

# GPS vs. Non-GPS Student Success Outcomes: Fall 2014 and Spring 2015

**Research Report No. 16-16** 

Office of Institutional Effectiveness and Student Success Initiatives MARCH 2016

#### NORTHERN VIRGINIA COMMUNITY COLLEGE

#### OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS INITIATIVES

The purpose of the Office of Institutional Effectiveness and Student Success Initiatives 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.

When citing data from this report, the Northern Virginia Community College (NOVA) Office of Institutional Effectiveness and Student Success Initiatives must be cited as the source.

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## **Executive Summary**

### **Enrollment and Credits Attempted**

In Fall 2014 and Spring 2015, GPS students at NOVA:

- Enrolled in a higher average number of courses per student than all FTIC students.
- Took a larger **average credit load** than all FTIC students.
- Were more likely to enroll in **developmental courses** and attempted a greater number of developmental courses in their first semester at NOVA than all FTIC students.
- Were more likely to enroll in **gatekeeper courses** and attempted a greater number of gatekeeper courses per student than all FTIC students.

### **Success Rates**

- **Overall course success rates** were higher for all FTIC students than for GPS students in Fall 2014 and Spring 2015.
- GPS students had higher **mean end-of-semester GPA** in Fall 2014 than non-GPS students but lower than all FTIC students. GPS students had the highest mean end-of-semester GPA in Spring 2015, higher than non-GPS and all FTIC students.
- In Fall 2014, the **developmental course success rate** for all FTIC students was slightly higher than for GPS students. In Spring 2015, the developmental course success rates were roughly the same for GPS students, non-GPS students, and all FTIC students.
- **The gatekeeper course success rates** were highest for all FTIC students in Fall 2014 and similar for all three groups in Spring 2015.

### Retention

- The Fall-to-Fall retention rate was highest among GPS students.
- The **Fall-to-Spring retention rate** was highest among all FTIC students overall, though only one percentage point higher than GPS students.

### Introduction

#### What is GPS for Success?

- GPS for Success is NOVA's comprehensive advising program for recent high school graduates who are first-time in college (FTIC) students.
- Focusing on early academic advising, GPS was developed as a part of NOVA's Quality Enhancement Plan (QEP) for reaccreditation with the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).
- The goal of GPS for Success is to help students succeed in college by fostering connections with professional advisors and faculty who will help students plan for and attain their academic goals.

### In this Report

This Report compares data on students in the GPS for Success program to other FTIC populations for Fall 2014 and Spring 2015. Specifically, this Report examines:

- Overall course enrollment and success rates
- Mean end-of-semester GPA
- > Average credits attempted
- > Fall-to-Spring and Fall-to-Fall retention rates
- > Developmental course enrollment and success rates
- Gatekeeper course enrollment and success rates

### **Data Notes**

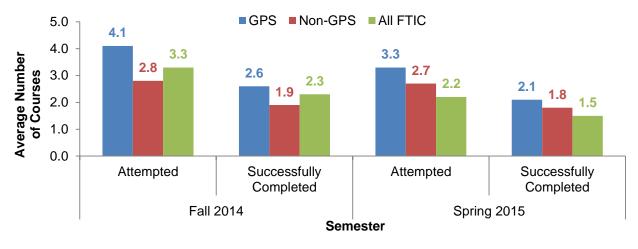
- GPS students are recent high school graduates or GED recipients between the ages 17 and 24 who have never previously attended college (unless it was dual enrollment during high school), who are not members of the College Pathway Initiatives, and are not transient students.
- Non-GPS students are FTIC students outside the age limits of GPS, who are neither dual enrolled nor members of the College Pathway Initiatives.
- All FTIC students are all first-time in college students: GPS, non-GPS, College Pathway Initiatives, transient, and dual enrolled.

## **Overall Course Enrollment and Success Rates**

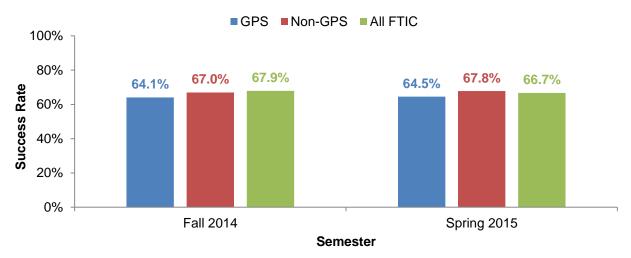
GPS students attempted a greater average number of courses per semester than both non-GPS and all FTIC students. Additionally, GPS students successfully completed a greater average number of courses per semester in Fall 2014 and Spring 2015 (Figure 1). All groups attempted and completed fewer courses in the Spring than in the Fall.

However, as seen in Figure 2, the overall success rates of GPS students were lower than non-GPS students and all FTIC students. This may be due to GPS students enrolling in a larger number of courses, but not being successful in as many courses as the other two groups (compare to Figure 1). In this Report, successful completion of a course is defined as receiving a grade of 'C' or higher.

#### Figure 1. Average Number of Courses Attempted and Successfully Completed per FTIC Student by GPS Status: Fall 2014 and Spring 2015

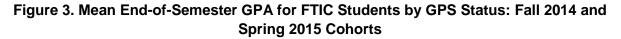


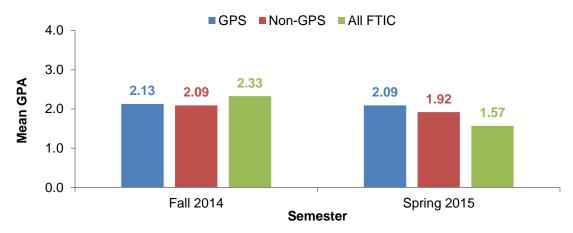
# Figure 2. Overall Course Success Rates for FTIC Students by GPS Status: Fall 2014 and Spring 2015



### **Mean End-of-Semester GPA**

Mean end-of-semester GPAs were higher in Spring 2015 than Fall 2014 for all three groups of students examined in this report. The all FTIC student group had the highest mean end-of-semester GPA in Fall 2014 and the lowest mean end-of-semester GPA in Spring 2015.

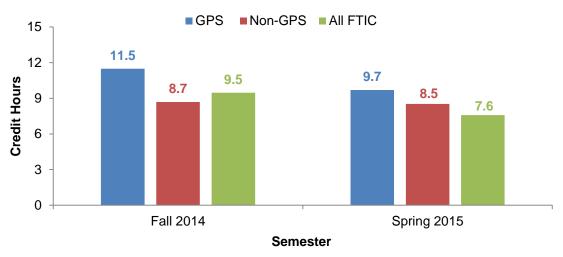




#### Average Credit Load

GPS students took, on average, a larger number of credits than non-GPS students and all FTIC students in both Fall 2014 and Spring 2015. First time students who began their studies in the Spring 2015 semester enrolled in a lower average credit load than those who began their studies at NOVA in the Fall.





### Fall-to-Spring and Fall-to-Fall Retention Rates

The all FTIC students group had the highest Fall-to-Spring retention rate of the three groups, while GPS students had the highest Fall-to-Fall retention rate. GPS students' Fall-to-Spring retention rate was 10 percentage points higher than that of non-GPS students, and their Fall-to-Fall retention rate was almost 17 percentage points higher. Compared to all FTIC students, GPS students' Fall-to-Fall retention rate was higher by 8 percentage points.

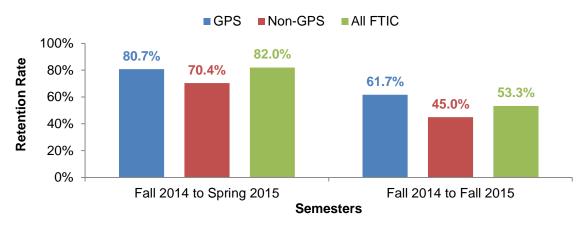
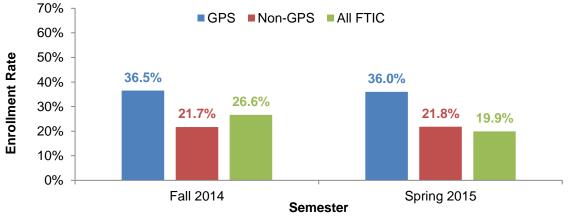


Figure 5. Retention Rates for FTIC Students by GPS Status: Fall 2014 Cohort

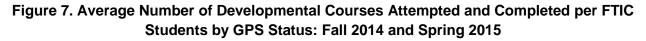
### **Developmental Course Enrollment and Success Rates**

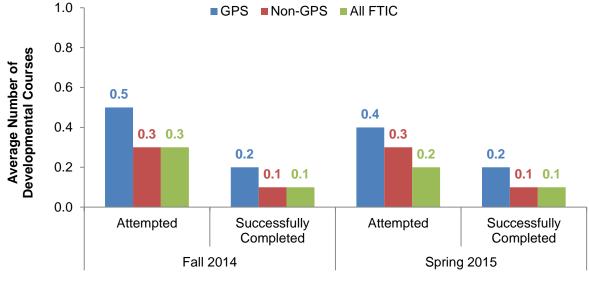
A greater percentage of GPS students enrolled in developmental courses in Fall 2014 compared to all FTIC and non-GPS students in both Fall 2014 and Spring 2015 (Figure 6). Though data on rates of developmental course placement are not examined in this Report, GPS students may have been more likely to adhere to NOVA's recent policy change requiring first-time students to enroll in developmental coursework if placed. Developmental course enrollment remained about the same from Fall 2014 to Spring 2015 for both GPS and non-GPS students.





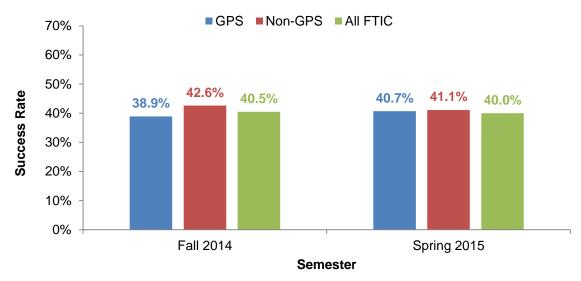
In Fall 2014 and Spring 2015, GPS students both attempted and successfully completed a greater average number of developmental courses per semester than non-GPS and all FTIC students (Figure 7). However, *rates* of successful completion were lowest among GPS students in Fall 2014 (Figure 8). As with overall coursework (see Figures 1 and 2), it is displayed here that although GPS students enrolled in more developmental courses, they were not successful in as many of those courses as the other groups. In Spring 2015, success rates were similar (within 1 percentage point) for all three groups.





Semester

Figure 8. Developmental Course Success Rates for FTIC Students by GPS Status: Fall 2014 and Spring 2015

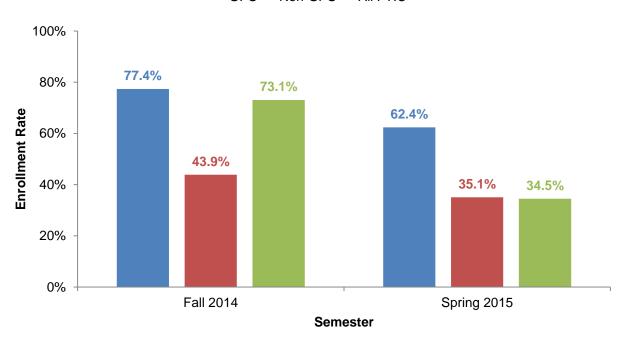


### **Gatekeeper Course Enrollment and Success Rates**

Gatekeeper courses are defined as those that are critical to future success in college, such as general education or prerequisite courses, and which tend to have high enrollment and low success rates. NOVA's five gatekeeper courses are: Principles of Accounting I (ACC 211), College Composition I (ENG 111), General Biology I (BIO 101), Mathematics for the Liberal Arts I (MTH 151), and Pre-calculus I (MTH 163). Students may enroll in more than one gatekeeper course (or none at all) in a given semester.

Non-GPS students were less likely to enroll in gatekeeper courses in Fall 2014 than GPS or all FTIC students (Figure 9). For all three groups of students who entered NOVA for the first time in Spring 2015, enrollment in gatekeeper courses was considerably lower than in Fall 2014.





In Fall 2014, GPS and all FTIC students attempted a similar average number of gatekeeper courses per student (1 per student), while non-GPS students attempted and completed the fewest gatekeeper courses (1 for every 2 students). GPS and all FTIC students successfully completed the same average number of gatekeeper courses (0.7 per student). Non-GPS students successfully completed an average of 0.4 gatekeeper courses per student, which was just under the average number attempted (0.5 per student). In Spring 2015, GPS students attempted and successfully completed more gatekeeper courses than either non-GPS or all FTIC students (see Figure 10, next page).

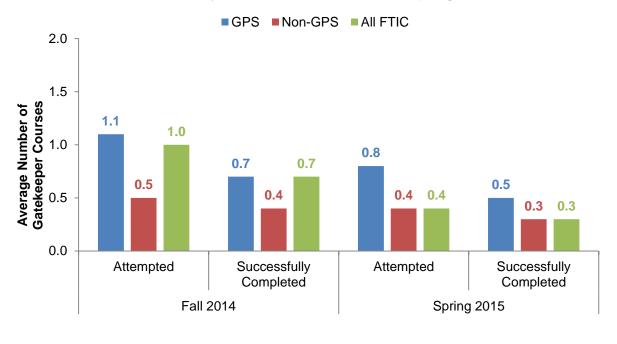
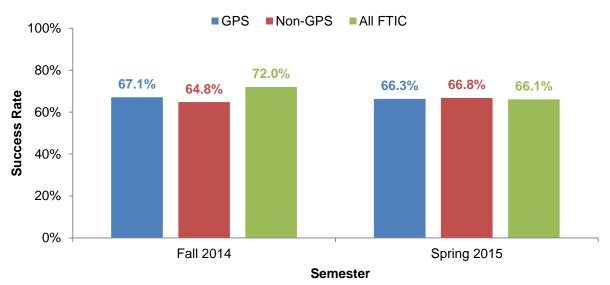


Figure 10. Average Number of Gatekeeper Courses Attempted and Completed per FTIC Students by GPS Status: Fall 2014 and Spring 2015

Semester

In Fall 2014, all FTIC students had the highest gatekeeper success rate at 72 percent. In Spring 2015, there was less than a percentage point difference in success rates between the three groups.





### **Appendix: Data Tables**

Spring 2015							
Semester	Type of FTIC Student	# Students	# Courses Enrolled	Average # Per Student			
	GPS	4,487	18,380	4.1			
Fall 2014	Non-GPS	2,241	6,284	2.8			
	All FTIC	10,534	35,079	3.3			
	GPS	777	2,584	3.3			
Spring 2015	Non-GPS	1,285	3,407	2.7			
	All FTIC	2,928	6,386	2.2			

# Table 1. Overall Course Enrollment Rates for FTIC Students by GPS Status: Fall 2014 and Spring 2015

## Table 2. Overall Course Success Rates for FTIC Students by GPS Status: Fall 2014 andSpring 2015

Semester	Type of FTIC	# Courses	Succes	sful Course Com	pletion
	Student	Enrolled	#	%	Average # Per Student
	GPS	18,380	11,783	64.1%	2.6
Fall 2014	Non-GPS	6,284	4,211	67.0%	1.9
	All FTIC	35,079	23,825	67.9%	2.3
	GPS	2,584	1,667	64.5%	2.1
Spring 2015	Non-GPS	3,407	2,311	67.8%	1.8
	All FTIC	6,386	4,257	66.7%	1.5

## Table 3. Mean End-of-Semester GPA for FTIC Students by GPS Status: Fall 2014 andSpring 2015 Cohorts

Type of FTIC Fall		2014	Spring 2015	
Student	#	Mean GPA	#	Mean GPA
GPS	4,487	2.13	777	2.09
Non-GPS	2,241	2.09	1,285	1.92
All FTIC	10,534	2.33	2,928	1.57

# Table 4. Average Credit Load for FTIC Students by GPS Status: Fall 2014 and Spring 2015Cohorts

Type of FTIC Fall 2014		2014	Spring 2015	
Student	#	Average Credit Load	#	Average Credit Load
GPS	4,487	11.5	777	9.7
Non-GPS	2,241	8.7	1,285	8.5
All FTIC	10,534	9.5	2,928	7.6

Type of FTIC	Fall 2014	Returned in S	Spring 2015	Returned in	Fall 2015*
Student	Fall 2014	#	%	#	%
GPS	4,487	3,623	80.7%	2,769	61.7%
Non-GPS	2,241	1,577	70.4%	1,009	45.0%
All FTIC	10,534	8,638	82.0%	5,612	53.3%

### Table 5. Retention Rates for FTIC Students by GPS Status: Fall 2014 Cohort

\*Fall 2015 data are preliminary. Source: PeopleSoft 09/25/2015.

## Table 6. Developmental Course Enrollment Rates for FTIC Students by GPS Status: Fall2014 and Spring 2015

	Type of FTIC		Developr	nental Course Er	nrollment
Semester	Student	# Students	#	%	Average # Per Student
	GPS	4,487	1,639	36.5%	0.5
Fall 2014	Non-GPS	2,241	487	21.7%	0.3
	All FTIC	10,534	2,805	26.6%	0.3
	GPS	777	280	36.0%	0.4
Spring 2015	Non-GPS	1,285	280	21.8%	0.3
	All FTIC	2,928	582	19.9%	0.2

## Table 7. Developmental Course Success Rates for FTIC Students by GPS Status: Fall2014 and Spring 2015

Someotor	Type of FTIC	# Courses		essful Developm ourse Completic	
Semester	Student	Enrolled	#	%	Average # Per Student
	GPS	2,052	798	38.9%	0.2
Fall 2014	Non-GPS	584	249	42.6%	0.1
	All FTIC	3,485	1,410	40.5%	0.1
	GPS	349	142	40.7%	0.2
Spring 2015	Non-GPS	331	136	41.1%	0.1
	All FTIC	705	282	40.0%	0.1

## Table 8. Gatekeeper Course Enrollment Rates for FTIC Students by GPS Status: Fall 2014 and Spring 2015

Semester	Type of FTIC	# Students	Students Enrolle Cou	ed in Gatekeeper rses
	Student		#	%
Fall 2014	GPS	4,487	3,472	77.4%
	Non-GPS	2,241	983	43.9%
	All FTIC	10,534	7,704	73.1%
	GPS	777	485	62.4%
Spring 2015	Non-GPS	1,285	451	35.1%
	All FTIC	2,928	1,011	34.5%

# Table 9. Gatekeeper Course Total Enrollment for FTIC Students by GPS Status: Fall 2014 and Spring 2015

	Type of FTIC	Total Gatekeeper Enrollment		
Semester	Student	# Gatekeeper Courses	Average # of Courses Per Student	
	GPS	4,873	1.1	
Fall 2014	Non-GPS	1,218	0.5	
	All FTIC	10,203	1.0	
	GPS	605	0.8	
Spring 2015	Non-GPS	536	0.4	
	All FTIC	1,234	0.4	

# Table 10. Gatekeeper Course Success Rates for FTIC Students by GPS Status: Fall 2014 and Spring 2015

Semester	Type of FTIC Student	# Gatekeeper Courses	Gatekeeper Successful Completion		
			#	%	Average # Per Student
Fall 2014	GPS	4,873	3,268	67.1%	0.7
	Non-GPS	1,218	789	64.8%	0.4
	All FTIC	10,203	7,347	72.0%	0.7
Spring 2015	GPS	605	401	66.3%	0.5
	Non-GPS	536	358	66.8%	0.3
	All FTIC	1,234	816	66.1%	0.3

#### NOVA Mission and Strategic Goals

#### Mission

With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

#### Strategic Goals

- I. STUDENT SUCCESS Northern Virginia Community College will move into the top tier of community colleges with respect to the college readiness, developmental course completion, retention, graduation, transfer, and career placement of its students.
- II. ACCESS Northern Virginia Community College will increase the number and diversity of students being served to mirror the population growth of the region.
- III. TEACHING AND LEARNING Northern Virginia Community College will focus on student success by creating an environment of world-class teaching and learning.
- IV. EXCELLENCE Northern Virginia Community College will develop ten focal points of excellence in its educational programs and services that will be benchmarked to the best in the nation and strategic to building the College's overall reputation for quality.
- V. LEADERSHIP Northern Virginia Community College will serve as a catalyst and a leader in developing educational and economic opportunities for all Northern Virginians and in maintaining the quality of life and economic competitiveness of the region.
- VI. PARTNERSHIPS Northern Virginia Community College will develop strategic partnerships to create gateways of opportunity and an integrated educational system for Northern Virginians who are pursuing the American Dream.
- VII. RESOURCES Northern Virginia Community College will increase its annual funding by \$100 million and expand its physical facilities by more than one million square feet in new and renovated space. This includes the establishment of two additional campuses at epicenters of the region's population growth, as well as additional education and training facilities in or near established population centers.
- VIII. EMERGENCY PREPAREDNESS AND CONTINUITY OF OPERATIONS Northern Virginia Community College will be recognized as a leader among institutions of higher education in Virginia for its development and testing of emergency response and continuity of operation plans.



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