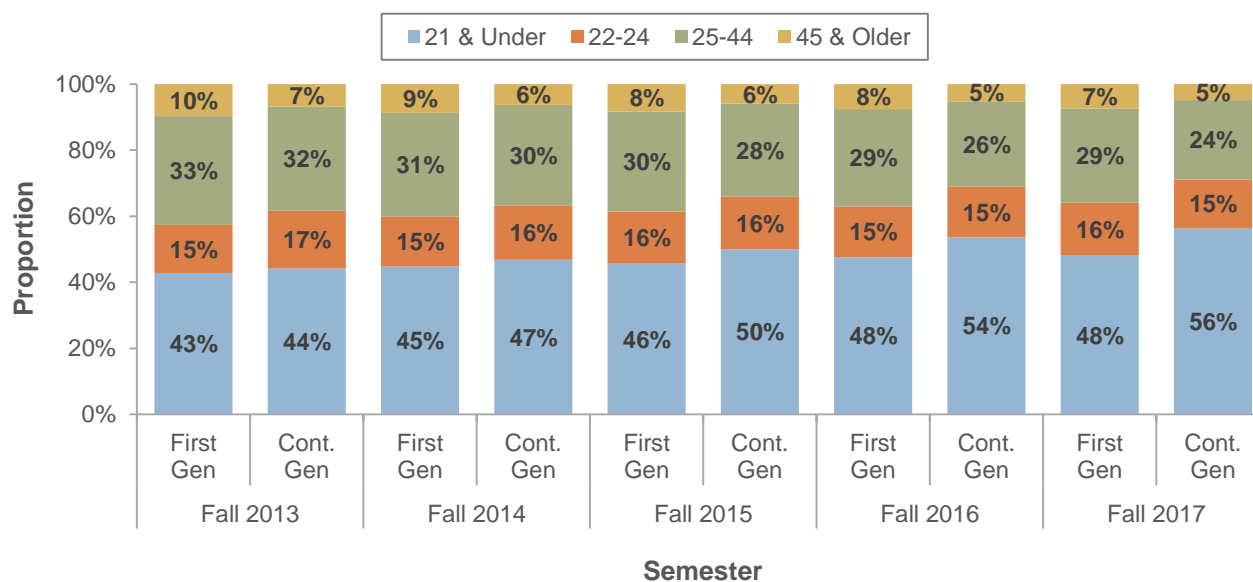
Figure 5. First Generation Status by Program Placement: Fall 2013 through Fall 2017



Age Group

A higher proportion of first generation students were aged 25 or older (an average of 39 percent across the past five cohorts) than continuing generation students (34 percent on average).

Figure 6. First Generation Status by Age Group: Fall 2013 through Fall 2017

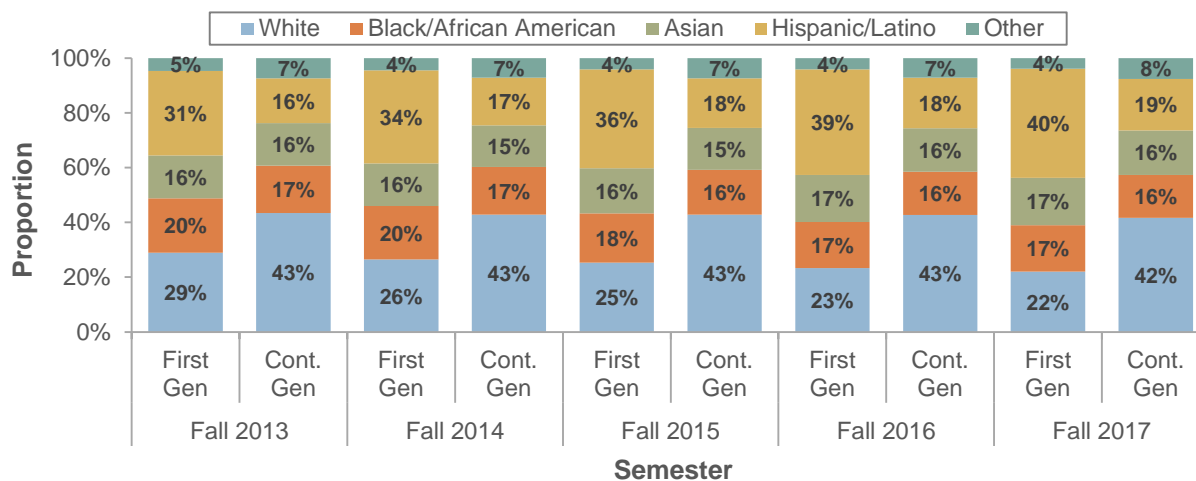


Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Race/Ethnicity

Across the past five cohorts, a higher proportion of first generation students were Hispanic or Latino, compared to continuing generation students (an average of 36 percent versus 18 percent, respectively).

Figure 7. First Generation Status by Race/Ethnicity: Fall 2013 through Fall 2017

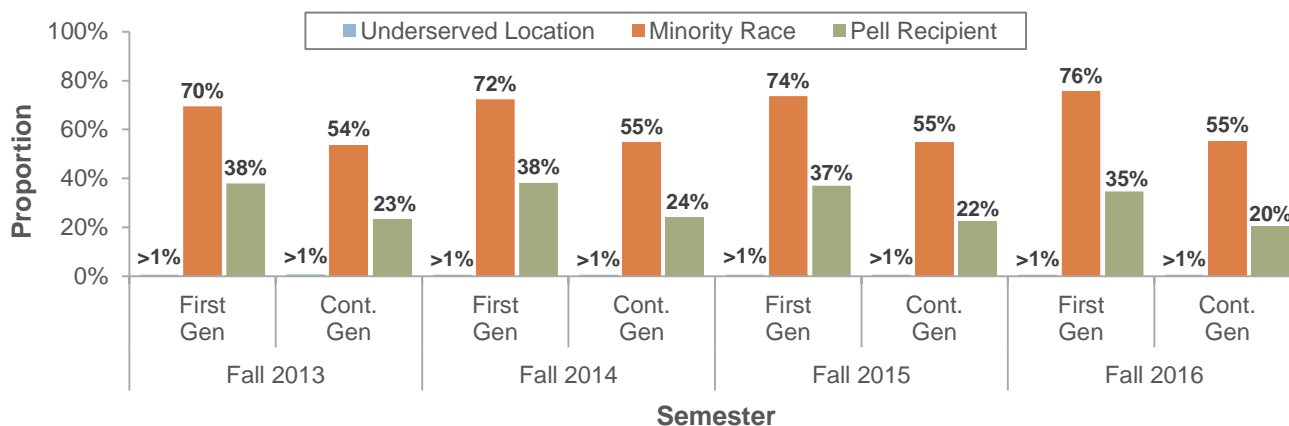


Underserved Population (USP)

Underserved populations (USP) include students who are first generation, from an underserved location, of a minority race or ethnicity, or Pell grant recipients.

- A larger proportion of first generation students received a Pell Grant (an average of 37 percent across the past five cohorts) than continuing generation students (23 percent).
- A much larger proportion of first generation students (73 percent on average) were of a minority race or ethnicity than continuing generation students (55 percent).

Figure 8. First Generation Status by Underserved Population (USP): Fall 2013 through Fall 2016



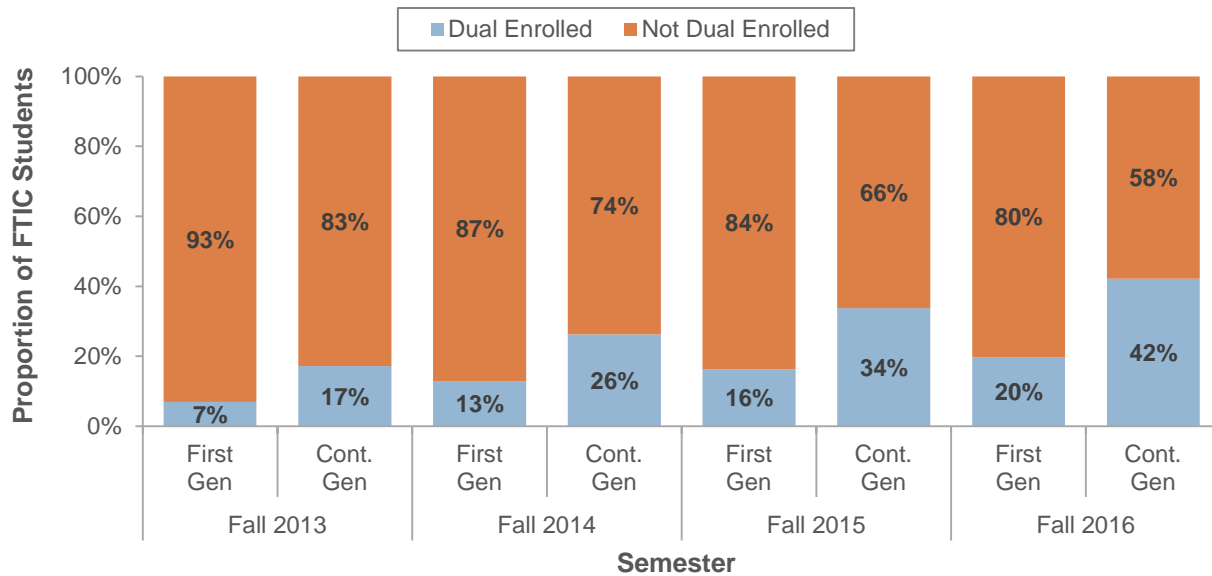
Note: Percentages do not add to 100 because groups are not mutually exclusive, e.g., a student can be a minority *and* a Pell recipient.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Dual Enrollment

Between Fall 2013 and Fall 2016, the number of first-time in college dual enrolled students increased for both first generation and continuing generation students. However, a much smaller proportion of first generation FTIC students were dual enrolled at NOVA (14 percent on average across the past five cohorts) than continuing generation FTIC students (31 percent on average).

**Figure 9. First Generation Status by Dual Enrollment Status:
Fall 2013 through Fall 2016 FTIC Students**



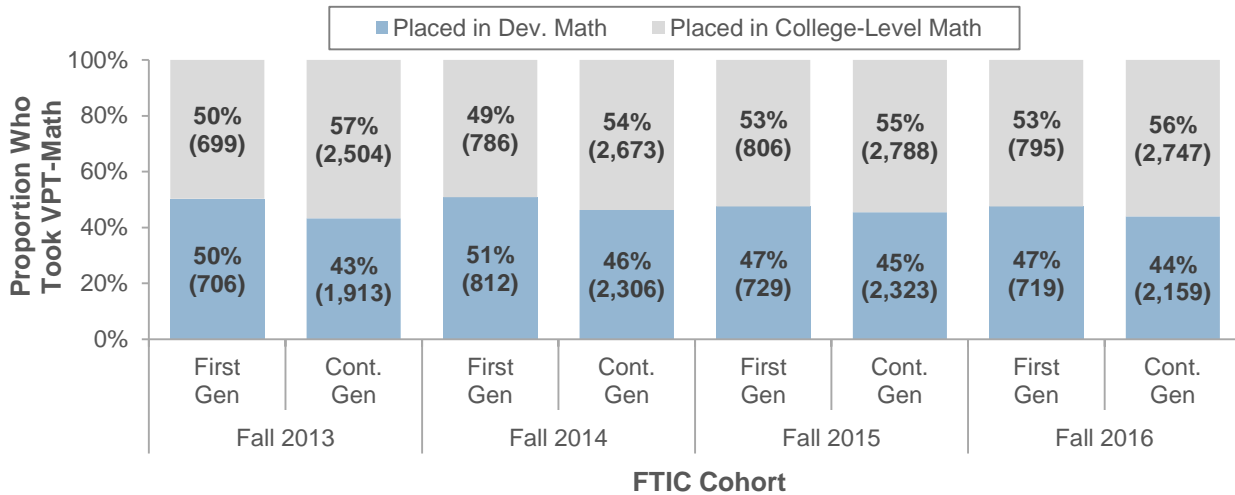
Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

B. Developmental Math Placement and Success of First Generation Students

Developmental Math Placement

Among students who took the VPT-Math exam, a higher proportion of first generation students were placed into developmental math (49 percent on average) compared to continuing generation students (45 percent on average).

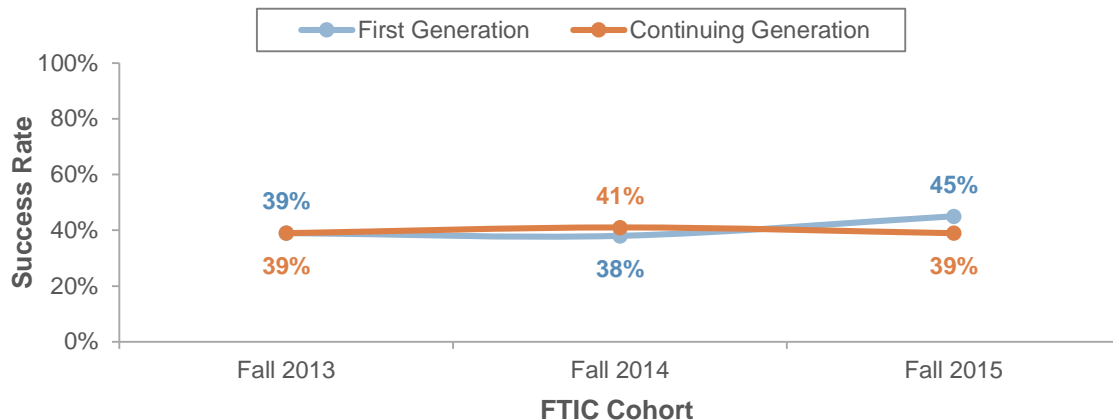
Figure 10. Developmental Math Placement by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohort



Success Rates in Developmental Math

Among students placed in developmental math, about 40 percent of both first generation and continuing generation students succeeded in a developmental math course within two years.

Figure 11. Success Rates in Developmental Math within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohort



Note: Success in developmental courses is defined by earning a grade of S (Satisfactory) or P (Pass) within two years of enrollment.

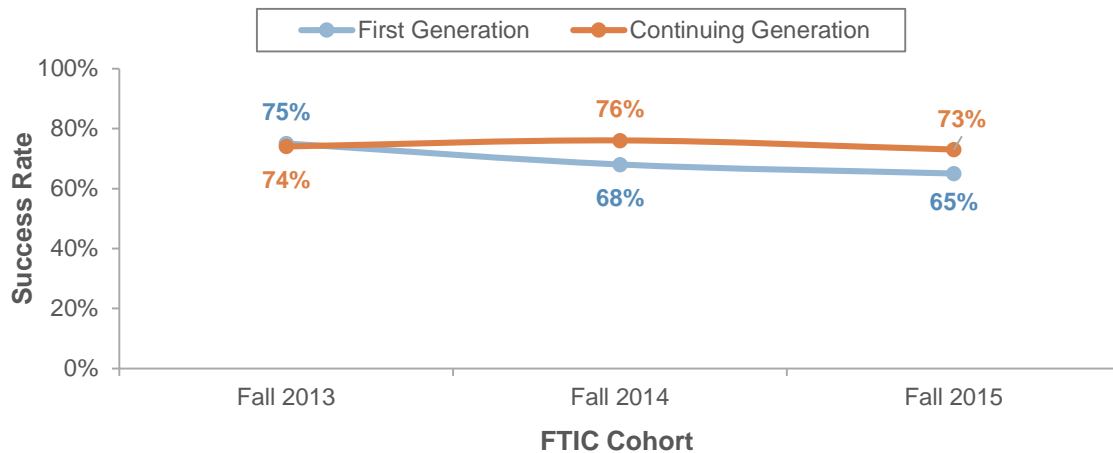
Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Success Rates in Gatekeeper Math

Developmental Math Students

Among students placed into developmental math, a smaller proportion of first generation students succeeded in gatekeeper math (Math 151 or Math 163) within two years, compared to their continuing generation counterparts (an average of 69 versus 74 percent, respectively).

Figure 12. Developmental Math Students' Success Rates in Gatekeeper Math within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

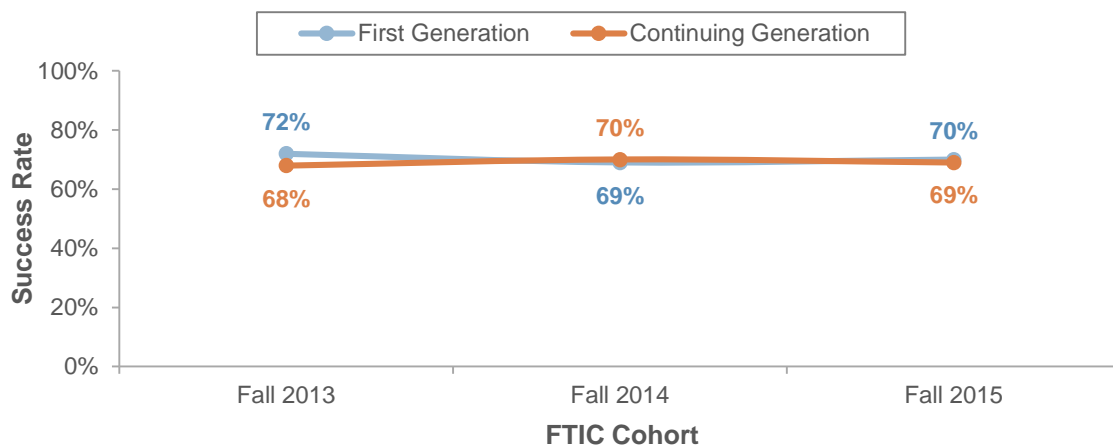


Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

College-Ready Math Students

College-ready math students are those who did not place into developmental-level math or who were exempt from taking the math placement test. First generation college-ready math students succeeded in gatekeeper math (Math 151 or Math 163) at a similar rate than their continuing generation counterparts (70 percent versus 69 percent on average, respectively).

Figure 13. College-Ready Math Students' Success Rates in Gatekeeper Math within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts



Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

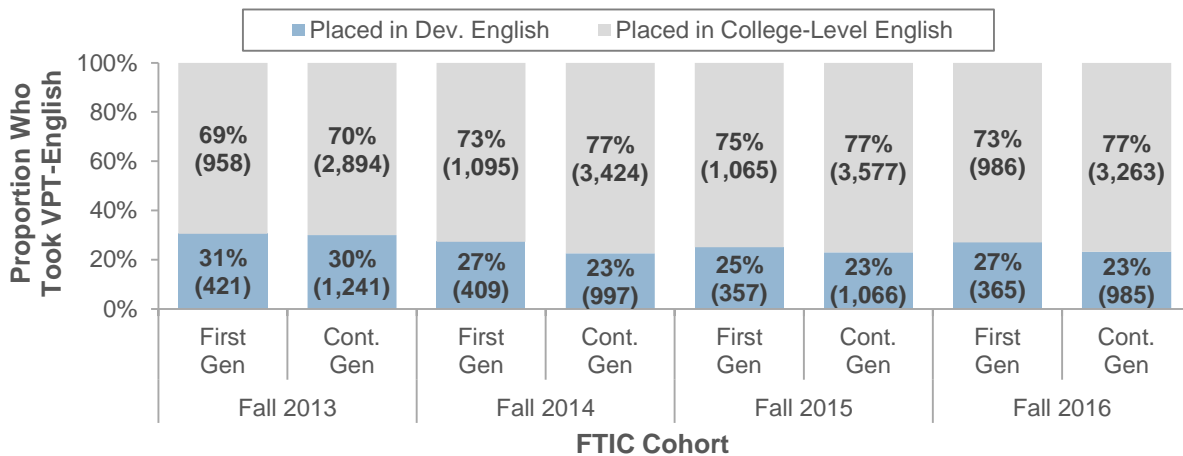
Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

C. Developmental English Placement and Success of First Generation Students

Developmental English Placement

Among students who took the VPT-English exam, a slightly higher proportion of first generation students were placed into developmental English (27 percent on average) compared to continuing generation students (25 percent on average).

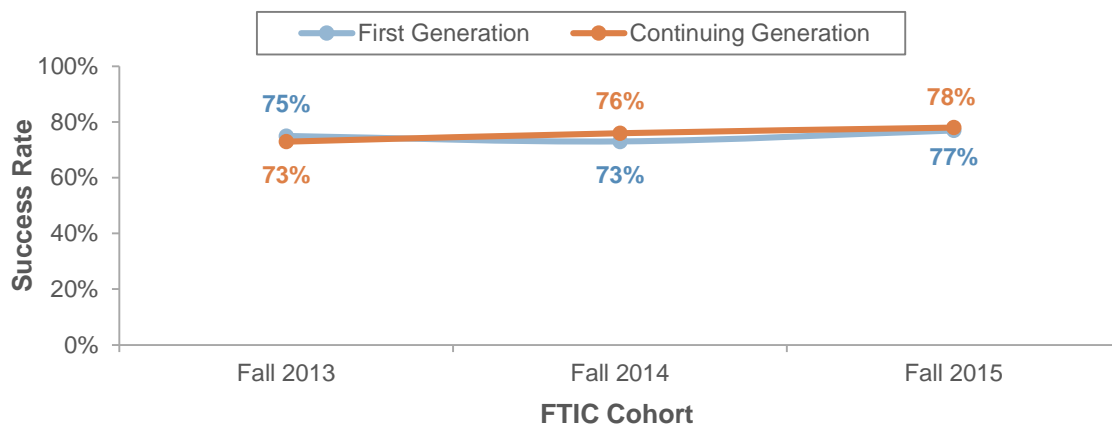
Figure 14. Developmental English Placement by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts



Success Rates in Developmental English

Among students placed in developmental English, a slightly lower proportion of first generation students succeeded in a developmental English course within two years of enrollment, compared to continuing generation students (an average of 75 versus 76 percent, respectively).

Figure 15. Success in Developmental English within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts



Note: Success in developmental courses is defined by earning a grade of S (Satisfactory) or P (Pass) within two years of enrollment.

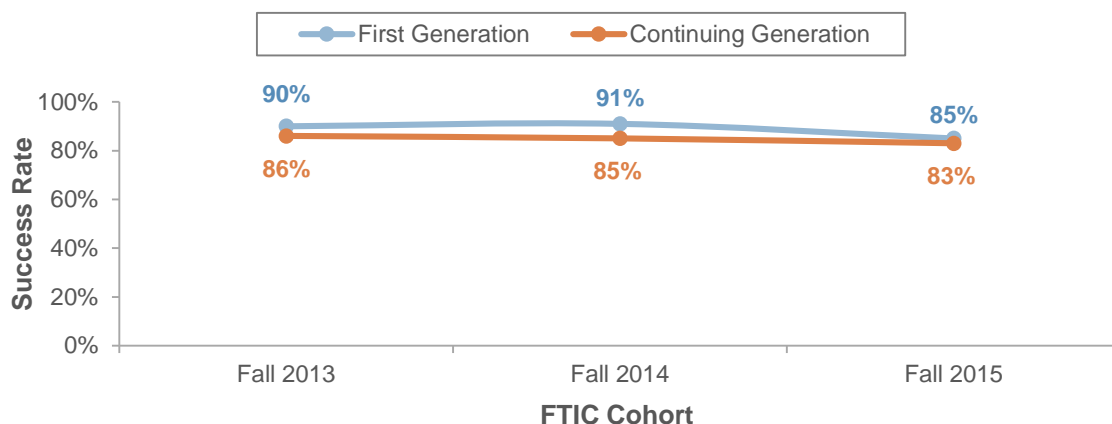
Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Success Rates in Gatekeeper English

Developmental English Students

Among students placed into developmental English, a higher proportion of first generation students succeeded in gatekeeper English (ENG 111) within two years, compared to their continuing generation counterparts (an average of 89 versus 85 percent, respectively).

Figure 16. Developmental English Students' Success in Gatekeeper English (ENG 111) within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

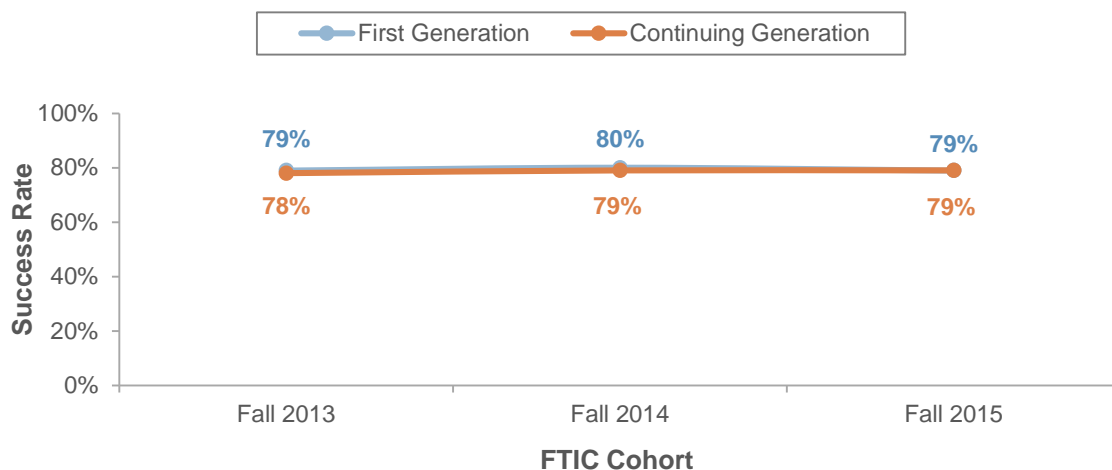


Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

College-Ready English Students

College-ready English students are those who did not place into developmental-level English or who were exempt from taking the English placement test. First generation college-ready English students succeeded in gatekeeper English (ENG 111) at a slightly higher rate than their continuing generation counterparts (79 percent versus 78 percent on average, respectively).

Figure 17. College-Ready Students' Success in Gatekeeper English (ENG 111) within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts



Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

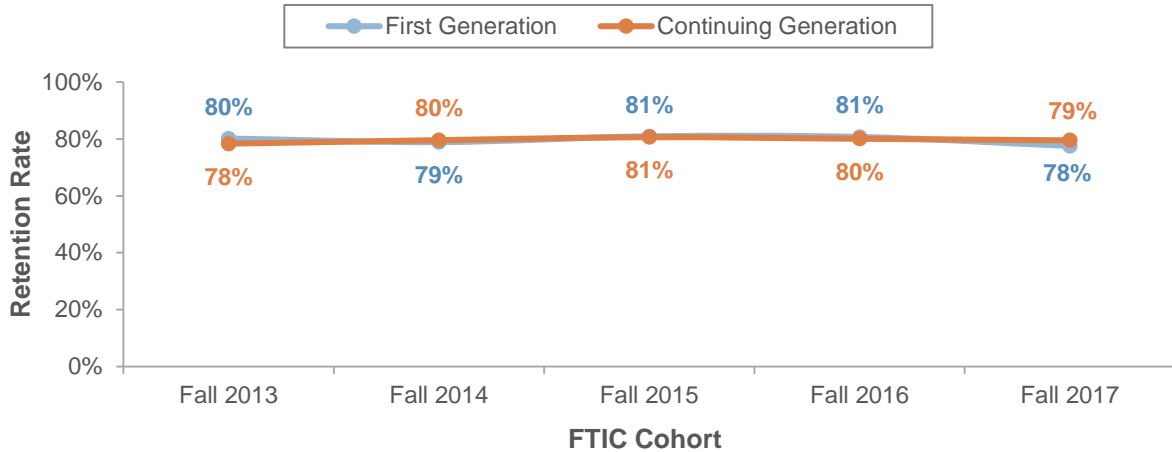
Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

D. Success Outcomes by First Generation Status

Fall-to-Spring Retention Rates

Between Fall 2013 and Fall 2017, fall-to-spring retention rates fluctuated at or around 80 percent for both first generation and continuing generation students.

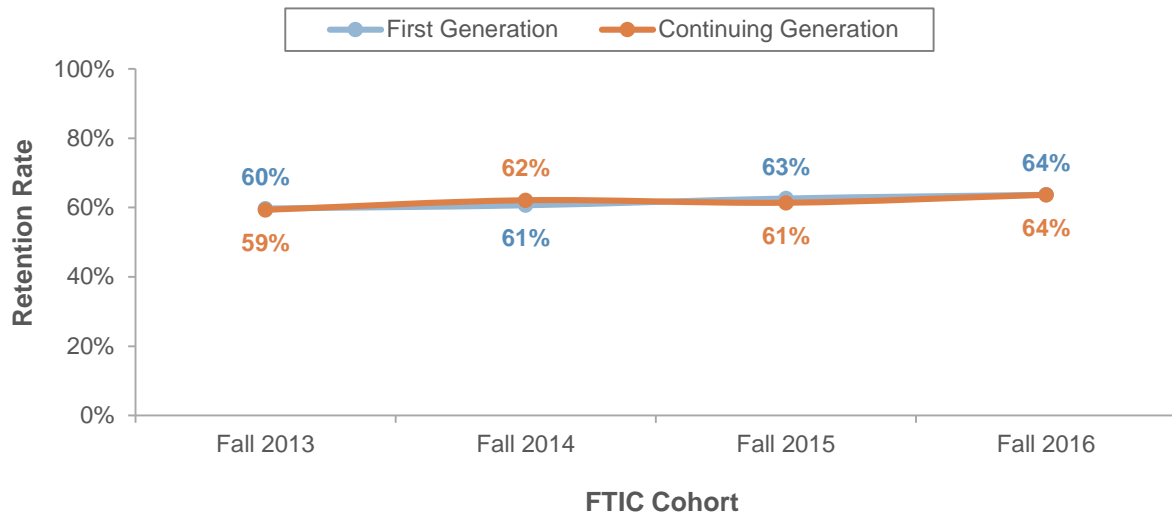
Figure 18. Fall-to-Spring Retention by First Generation Status: Fall 2013 through Fall 2017 FTIC Cohorts



Fall-to-Fall Retention Rates

Between Fall 2013 and Fall 2016, fall-to-fall retention rates were similar for both first generation and continuing generation students. For both groups, fall-to-fall retention increased from around 59-60 percent in Fall 2013 to 64 percent in Fall 2016.

Figure 19. Fall-to-Fall Retention by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts

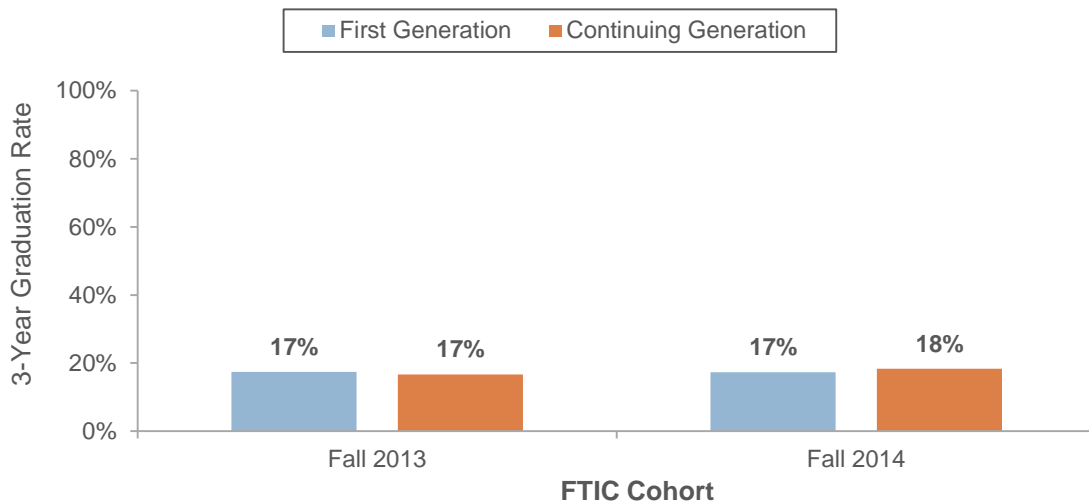


Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Three-Year Graduation Rates

For the Fall 2013 and Fall 2014 FTIC cohorts, the three-year NOVA graduation rates were around 17-18 percent for both first generation and continuing generation students.

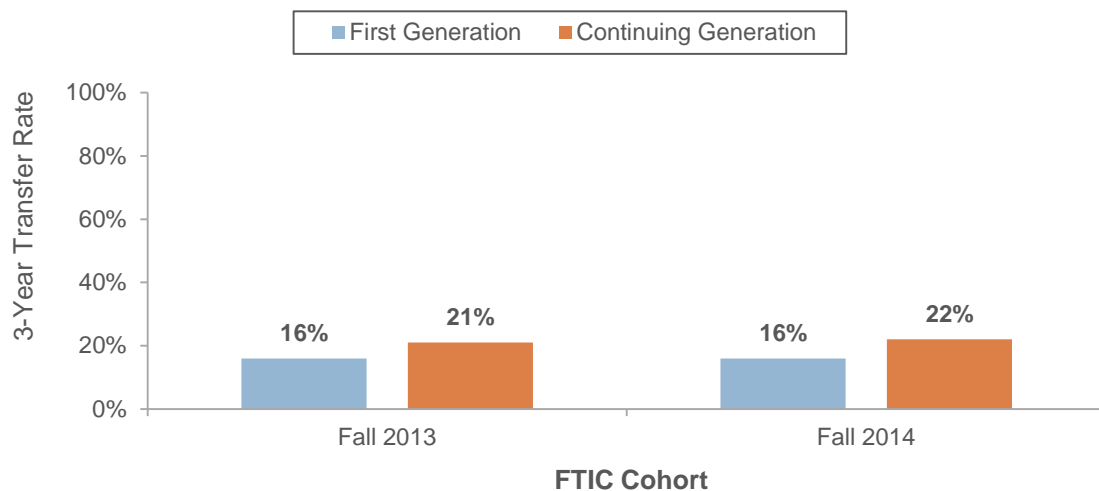
**Figure 20. Three-Year NOVA Graduation Rate by First Generation Status:
Fall 2013 and Fall 2014 FTIC Cohorts**



Three-Year Transfer Rates

A considerably lower proportion of first generation students transferred to a four-year institution within three years of initial enrollment at NOVA, compared to continuing generation students (16 percent compared to 21-22 percent).

**Figure 21. Three-Year Transfer Rate by First Generation Status:
Fall 2013 and Fall 2014 FTIC Cohorts**



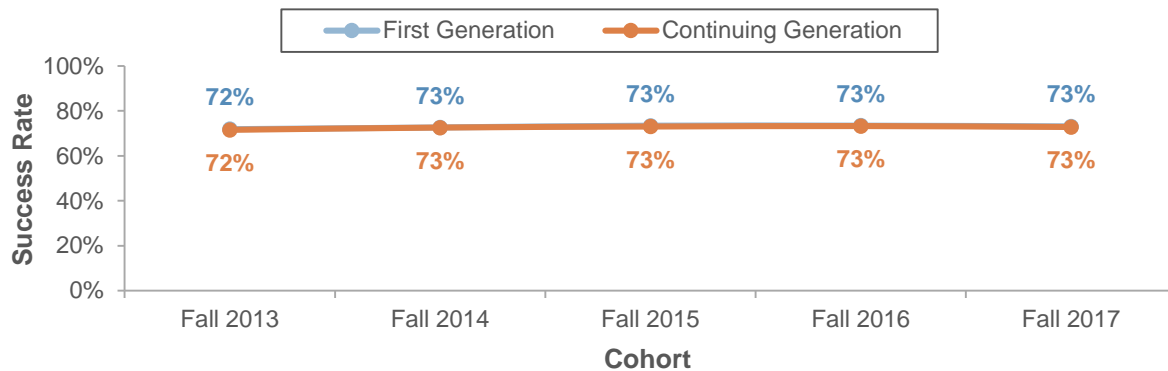
Note: Transfer to four-year institutions with or without completing a NOVA degree.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Overall Course Success Rates

Across all courses at NOVA, course success rates averaged around 73 percent for both first generation students and continuing generation students.

Figure 22. Overall Course Success Rates by First Generation Status: Fall 2013 through Fall 2017 Cohorts



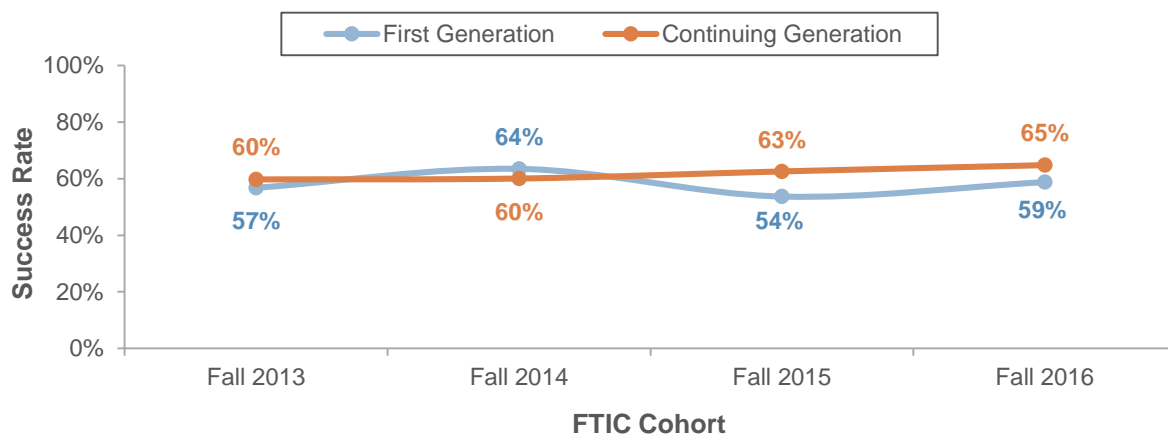
Success Rates in Gatekeeper Courses

NOVA's ATD initiative in 2007 determined gatekeeper courses to be the five courses with highest enrollment and lowest success rates: ACC 211: Principles of Accounting I; BIO 101: General Biology I; ENG 111: College Composition I; MTH 151: Mathematics for the Liberal Arts I; and MTH 163: Pre-Calculus I.

Accounting 211: Principles of Accounting I

On average, first generation students' success rate in ACC 211 was 58 percent compared to 62 percent for continuing generation students in these four cohorts. Across the four cohorts presented here, first generation students succeeded in ACC 211 at rates that were three to nine percentage points lower than continuing generation students.

Figure 23. Success Rates in Accounting 211 within One Year of Initial Enrollment by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts



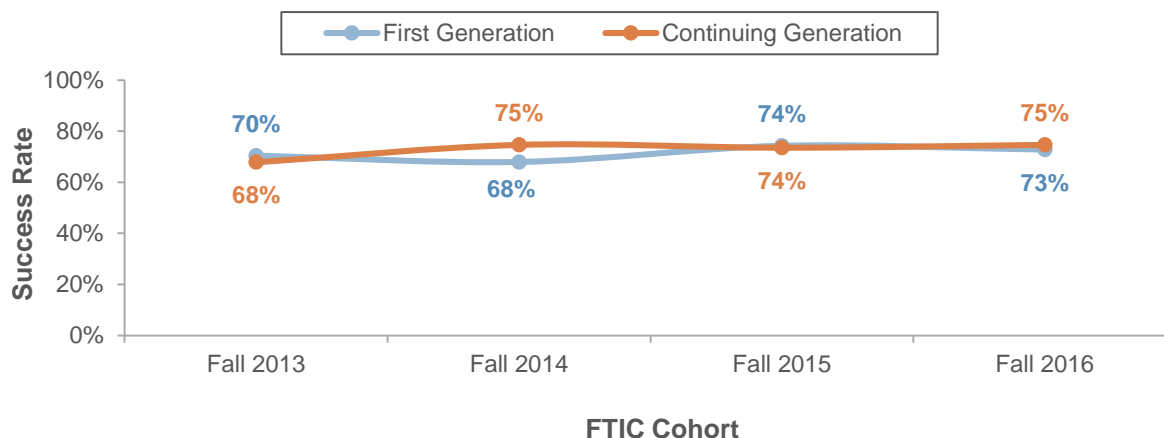
Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Biology 101: General Biology I

On average, first generation students succeeded in BIO 101 at a rate slightly lower than continuing generation students (71 compared to 72 percent). In Fall 2014 and Fall 2016, first generation students had a lower success rate in BIO 101 compared to continuing generation students. In the Fall 2013 cohort, first generation students succeeded at a higher rate (70 compared to 68 percent); in the Fall 2015 cohort, the success rates were the same for both groups.

Figure 24. Success Rates in Biology 101 within One Year of Initial Enrollment by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts

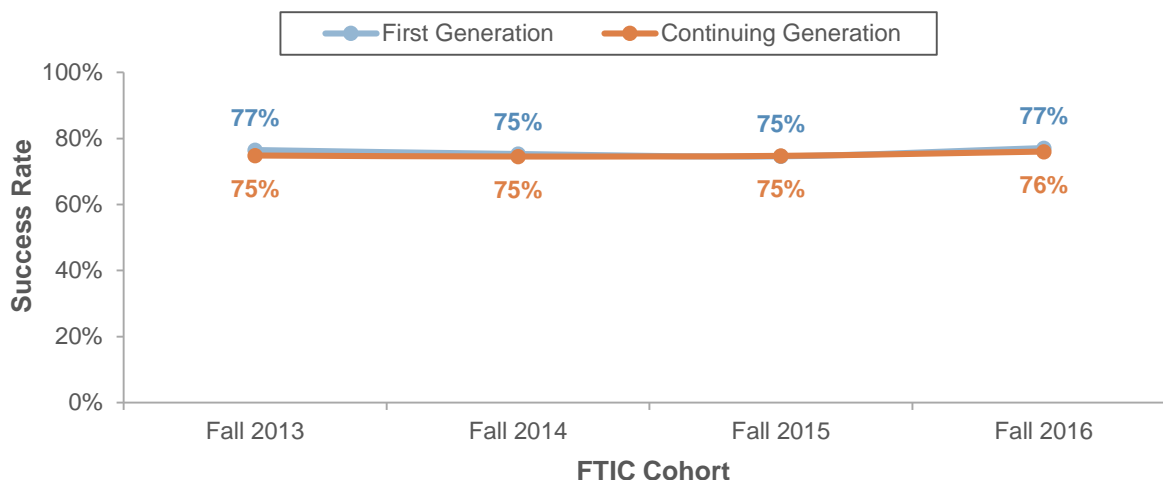


Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

English 111: College Composition I

On average, first generation students succeeded in ENG 111 at a rate slightly higher than continuing generation students (76 compared to 75 percent). In Fall 2013 and Fall 2016, ENG 111 success rates were higher for first generation students than continuing generation students. In Fall 2014 and Fall 2015, ENG 111 success rates were the same for both groups of students.

Figure 25. Success Rates in English 111 within One Year of Initial Enrollment by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts



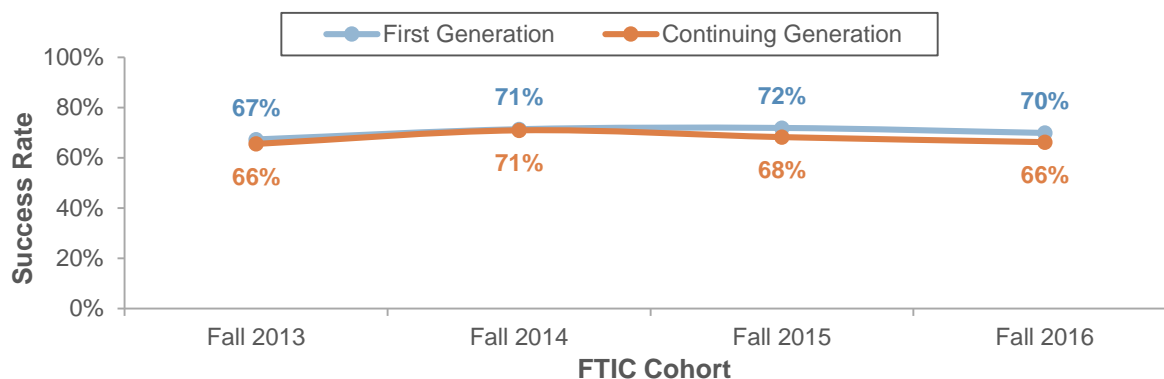
Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Math 151: Mathematics for the Liberal Arts

On average, first generation students succeeded in MTH 151 at higher rate than continuing generation students (70 compared to 68 percent). In three cohorts, first generation students succeeded in MTH 151 at rates that were one to four percentage points higher than continuing generation students. However, in the Fall 2014 cohort, success rates were equivalent between the two groups.

Figure 26. Success Rates in MTH 151 within One Year of Initial Enrollment by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts

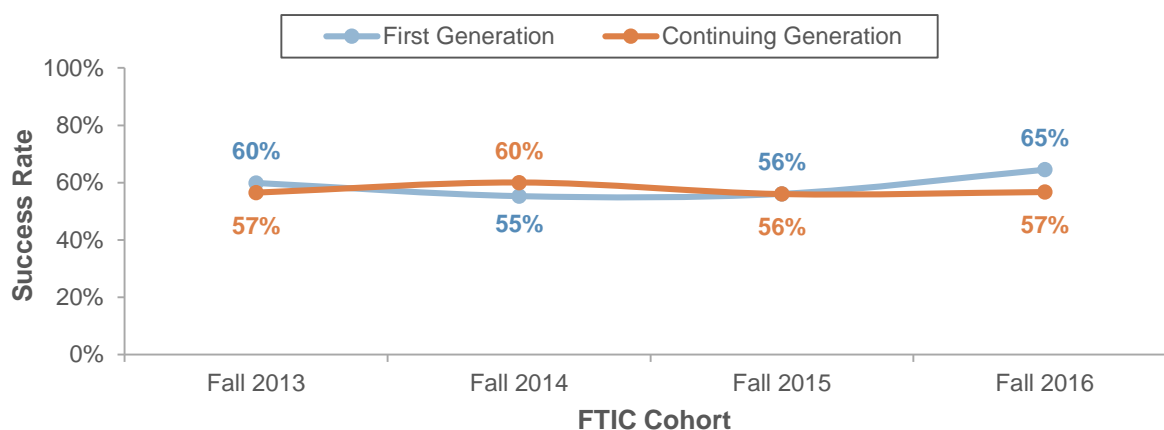


Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

Math 163: Pre-Calculus I

On average, first generation students succeeded in MTH 163 at a higher rate than continuing generation students (59 compared to 57 percent). In Fall 2013 and Fall 2016, MTH 163 success rates were three to eight percentage points higher for first generation students than continuing generation students. In the Fall 2013 cohort, first generation students succeeded at a lower rate (55 compared to 60 percent); in the Fall 2015 cohort, the success rates were the same for both groups.

Figure 27. Success Rates in MTH 163 within One Year of Initial Enrollment by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts



Note: Success in credit-level courses is defined by a grade of C or better within two years of enrollment.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

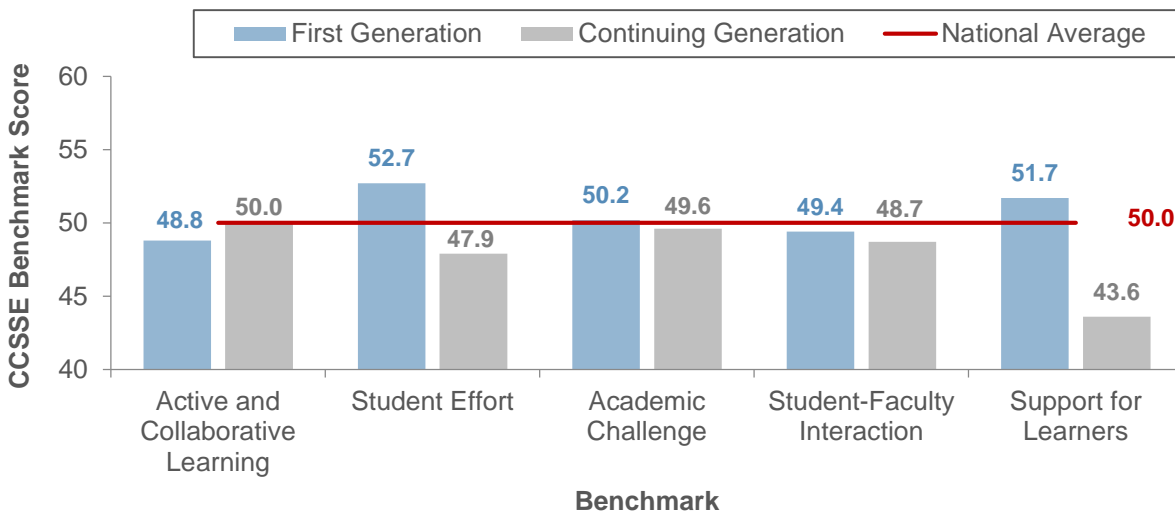
E. NOVA Benchmark Scores on the Community College Survey of Student Engagement (CCSSE)

The Community College Survey of Student Engagement (CCSSE) is an assessment tool used to help institutions focus on good educational practices and identify areas in which they can improve programs and services for students. The survey is comprised of items that assess institutional practices and student behaviors that are highly correlated with student learning and retention.⁴

CCSSE identifies five benchmarks for assessing institutional performance in student engagement based on groups of conceptually-related items on the survey: Active and Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners.

- First generation students rated NOVA higher than continuing generation students on four of the five benchmarks: Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners.
- First generation students rated NOVA higher than the national average on two benchmarks: Student Effort and Support for Learners.
- Continuing generation students rated NOVA at or below the national average on all five benchmarks.

Figure 28. NOVA Benchmark Scores by First Generation Status: CCSSE 2017



Note. NOVA scores are included in national averages.

⁴ Community College Survey of Student Engagement. (2017). Retrieved from: <http://www.ccsse.org>.

Conclusion

Research shows that many first generation students lack familiarity and understanding regarding college preparedness. First generation students can face significant financial, cultural, and educational barriers, which can make navigating the college experience difficult.⁵

However, as presented in this report, the differences in outcomes between first generation and continuing generation students at NOVA were minimal, suggesting that the access to educational opportunities that NOVA provides gives first generation students the ability to be as successful as their continuing generation counterparts.

On most student success metrics, first generation students performed comparably or slightly better than their continuing generation counterparts. While a higher proportion of first generation students were placed into developmental math and English compared to continuing generation students, their success rates in developmental math and English were comparable to continuing generation students. Although developmental math first generation students did not perform as well as their continuing generation counterparts in gatekeeper math, developmental English first generation students performed better in gatekeeper English than their continuing generation counterparts. College-ready first generation students were comparable to college-ready continuing generation students in gatekeeper math and English.

First generation students performed better than continuing generation students in three gatekeeper courses: ENG 111, MTH 151, MTH 163, and lower in two gatekeeper courses: ACC 211 and BIO 101. Overall course success rates, fall-to-spring retention, fall-to-fall retention, three-year graduation rates (from NOVA), and were comparable for both first generation and continuing generation students. A lower percentage of first generation students transferred to a four-year institution within three years compared to continuing generation students.

A host of barriers can impede a first generation student's choice to attend college and/or ability to complete their academic goal. NOVA has a unique opportunity to act as a gateway to post-secondary education and provide support for a generation of students whose families have not previously attended college. Such a targeted initiative would make a way for these students to better navigate college and achieve their academic and personal goals.

⁵ Mangan, Katherine. (2015). *The Challenge of the First-Generation Student*. The Chronicle of Higher Education.

Appendix: Data Tables

A. Demographics of First Generation Students

Table 1. First Generation Status: Fall 2013 through Fall 2017

Status	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
	#	%	#	%	#	%	#	%	#	%
First Generation	10,213	19.7	10,427	20.3	10,607	20.4	10,399	20.5	10,545	20.6
Continuing Generation	41,590	80.3	41,060	79.7	41,471	79.6	40,436	79.5	40,645	79.4
Total	51,803	100.0	51,487	100.0	52,078	100.0	50,835	100.0	51,190	100.0

Table 2. First Generation Status by Gender: Fall 2013 through Fall 2017

Gender	Fall 2013				Fall 2014				Fall 2015				Fall 2016				Fall 2017			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Male	4,520	44.3	20,740	49.9	4,540	43.5	20,441	49.8	4,653	43.9	20,823	50.2	4,599	44.2	20,298	50.2	4,603	43.7	20,204	49.7
Female	5,693	55.7	20,850	50.1	5,887	56.5	20,619	50.2	5,954	56.1	20,648	49.8	5,800	55.8	20,138	49.8	5,942	56.3	20,441	50.3
Total	10,213	100.0	41,590	100.0	10,427	100.0	41,060	100.0	10,607	100.0	41,471	100.0	10,399	100.0	40,436	100.0	10,545	100.0	40,645	100.0

Table 3. First Generation Status by Enrollment Status: Fall 2013 through Fall 2017

Enrollment Status	Fall 2013				Fall 2014				Fall 2015				Fall 2016				Fall 2017			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Full-Time	4,071	39.9	15,629	37.6	3,988	38.2	14,754	35.9	3,842	36.2	14,593	35.2	3,786	36.4	13,795	34.1	3,785	35.9	13,482	33.2
Part-Time	6,142	60.1	25,961	62.4	6,439	61.8	26,306	64.1	6,765	63.8	26,878	64.8	6,613	63.6	26,641	65.9	6,760	64.1	27,163	66.8
Total	10,213	100.0	41,590	100.0	10,427	100.0	41,060	100.0	10,607	100.0	41,471	100.0	10,399	100.0	40,436	100.0	10,545	100.0	40,645	100.0

Table 4. First Generation Status by Student Type: Fall 2013 through Fall 2017

Student Type	Fall 2013				Fall 2014				Fall 2015				Fall 2016				Fall 2017			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
First-Time	2,117	20.7	7,540	18.1	2,217	21.3	8,317	20.3	2,211	20.8	9,276	22.4	2,208	21.2	10,009	24.8	2,270	21.5	10,784	26.5
Returning/Reapplying	7,353	72.0	30,806	74.1	7,551	72.4	29,736	72.4	7,723	72.8	29,240	70.5	7,577	72.9	27,716	68.5	7,654	72.6	27,375	67.4
Transfer	743	7.3	3,244	7.8	659	6.3	3,007	7.3	673	6.3	2,955	7.1	614	5.9	2,711	6.7	621	5.9	2,486	6.1
Total	10,213	100.0	41,590	100.0	10,427	100.0	41,060	100.0	10,607	100.0	41,471	100.0	10,399	100.0	40,436	100.0	10,545	100.0	40,645	100.0

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Table 5. First Generation Status by Program Placement: Fall 2013 through Fall 2017

Program Placement	Fall 2013				Fall 2014				Fall 2015				Fall 2016				Fall 2017			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
A.A./A.S.	7,177	70.3	27,268	65.6	7,361	70.6	27,302	66.5	7,562	71.3	27,064	65.3	7,523	72.3	25,851	63.9	7,348	69.7	24,827	61.1
A.A.A./A.A.S.	1,776	17.4	6,488	15.6	1,732	16.6	5,799	14.1	1,626	15.3	5,476	13.2	1,509	14.5	5,097	12.6	1,678	15.9	5,023	12.4
Certificate	376	3.7	1,507	3.6	334	3.2	1,343	3.3	336	3.2	1,259	3.0	297	2.9	1,065	2.6	273	2.6	972	2.4
Not Placed	884	8.7	6,327	15.2	1,000	9.6	6,616	16.1	1,083	10.2	7,672	18.5	1,070	10.3	8,423	20.8	1,246	11.8	9,823	24.2
Total	10,213	100.0	41,590	100.0	10,427	100.0	41,060	100.0	10,607	100.0	41,471	100.0	10,399	100.0	40,436	100.0	10,545	100.0	40,645	100.0

Table 6. First Generation Status by Age Group: Fall 2013 through Fall 2017

Age Group	Fall 2013				Fall 2014				Fall 2015				Fall 2016				Fall 2017			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
21 & Under	4,375	42.8	18,367	44.2	4,669	44.8	19,207	46.8	4,845	45.7	20,756	50.0	4,954	47.6	21,689	53.6	5,074	48.1	22,902	56.3
22-24	1,481	14.5	7,276	17.5	1,580	15.2	6,767	16.5	1,669	15.7	6,581	15.9	1,593	15.3	6,195	15.3	1,685	16.0	6,027	14.8
25-44	3,363	32.9	13,125	31.6	3,265	31.3	12,505	30.5	3,210	30.3	11,666	28.1	3,067	29.5	10,423	25.8	3,009	28.5	9,732	23.9
45 & Older	994	9.7	2,822	6.8	913	8.8	2,581	6.3	883	8.3	2,468	6.0	785	7.5	2,129	5.3	777	7.4	1,984	4.9
Total	10,213	100.0	41,590	100.0	10,427	100.0	41,060	100.0	10,607	100.0	41,471	100.0	10,399	100.0	40,436	100.0	10,545	100.0	40,645	100.0

Table 7. First Generation Status by Race/Ethnicity: Fall 2013 through Fall 2017

Race/Ethnicity	Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017	
	#	%	#	%	#	%	#	%	#	%
First Generation										
White	2,957	29.0	2,762	26.5	2,681	25.3	2,420	23.3	2,328	22.1
Black/African American	2,029	19.9	2,036	19.5	1,914	18.0	1,758	16.9	1,784	16.9
Asian	1,601	15.7	1,623	15.6	1,747	16.5	1,778	17.1	1,816	17.2
Hispanic/Latino	3,151	30.9	3,540	34.0	3,825	36.1	4,010	38.6	4,209	39.9
American Indian/Alaska Native	20	0.2	23	0.2	19	0.2	21	0.2	23	0.2
Native Hawaiian/Other Pacific Islander	45	0.4	44	0.4	40	0.4	32	0.3	34	0.3
Two or More Races	253	2.5	270	2.6	261	2.5	273	2.6	269	2.6
Unknown	84	0.8	77	0.7	84	0.8	77	0.7	68	0.6
Not Specified	73	0.7	52	0.5	36	0.3	30	0.3	14	0.1
First Generation Total	10,213	100.0	10,427	100.0	10,607	100.0	10,399	100.0	10,545	100.0
Continuing Generation										
White	18,036	43.4	17,596	42.9	17,768	42.8	17,250	42.7	16,944	41.7
Black/African American	7,218	17.4	7,152	17.4	6,791	16.4	6,398	15.8	6,366	15.7
Asian	6,448	15.5	6,233	15.2	6,337	15.3	6,415	15.9	6,606	16.3
Hispanic/Latino	6,837	16.4	7,125	17.4	7,504	18.1	7,477	18.5	7,646	18.8
American Indian/Alaska Native	117	0.3	111	0.3	117	0.3	105	0.3	104	0.3
Native Hawaiian/Other Pacific Islander	252	0.6	224	0.5	221	0.5	197	0.5	172	0.4
Two or More Races	1,467	3.5	1,594	3.9	1,808	4.4	1,801	4.5	2,031	5.0
Unknown	556	1.3	574	1.4	608	1.5	584	1.4	633	1.6
Not Specified	659	1.6	451	1.1	317	0.8	209	0.5	143	0.4
Continuing Generation Total	41,590	100.0	41,060	100.0	41,471	100.0	40,436	100.0	40,645	100.0

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Table 8. First Generation Status by Underserved Population (USP): Fall 2013 through Fall 2016

Underserved Population	Fall 2013				Fall 2014				Fall 2015				Fall 2016			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Underserved Location	69	0.7	340	0.8	68	0.7	275	0.7	74	0.7	280	0.7	71	0.7	271	0.7
Minority Race	7,099	69.5	22,344	53.7	7,540	72.3	22,444	54.7	7,806	73.6	22,784	54.9	7,872	75.7	22,397	55.4
Pell Recipient	3,877	38.0	9,655	23.2	3,988	38.2	9,928	24.2	3,922	37.0	9,304	22.4	3,600	34.6	8,216	20.3
Cohort Total	10,213	--	41,590	--	10,427	--	41,060	--	10,607	--	41,471	--	10,399	--	40,436	--

Note: Percentages do not add to 100 percent because groups are not mutually exclusive, i.e., a student can be in none, some, or all of these groups (a student can be of a minority race and a Pell recipient, etc.).

Table 9. Percentage of FTIC Students who are First Generation Students by Dual Enrollment Status: Fall 2013 through Fall 2016

Dual Enrollment Status	Fall 2013				Fall 2014				Fall 2015				Fall 2016			
	First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen		First Gen		Cont. Gen	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Dual Enrolled	147	6.9	1,299	17.2	286	12.9	2,181	26.2	360	16.3	3,129	33.7	434	19.7	4,216	42.1
Not Dual Enrolled	1,970	93.1	6,241	82.8	1,931	87.1	6,136	73.8	1,851	83.7	6,147	66.3	1,774	80.3	5,793	57.9
FTIC Total	2,117	100.0	7,540	100.0	2,217	100.0	8,317	100.0	2,211	100.0	9,276	100.0	2,208	100.0	10,009	100.0

Note: FTIC = first-time in college

B. Developmental Math Placement and Success of First Generation Students

Table 10. Math Placement Testing by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts

FTIC Cohort	First Generation			Continuing Generation		
	Total	Took VPT-Math		Total	Took VPT-Math	
		#	%		#	%
Fall 2013	1,968	1,405	71.4	6,208	4,417	71.2
Fall 2014	1,918	1,598	83.3	6,018	4,979	82.7
Fall 2015	1,834	1,535	83.7	5,965	5,111	85.7
Fall 2016	1,761	1,514	86.0	5,639	4,906	87.0

Note: These totals do not include dual enrolled students or students exempt from taking the VPT-Math.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

**Table 11. Developmental Math Placement by First Generation Status:
Fall 2013 through Fall 2016 FTIC Cohorts**

FTIC Cohort	First Generation			Continuing Generation		
	Total Who Took VPT-Math	Placed in Dev. Math		Total Who Took VPT-Math	Placed in Dev. Math	
		#	%		#	%
Fall 2013	1,405	706	50.2	4,417	1,913	43.3
Fall 2014	1,598	812	50.8	4,979	2,306	46.3
Fall 2015	1,535	729	47.5	5,111	2,323	45.5
Fall 2016	1,514	719	47.5	4,906	2,159	44.0

**Table 12. Success in Developmental Math within Two Years by First Generation Status:
Fall 2013 through Fall 2015 FTIC Cohorts**

FTIC Cohort	First Generation					Continuing Generation				
	Total Placed in Dev. Math	Enrolled in Dev. Math		Succeeded in Dev. Math		Total Placed in Dev. Math	Enrolled in Dev. Math		Succeeded in Dev. Math	
		#	%	#	%		#	%	#	%
Fall 2013	706	521	73.8	204	39.2	1,913	1,365	71.4	535	39.2
Fall 2014	812	651	80.2	247	37.9	2,306	1,771	76.8	734	41.4
Fall 2015	729	547	75.0	245	44.8	2,323	1,713	73.7	675	39.4

Table 13. Developmental Math Students' Success in Gatekeeper Math within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

FTIC Cohort	First Generation					Continuing Generation				
	Total Who Succeeded in Dev. Math	Enrolled in Gatekeeper Math		Succeeded in Gatekeeper Math		Total Who Succeeded in Dev. Math	Enrolled in Gatekeeper Math		Succeeded in Gatekeeper Math	
		#	%	#	%		#	%	#	%
Fall 2013	204	102	50.0	76	74.5	535	274	51.2	204	74.5
Fall 2014	247	116	47.0	79	68.1	734	383	52.2	291	76.0
Fall 2015	245	109	44.5	71	65.1	675	323	47.9	235	72.8

Table 14. College-Ready Students' Success in Gatekeeper Math within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

FTIC Cohort	First Generation					Continuing Generation				
	Total Not Placed in Dev. Math	Enrolled in Gatekeeper Math		Succeeded in Gatekeeper Math		Total Not Placed in Dev. Math	Enrolled in Gatekeeper Math		Succeeded in Gatekeeper Math	
		#	%	#	%		#	%	#	%
Fall 2013	701	433	61.8	311	71.8	2,537	1,509	59.5	1,032	68.4
Fall 2014	799	499	62.5	343	68.7	2,791	1,691	60.6	1,189	70.3
Fall 2015	823	497	60.4	348	70.0	2,970	1,767	59.5	1,216	68.8

Note: Totals of students not placed in developmental math also include the small number of students exempt from taking the VPT-Math.

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

C. Developmental English Placement and Success of First Generation Students

**Table 15. English Placement Testing by First Generation Status:
Fall 2013 through Fall 2016 FTIC Cohorts**

FTIC Cohort	First Generation			Continuing Generation		
	Total	Took VPT-English		Total	Took VPT-English	
		#	%		#	%
Fall 2013	1,934	1,379	71.3	6,009	4,135	68.8
Fall 2014	1,902	1,504	79.1	5,848	4,421	75.6
Fall 2015	1,800	1,422	79.0	5,809	4,643	79.9
Fall 2016	1,728	1,351	78.2	5,456	4,248	77.9

Note: These totals do not include dual enrolled students or students exempt from taking the VPT-English.

**Table 16. Developmental English Placement by First Generation Status:
Fall 2013 through Fall 2016 FTIC Cohorts**

FTIC Cohort	First Generation			Continuing Generation		
	Total Who Took VPT-English	Placed in Dev. Eng.		Total Who Took VPT-English	Placed in Dev. Eng.	
		#	%		#	%
Fall 2013	1,379	421	30.5	4,135	1,241	30.0
Fall 2014	1,504	409	27.2	4,421	997	22.6
Fall 2015	1,422	357	25.1	4,643	1,066	23.0
Fall 2016	1,351	365	27.0	4,248	985	23.2

**Table 17. Success in Developmental English within Two Years by First Generation Status:
Fall 2013 through Fall 2015 FTIC Cohorts**

FTIC Cohort	First Generation					Continuing Generation				
	Total Placed in Dev. Eng.	Enrolled in Dev. Eng.		Succeeded in Dev. Eng.		Total Placed in Dev. Eng.	Enrolled in Dev. Eng.		Succeeded in Dev. Eng.	
		#	%	#	%		#	%	#	%
Fall 2013	421	370	87.9	279	75.4	1,241	1,084	87.3	795	73.3
Fall 2014	409	359	87.8	263	73.3	997	876	87.9	662	75.6
Fall 2015	357	310	86.8	238	76.8	1,066	947	88.8	743	78.5

Table 18. Developmental English Students' Success in Gatekeeper English within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

FTIC Cohort	First Generation					Continuing Generation				
	Total Who Succeeded in Dev. Eng.	Enrolled in Gatekeeper Eng.		Succeeded in Gatekeeper Eng.		Total Who Succeeded in Dev. Eng.	Enrolled in Gatekeeper Eng.		Succeeded in Gatekeeper Eng.	
		#	%	#	%		#	%	#	%
Fall 2013	279	262	93.9	236	90.1	795	754	94.8	646	85.7
Fall 2014	263	243	92.4	221	90.9	662	610	92.1	520	85.2
Fall 2015	238	231	97.1	197	85.3	743	678	91.3	561	82.7

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

Table 19. College-Ready Students' Success in Gatekeeper English within Two Years by First Generation Status: Fall 2013 through Fall 2015 FTIC Cohorts

FTIC Cohort	First Generation					Continuing Generation				
	Total Not Placed in Dev. Eng.	Enrolled in Gatekeeper Eng.		Succeeded in Gatekeeper Eng.		Total Not Placed in Dev. Eng.	Enrolled in Gatekeeper Eng.		Succeeded in Gatekeeper Eng.	
		#	%	#	%		#	%	#	%
Fall 2013	994	931	93.7	733	78.7	3,126	2,891	92.5	2,251	77.9
Fall 2014	1,124	1,069	95.1	859	80.4	3,712	3,493	94.1	2,744	78.6
Fall 2015	1,116	1,064	95.3	840	78.9	3,915	3,687	94.2	2,907	78.8

Note: Totals of students not placed in developmental English also include the small number of students exempt from taking the VPT-English.

D. Success Outcomes of First Generation Students

Retention Rates

Table 20. Fall-to-Spring Retention by First Generation Status: Fall 2013 through Fall 2017 FTIC Cohorts

FTIC Cohort	First Generation			Continuing Generation		
	Total	Retained in Spring		Total	Retained in Spring	
		#	%		#	%
Fall 2013	1,970	1,578	80.1	6,241	4,888	78.3
Fall 2014	1,931	1,523	78.9	6,136	4,882	79.6
Fall 2015	1,851	1,497	80.9	6,147	4,956	80.6
Fall 2016	1,774	1,431	80.7	5,793	4,638	80.1
Fall 2017	1,722	1,335	77.5	5,434	4,320	79.5

Table 21. Fall-to-Fall Retention by First Generation Status: Fall 2013 through Fall 2016 FTIC Cohorts

FTIC Cohort	First Generation			Continuing Generation		
	Total	Retained in Fall		Total	Retained in Fall	
		#	%		#	%
Fall 2013	1,970	1,176	59.7	6,241	3,701	59.3
Fall 2014	1,931	1,171	60.6	6,136	3,809	62.1
Fall 2015	1,851	1,159	62.6	6,147	3,771	61.3
Fall 2016	1,774	1,130	63.7	5,793	3,687	63.6

Graduation and Transfer Rates

Table 22. Three-Year Graduation Rate by First Generation Status: Fall 2013 and Fall 2014 FTIC Cohorts

FTIC Cohort	First Generation			Continuing Generation		
	Total	Graduated		Total	Graduated	
		#	%		#	%
Fall 2013	1,970	342	17.4	6,241	1,040	16.7
Fall 2014	1,931	335	17.3	6,136	1,125	18.3

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

**Table 23. Three-Year Transfer Rate by First Generation Status:
Fall 2013 and Fall 2014 FTIC Cohorts**

FTIC Cohort	First Generation			Continuing Generation		
	Total	Transferred		Total	Transferred	
		#	%		#	%
Fall 2013	1,970	308	15.6	6,241	1,321	21.2
Fall 2014	1,931	316	16.4	6,136	1,352	22.0

Note: Transferred to a four-year institution.

Course Success Rates

**Table 24. Gatekeeper Course Success Rates by First Generation Status:
Fall 2013 through Fall 2016 FTIC Cohorts**

Cohort	FTIC Total	ACC 211				BIO 101				ENG 111				MTH 151				MTH 163			
		Enrolled		Succeeded		Enrolled		Succeeded		Enrolled		Succeeded		Enrolled		Succeeded		Enrolled		Succeeded	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
FTIC First Generation																					
Fall 2013	1,970	81	4.1	46	56.8	419	21.3	295	70.4	1,356	68.8	1,038	76.5	214	10.9	144	67.3	337	17.1	202	59.9
Fall 2014	1,931	85	4.4	54	63.5	355	18.4	241	67.9	1,482	76.7	1,116	75.3	210	10.9	150	71.4	369	19.1	204	55.3
Fall 2015	1,851	82	4.4	44	53.7	319	17.2	237	74.3	1,412	76.3	1,054	74.6	178	9.6	128	71.9	362	19.6	203	56.1
Fall 2016	1,774	68	3.8	40	58.8	279	15.7	203	72.8	1,380	77.8	1,064	77.1	153	8.6	107	69.9	383	21.6	247	64.5
FTIC Continuing Generation																					
Fall 2013	6,241	281	4.5	168	59.8	1,391	22.3	943	67.8	4,416	70.8	3,302	74.8	867	13.9	569	65.6	1,091	17.5	616	56.5
Fall 2014	6,136	258	4.2	155	60.1	1,222	19.9	912	74.6	4,756	77.5	3,544	74.5	814	13.3	578	71.0	1,208	19.7	725	60.0
Fall 2015	6,147	289	4.7	181	62.6	1,107	18.0	814	73.5	4,776	77.7	3,570	74.7	703	11.4	480	68.3	1,291	21.0	723	56.0
Fall 2016	5,793	199	3.4	129	64.8	1,061	18.3	791	74.6	4,590	79.2	3,488	76.0	606	10.5	402	66.3	1,294	22.3	734	56.7

Notes: Success in a gatekeeper course within one year of initial enrollment at NOVA. Success in credit-level courses is defined by a grade of C or better. The five gatekeeper courses at NOVA are as follows: ACC 211: Principles of Accounting I; BIO 101: General Biology I; ENG 111: College Composition I; MTH 151: Mathematics for the Liberal Arts I; MTH 163: Pre-Calculus I.

**Table 25. Overall Course Success Rates by First Generation Status:
Fall 2013 through Fall 2017 Cohorts**

FTIC Cohort	First Generation			Continuing Generation			Total		
	# Courses	Succeeded		# Courses	Succeeded		# Courses	Succeeded	
		#	%		#	%		#	%
Fall 2013	30,043	21,612	71.9	118,033	84,432	71.5	148,076	106,044	71.6
Fall 2014	31,086	22,591	72.7	117,547	85,311	72.6	148,633	107,902	72.6
Fall 2015	30,666	22,519	73.4	115,841	84,610	73.0	146,507	107,129	73.1
Fall 2016	29,644	21,771	73.4	107,256	78,568	73.3	136,900	100,339	73.3

Note: Course success is defined by grades of A, B, C, P, or S.

NOVA Benchmark Scores on CCSSE 2017

Table 26. NOVA Benchmark Scores by First Generation Status: CCSSE 2017

Status	Active & Collaborative Learning	Student Effort	Academic Challenge	Student-Faculty Interaction	Support for Learners
First Generation	48.8	52.7	50.2	49.4	51.7
Continuing Generation	50.0	47.9	49.6	48.7	43.6

Notes: Where applicable, Fall 2017 data was extracted from SIS because VCCS data files were not yet available at the time of this report. For the purpose of this analysis, dual enrolled students were excluded from the first-time in college (FTIC) cohorts.

PATHWAY TO THE AMERICAN DREAM—NOVA'S STRATEGIC PLAN 2017-2023

THE NOVA COMMITMENT

As its primary contributions to meeting the needs of the Commonwealth of Virginia, the Northern Virginia Community College pledges to advance the social and economic mobility of its students while producing an educated citizenry for the 21st Century.

THE STRATEGIC PLAN GOALS AND OBJECTIVES

To deliver on this commitment NOVA will focus its creativity and talent, its effort and energy, and its resources and persistence, on achieving three overarching goals—success, achievement, and prosperity. It will strive to enable **Every Student to Succeed, Every Program to Achieve, and Every Community to Prosper.**

To advance the completion agenda described above, thereby promoting students' success and enhancing their social mobility, ensuring that programs achieve, and producing an educated citizenry for the 21st Century, the following goals and objectives are adopted:

GOAL 1: Every Student Succeeds

- **Objective 1:** Develop a College-wide approach to advising that ensures all students are advised and have access to support throughout their time at NOVA
- **Objective 2:** Implement VIP-PASS System as the foundational technology based on NOVA Informed Pathways for student self-advising, assignment and coordination of advisors, and course registration

GOAL 2: Every Program Achieves

- **Objective 3:** Develop comprehensive, fully integrated Informed Pathways for every program to ensure seamless transitions from high school and other entry points to NOVA, and from NOVA to four-year transfer institutions or the workforce
- **Objective 4:** Develop effective processes and protocols for programmatic College-wide collective decisions that include consistent, accountable leadership and oversight of each academic program with designated "owners," active advisory committees, clear student learning outcomes and assessments, and program reviews in all modalities of instruction
- **Objective 5:** Align NOVA's organizational structures, position descriptions, and expectations for accountability with its overarching mission to support student engagement, learning, success and institutional effectiveness

GOAL 3: Every Community Prospers

- **Objective 6:** Enhance the prosperity of every community in Northern Virginia by refocusing and prioritizing NOVA's workforce development efforts
- **Objective 7:** Further develop NOVA's IT and Cybersecurity programs to support regional job demand and position NOVA as the leading IT community college in the nation
- **Objective 8:** Re-envision workforce strategies and integrate workforce development into a NOVA core focus
- **Objective 9:** Plan to expand the breadth and reach of NOVA's healthcare and biotechnology programs, and prioritize future programs to support regional economic development goals economic development goals

NOVA

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