

GPS Student Success Outcomes by Engagement with Hobsons Communications: Fall 2014

Research Report No. 18-16

Office of Institutional Effectiveness and Student Success Initiatives

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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

Credit Load and Enrollment Rates

- GPS students who viewed or interacted with at least one email from the Hobsons Student Success Planner system took a larger **average credit load** than all first-time in college (FTIC) students on average.
- A smaller percentage of GPS students who interacted with multiple emails were enrolled in **developmental courses** as compared to GPS students in all other interaction categories and GPS students on average.
- GPS students who viewed or interacted with Hobsons emails enrolled in **gatekeeper courses** at higher rates than all GPS students on average as well as all FTIC students on average.

Success Rates

- GPS students who interacted with at least one email from the Student Success Planner system had a higher **mean end-of-semester GPA** than the average for all GPS students in Fall 2014. Students who interacted with multiple emails had a GPA 0.42 points higher than the average for all GPS students.
- GPS students who interacted with multiple emails from the Student Success Planner system in Fall 2014 had higher **developmental course success rates** than all GPS students on average as well as all FTIC students on average.
- **Success in gatekeeper courses** was nearly equivalent for GPS students who interacted once, those who interacted multiple times, and all GPS students on average.

Retention Rates

- The **Fall-to-Spring retention rate** was higher for GPS students who viewed or interacted with at least one Hobsons Student Success Planner email compared to all GPS students on average as well as all FTIC students on average. As the interactions with Hobsons increased, so did the fall-to-spring retention rate. GPS students who interacted with multiple emails returned to NOVA in Spring 2015 at the highest rate.
- For GPS students who interacted with at least one Hobsons Student Success Planner email, the **Fall-to-Fall retention rate** was notably higher than that of all GPS students and all FTIC students. As the interactions with Hobsons increased, so did the Fall-to-Fall retention rate. GPS students who interacted with multiple emails returned to NOVA in Fall 2015 at a rate over 20 percentage points higher than that of all GPS students and all FTIC 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.
- GPS for Success 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.

What is the Hobsons Student Success Planner?

- The Hobsons Student Success Planner guides GPS for Success students through program selection and course requirements to help them understand what they need to do to complete their desired program, build an academic plan to stay on track, and make important decisions regarding their enrollment.¹
- The Hobsons Student Success Planner also provides NOVA with insight into student plans and enables advisors to review and monitor student course load and path to graduation.

In this Report

This Report evaluates use of the Student Success Planner program by presenting student success outcomes of GPS students based on their level of interaction with automated emails sent out in Fall 2014. Specifically, this Report presents the following student success data:

- Average credit load
- Mean end-of-semester GPA
- Developmental course enrollment and success rates
- Gatekeeper course enrollment and success rates
- Fall-to-Spring and Fall-to-Fall retention rates

Data Notes

- **GPS students** are recent high school graduates or GED recipients ages 17 through 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.
- **All First-Time in College (FTIC) students** refers to all first-time in college students: GPS students, non-GPS students, College Pathway Initiatives students, transient students, and dual enrolled students.

¹ <http://www.hobsons.com/education-solutions/products/student-success-solutions/degree-planner/>

Note on Self-Selection Bias

While it is encouraging that GPS students who interacted with emails from the Hobsons Student Success Planner generally had better student success outcomes in their first semester at NOVA than did GPS students who did not, this evidence is not sufficient to draw any overarching conclusions about the effectiveness of the Hobsons software. This is due in part to the potential for **self-selection bias**. Self-selection bias occurs in any situation in which individuals select themselves into a group, causing a biased sample.

In this case, the personal characteristics of GPS students who interact with the Hobsons Student Success Planner tool may make them more likely to achieve higher student success outcomes, independent of the perceived effect of the tool. For example, these students may tend to be more organized, more motivated, and have more time to spend on academics than their peers who did not interact with the Hobsons software.

Nonetheless, given the limited time that the Hobsons Student Success Planner tool has been in use at NOVA, using email interaction as a proxy for use of the software and then measuring the success outcomes of those students who appear to be using the software was the best method of measuring the effectiveness of the software at NOVA thus far.

Email Communications via Hobsons

The following emails were sent via the Hobsons Student Success Planner as appropriate based on each GPS students' status:

- Email 1: Welcome to NOVA Email (6.17.2014)
- Email 2: Student Orientation Email (7.11.2014)
- Email 3: MyStudent Success Planner (8.19.2014)
- Email 4: MyStudent Success Planner (8.20.2014)
- Email 5: Academic Support Center (9.3.2014)
- Email 6: Meet with your First Year Advisor (9.17.2014)
- Email 7: Check in with your First Year Advisor (10.6.2014)
- Email 8: Advising Week Final Email (10.29.2014)
- Email 9: Registration for Spring (11.21.2014)

Based on students' interaction with the emails, they were placed in one of the following four categories:

- **Received Not Viewed:** Of the nine emails sent in Fall 2014, these students received at least one email but did not open any.
- **Viewed Not Interacted:** These students opened at least one email sent in Fall 2014.
- **Interacted Once:** Of the emails sent in Fall 2014, these students clicked on a link or replied to one email.
- **Interacted Multiple Times:** These students clicked on a link or replied to more than one email.

GPS Student Engagement in Hobsons: Fall 2014

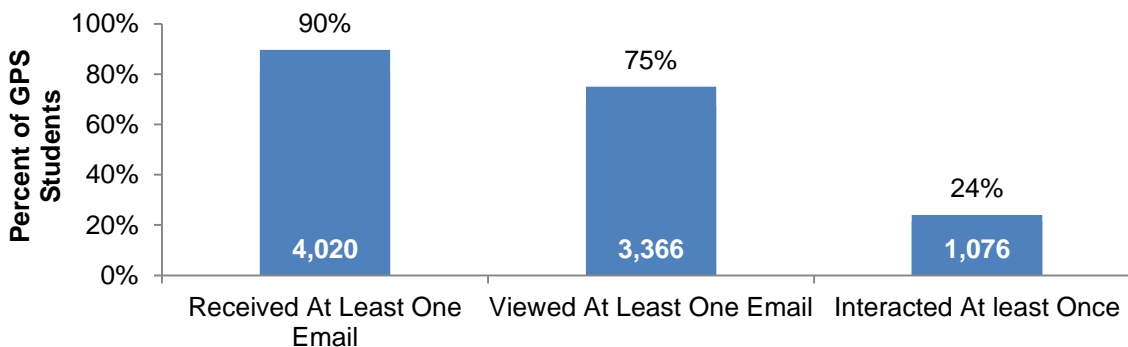
In Fall 2014, the Hobsons Student Success Planner was implemented at NOVA and GPS students began to receive communications via email to encourage their academic success. Table 1 and Figure 1 reveal that 90 percent of GPS students received Hobsons emails, 75 percent opened at least one email, and 24 percent interacted in some way (clicked on a link or replied) to at least one Hobsons email.

Table 1. Summary of GPS Student Engagement in Hobsons: Fall 2014

GPS Cohort	N	Received At Least One Email		Viewed At Least One Email		Interacted At Least Once	
		#	%	#	%	#	%
Fall 2014	4,487	4,020	89.6%	3,366	75.0%	1,076	24.0%

Note: Some students may not have been marked as a part of the GPS population until after applicable emails had been sent.

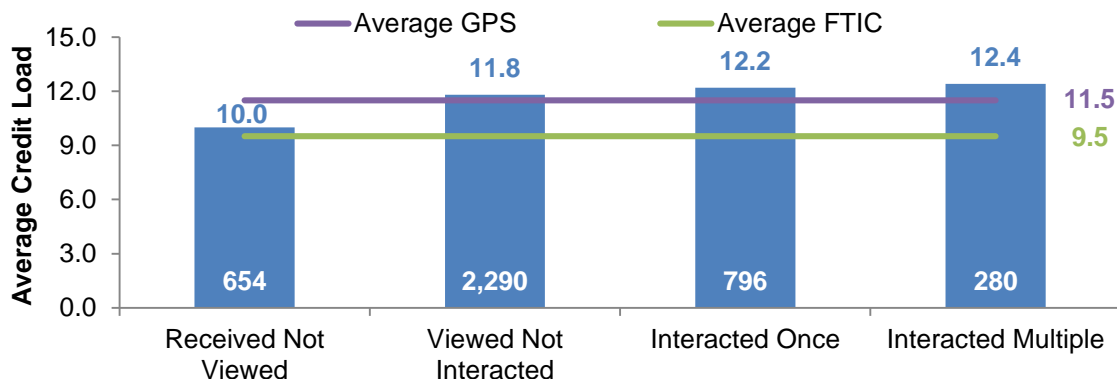
Figure 1. Summary of GPS Student Engagement in Hobsons: Fall 2014



Average Credit Load

Average credit load was approximately the same for GPS students who viewed or interacted with emails at least once and for all GPS students (each 12 credit hours). In comparison, GPS students who did not view emails and all FTIC students on average had a lower credit load (each 10 credit hours).

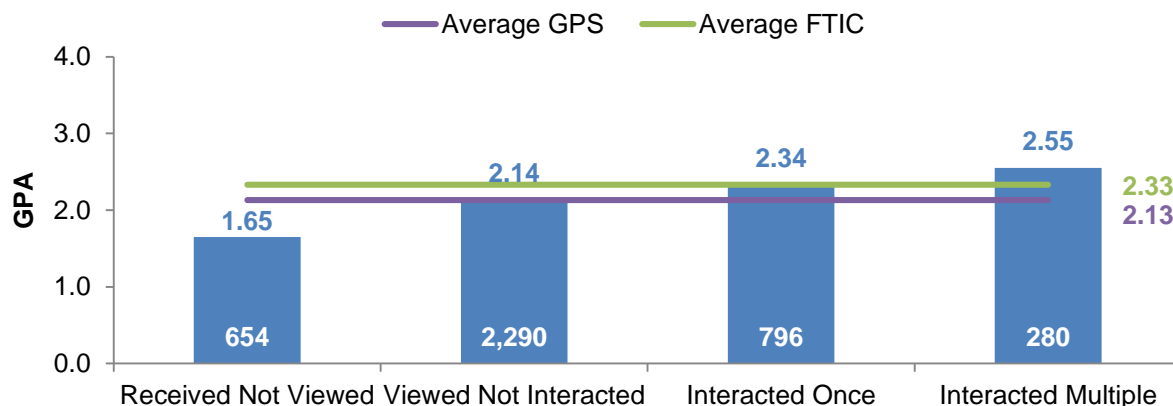
Figure 2. Average Credit Load of GPS Students by Hobsons Email Interaction: Fall 2014



Mean End-of-Semester GPA

GPS students who did not open any emails sent by the Hobsons Student Success Planner had an average GPA of 1.65 in Fall 2014, which is notably lower than that of GPS students who interacted with one email (2.34) or multiple emails (2.55). Furthermore, students who interacted with multiple Hobsons emails had a GPA 0.42 points higher than the average for all GPS students.

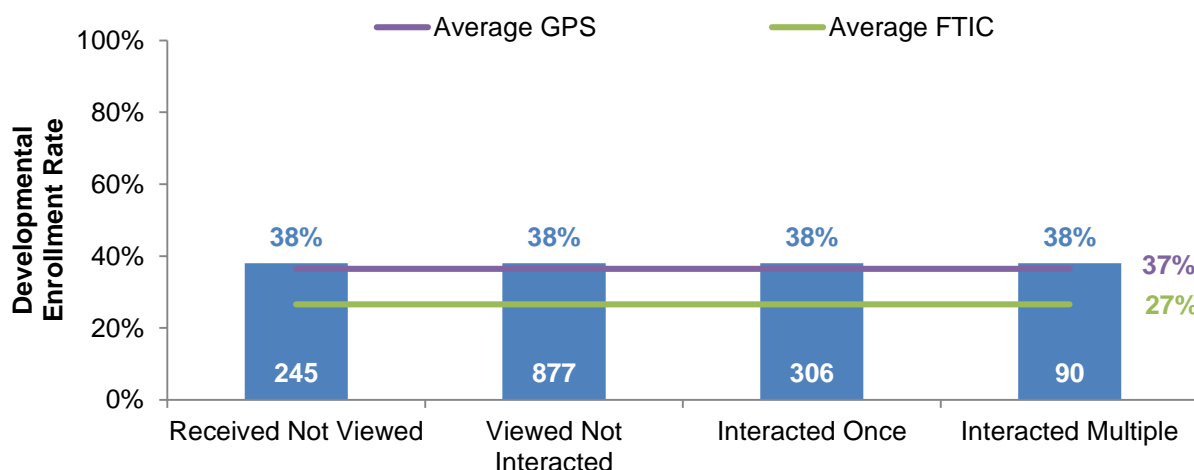
Figure 3. Mean End-of-Semester GPA by Hobsons Email Interaction: Fall 2014



Developmental Course Enrollment and Success Rates²

A smaller percentage of GPS students who interacted with multiple emails were enrolled in developmental courses (32 percent) than GPS students in all other interaction categories (each at 38 percent) and GPS students on average (37 percent). On average, 27 percent of all FTIC students were enrolled in developmental courses.

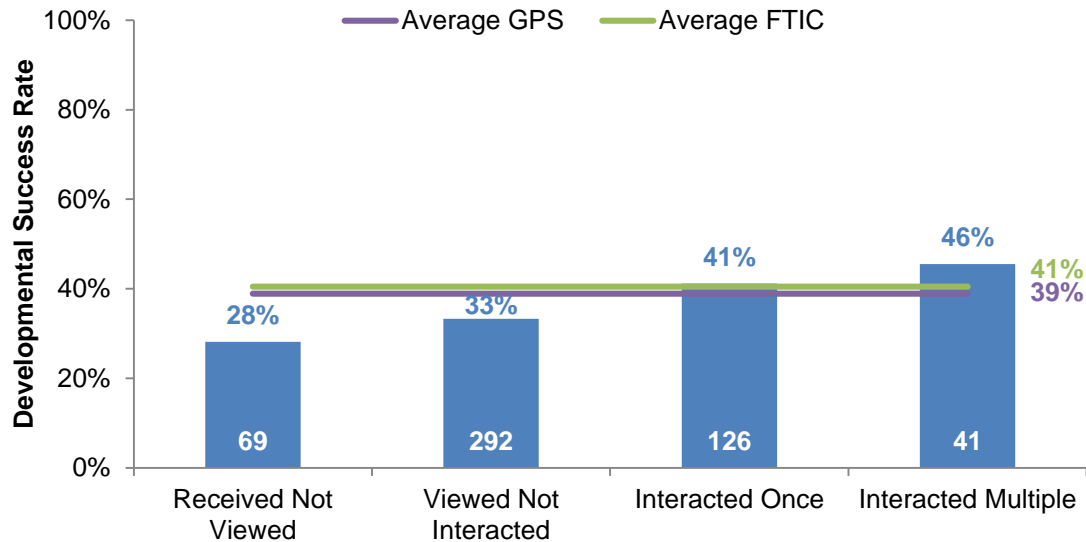
Figure 4. Developmental Course Enrollment of GPS Students by Hobsons Email Interaction: Fall 2014



² These data indicate enrollment in, but not necessarily placement into, developmental courses.

GPS students who interacted with multiple Hobsons emails in Fall 2014 had higher rates of success in developmental courses (46 percent) than all GPS students on average (39 percent) as well as all FTIC students on average (41 percent). Success in developmental courses is defined as an ‘S’ (Satisfactory) grade.

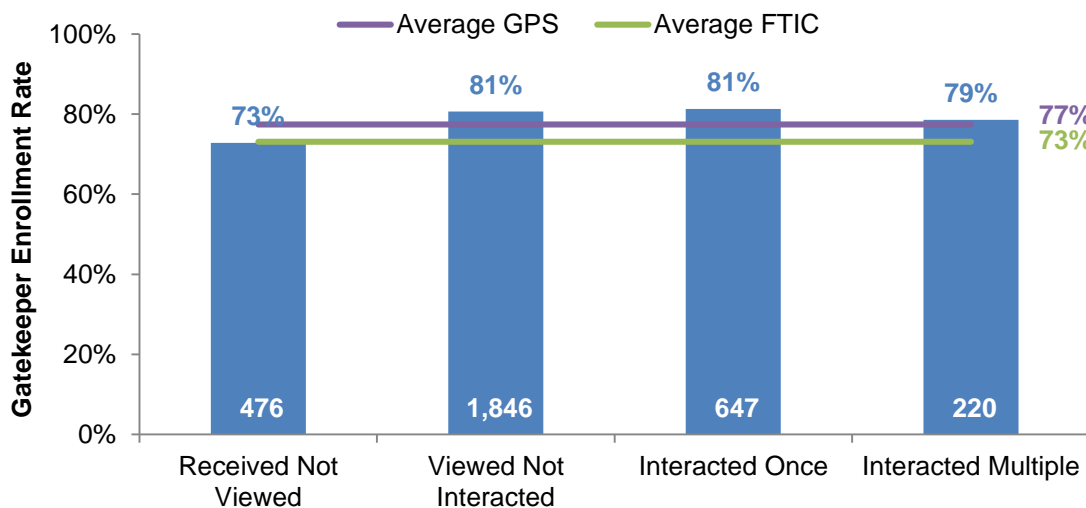
Figure 5. Developmental Course Success Rates for GPS Students by Hobsons Email Interaction: Fall 2014



Gatekeeper Course Enrollment and Success Rates

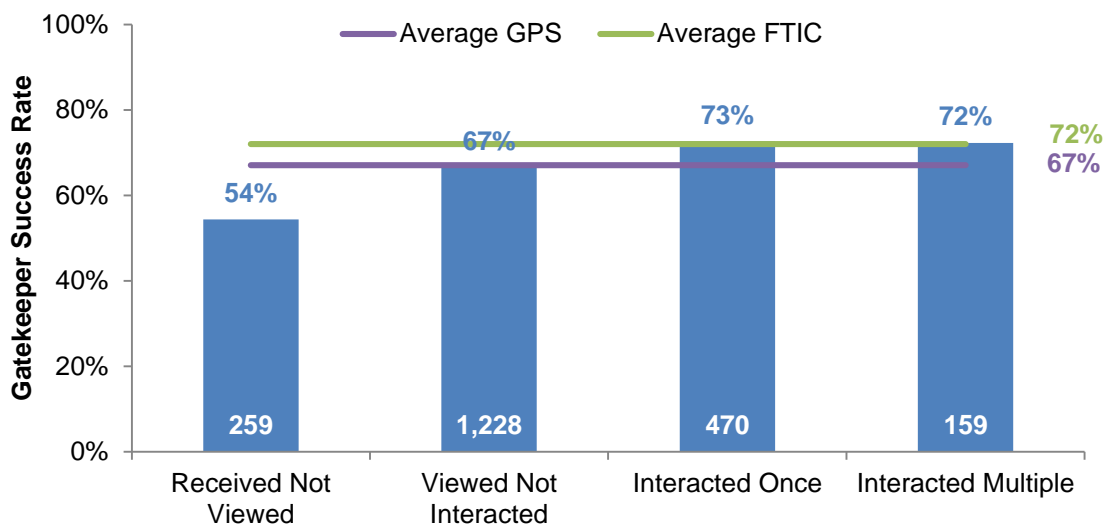
GPS students who viewed or interacted with Hobsons emails enrolled in gatekeeper courses at higher rates (79 to 81 percent) than all GPS students on average (77 percent) as well as all FTIC students on average (73 percent).

Figure 6. Gatekeeper Course Enrollment of GPS Students by Hobsons Email Interaction: Fall 2014



Success in gatekeeper courses was nearly equivalent for GPS students who interacted once with Hobsons emails (73 percent), those who interacted multiple times, and all GPS students on average (both 72 percent). Success is defined as achieving a grade of 'C' or better in a course.

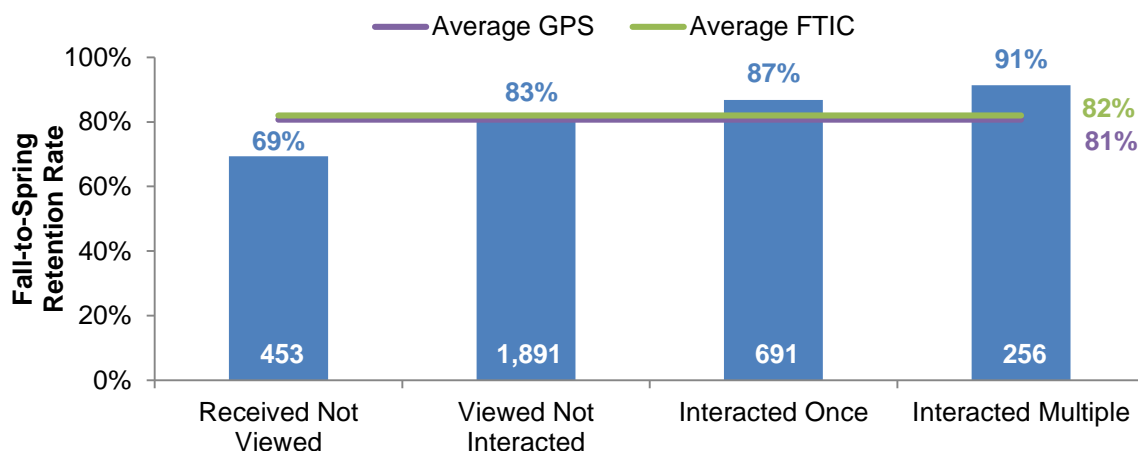
Figure 7. Gatekeeper Course Success Rates for GPS Students by Hobsons Email Interaction: Fall 2014



Retention Rates

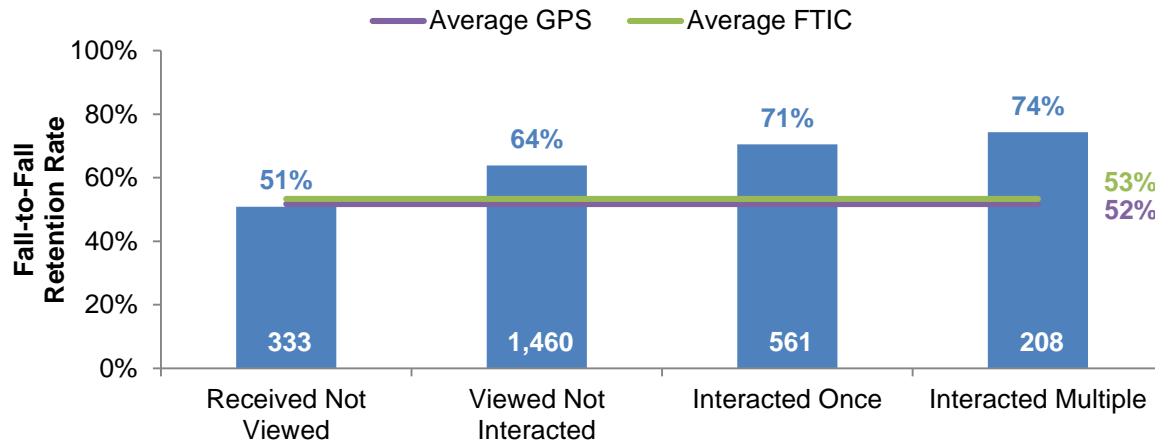
The Fall-to-Spring retention rate was higher for GPS students who viewed or interacted with at least one Hobsons Student Success Planner email (83 to 91 percent) compared to all GPS students on average (81 percent) as well as all FTIC students on average (82 percent). As the interactions with Hobsons increased, so did the Fall-to-Spring retention rate. GPS students who interacted with multiple emails returned to NOVA in Spring 2015 at the highest rate (91 percent).

Figure 8. Fall-to-Spring Retention Rates of GPS Students by Hobsons Email Interaction: Fall 2014



Similarly, for GPS students who interacted with at least one Hobsons Student Success Planner email, the Fall-to-Fall retention rate was notably higher than that of all GPS students on average as well as that of all FTIC students on average. As student interactions with Hobsons increased, so did the Fall-to-Fall retention rate. GPS students who interacted with multiple Hobsons emails returned to NOVA in Fall 2015 at a rate over 20 percentage points higher (74 percent) than all GPS students on average as well as all FTIC students on average.

Figure 9. Fall-to-Fall Retention Rates of GPS Students by Hobsons Email Interaction: Fall 2014



Appendix: Data Tables

Table 2. Average Credit Load of GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	#	Average Credit Load
Received Not Viewed	654	10.0
Viewed Not Interacted	2,290	11.8
Interacted Once	796	12.2
Interacted Multiple	280	12.4

Table 3. Mean End-of-Semester GPA by Hobsons Email Interaction: Fall 2014

Interaction	#	Average GPA
Received Not Viewed	654	1.65
Viewed Not Interacted	2,290	2.14
Interacted Once	796	2.34
Interacted Multiple	280	2.55

Table 4. Developmental Course Enrollment of GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	#	Enrolled in Developmental Courses	
		#	%
Received Not Viewed	654	245	37.5%
Viewed Not Interacted	2,290	877	38.3%
Interacted Once	796	306	38.4%
Interacted Multiple	280	90	32.1%

Table 5. Developmental Course Success Rates for GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	# Enrolled in Developmental Courses	Developmental Course Success Rate	
		#	%
Received Not Viewed	245	69	28.2%
Viewed Not Interacted	877	292	33.3%
Interacted Once	306	126	41.2%
Interacted Multiple	90	41	45.6%

Table 6. Gatekeeper Course Enrollment of GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	#	Enrolled in Gatekeeper Courses	
		#	%
Received Not Viewed	654	476	72.8%
Viewed Not Interacted	2,290	1,846	80.6%
Interacted Once	796	647	81.3%
Interacted Multiple	280	220	78.6%

Table 7. Gatekeeper Course Success Rates for GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	# Enrolled in Gatekeeper Courses	Gatekeeper Course Success Rate	
		#	%
Received Not Viewed	476	259	54.4%
Viewed Not Interacted	1,846	1,228	66.5%
Interacted Once	647	470	72.6%
Interacted Multiple	220	159	72.3%

Table 8. Retention Rates of GPS Students by Hobsons Email Interaction: Fall 2014

Interaction	#	Retained in Spring 2015		Retained in Fall 2015	
		#	%	#	%
Received Not Viewed	654	453	69.3%	333	50.9%
Viewed Not Interacted	2,290	1,891	82.6%	1,460	63.8%
Interacted Once	796	691	86.8%	561	70.5%
Interacted Multiple	280	256	91.4%	208	74.3%

Note: Fall 2015 data are as of 12/14/2015.

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.

NOVA

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