

OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS

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RESEARCH BRIEF

Progression from Developmental Math to Gatekeeper Math: Fall 2014 Cohort

Introduction

In Fall 2014, Northern Virginia Community College (NOVA) implemented six policy changes, one of which was mandatory placement testing in math for all first-time in college students between the ages of 17 and 24. Placement tests assess a student's skill level and facilitate placement into classes that best meet their academic needs. For students placed into developmental math, the ultimate goal is for them to learn the skills necessary to progress to and succeed in college-level math.

This Brief shows the number and percentage of first-time to NOVA (FTTN) students from the Fall 2014 cohort¹ who were placed into developmental math, enrolled in at least one developmental math course, and successfully completed a developmental math course within two years of initial enrollment (by receiving a grade of S). Information presented also shows the number and percentage of students who progressed to college-level gatekeeper math courses² and were ultimately successful in their gatekeeper math course within two years, by receiving a grade of A, B, or C.

Key Findings

- A majority of students who were placed into developmental math did not succeed in a developmental math course. Only 31 percent of students who placed into developmental math subsequently earned a passing grade (S) in at least one developmental math course within two years of initial enrollment at NOVA.
- A large majority of students who were placed into developmental math did not go on to succeed in college-level gatekeeper math. Of the 3,469 students placed into developmental math, only 12 percent (407 students) progressed from developmental math to gatekeeper math and earned a passing grade (A, B, or C) in their gatekeeper math course (MTH 151 or MTH 163).

¹ Percentages include only students from the Fall 2014 FTTN cohort who took the VPT math placement exam and were placed into developmental math. Of the 11,593 students in the Fall 2014 FTTN cohort, 7,402 students (63.8 percent) took the VPT math exam. Of this group, 3,469 students (46.9 percent of those who took the exam) were placed into developmental math. This cohort does not include dual-enrolled students.

² Includes MTH 151 (Math for the Liberal Arts I) and MTH 163 (Precalculus I).

Progression from Developmental Math to Gatekeeper Math

Figure 1 and Table 1, below, show that only a small proportion—12 percent—of students who were placed into developmental math ultimately succeeded in a college-level gatekeeper math course³ within two years of initial enrollment at NOVA.

Indeed, the number of students progressing through the developmental math to gatekeeper math sequence drops at each step. Of students placed into developmental math, only three-fourths enrolled in a developmental math course and only one-third earned a passing grade. Further, only 16 percent of developmental math students enrolled in gatekeeper math within two years and only 12 percent of developmental math students were successful in a gatekeeper math course.⁴



Figure 1. Progression from Developmental Math to Gatekeeper Math: Fall 2014 Cohort

Table 1, Progression fr	om Developmenta	I Math to Gatekeer	per Math [.] Fal	1 2014 Cohor

	Fall 2014 FTTN Cohort		
Status	Number	Percent of Students Placed in Dev. Math	
Total Fall 2014 FTTN Cohort	14,200		
Not Dual Enrolled	11,733		
Not Exempt from VPT Math	11,593		
Took VPT Math	7,402		
Placed in Developmental Math	3,469	100.0	
Enrolled in Developmental Math	2,632	75.9	
Successful in Developmental Math	1,076	31.0	
Enrolled in Gatekeeper Math	547	15.8	
Successful in Gatekeeper Math	407	11.7	

³ Includes MTH 151 (Math for the Liberal Arts I) and MTH 163 (Precalculus I).

⁴ A small number of students who were placed into developmental math (181 students; 5 percent of students placed into developmental math) did not successfully complete developmental math but did enroll and succeed in a gatekeeper math course. These students were excluded from numbers presented in Figure 1 and Table 1, which only show students who followed the traditional course path.