NOVA | Northern Virginia Community College

Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Demographics: Fall 2008 through Fall 2011 Cohorts

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OFFICE OF INSTITUTIONAL RESEARCH, PLANNING, AND ASSESSMENT

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Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Demographics: Fall 2008 through Fall 2011 Cohorts

Introduction

This Report examines successful developmental math course completion among four cohorts of first-time to NOVA students (Fall 2008 through Fall 2011) within two years of initial enrollment. Cohorts are comprised of students who enrolled in developmental math in their first semester. Student enrollment in college-level math courses is used to measure successful developmental math course completion, as developmental math students must satisfactorily complete all developmental math course requirements (grade of "S") before enrolling in college-level math. For the purposes of this analysis, the timeframe for enrollment in college-level math was within two years of initial enrollment. Extended Learning Institute (distance learning) courses were excluded from the base cohort data. Data are presented by enrollment status (either full-time or part-time) and by demographic sub-groups based on gender, age, race/ethnicity, and program placement.

The following is a summary of the data:

- Full-time students, by definition, are enrolled in a greater number of courses (12 or more credit hours), and accordingly, the data show that full-time students were more likely to complete their developmental math coursework and progress to college-level math courses within two years of initial enrollment. This was also true across all demographic segments examined. Regardless of student gender, age, race/ethnicity, or program placement, full-time students were more likely to complete their developmental math course requirements and progress to college-level math courses in comparison to their part-time counterparts.
- Among both full-time and part-time students, female students were more likely than male students to progress from developmental math to college-level math within two years.
- Among both full-time and part-time students, Asian students were generally more likely to progress to college-level math courses within two years compared to other racial/ethnic groups.
- Black students enrolled part-time were generally less likely to proceed to college-level math within two years as compared to other racial/ethnic groups of part-time students.

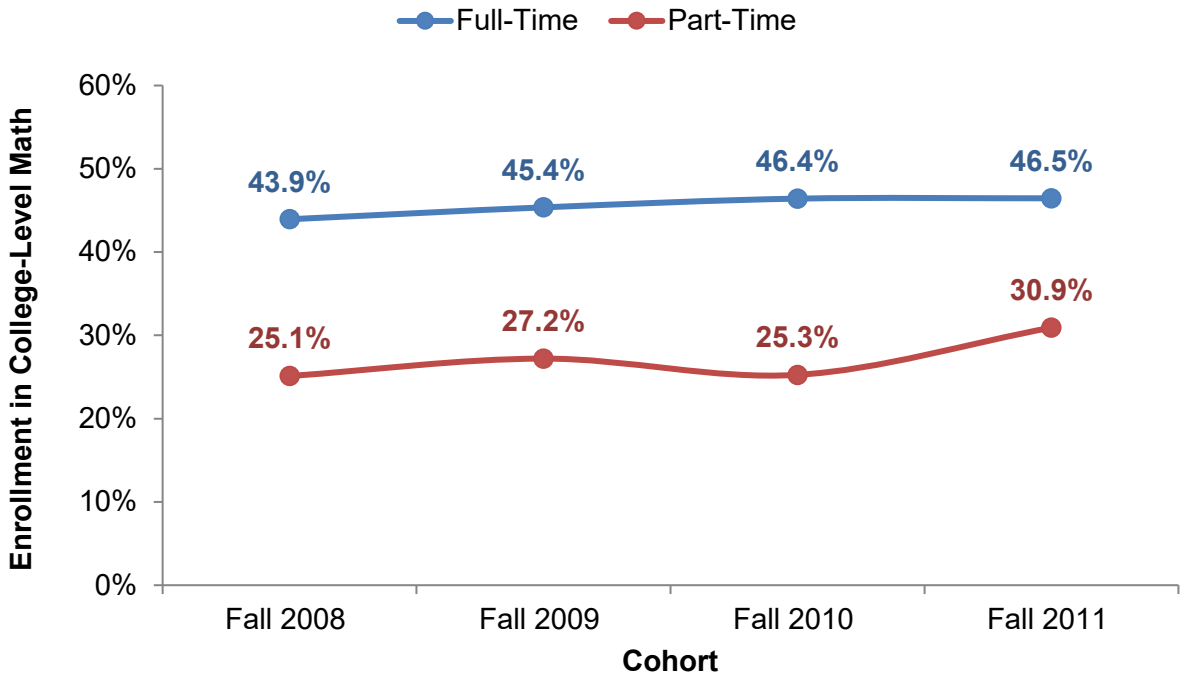
Section 1. Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status: Fall 2008 through Fall 2011 Cohorts

Table 1 and Figure 1 below present data on successful developmental math course completion based on student full- or part-time status in their initial term of entry at NOVA. Between 44 and 47 percent of full-time students completed their developmental math requirements and progressed to college-level math within two years compared to 25 to 31 percent of part-time students.

Table 1. Successful Developmental Math Course Completion by Full-/Part-Time Status: Fall 2008 through Fall 2011 Cohorts

Status	Fall 2008 Cohort			Fall 2009 Cohort			Fall 2010 Cohort			Fall 2011 Cohort		
	N	College-Level Math		N	College-Level Math		N	College-Level Math		N	College-Level Math	
		#	%		#	%		#	%		#	%
Full-Time	1,329	584	43.9	1,554	705	45.4	1,493	693	46.4	1,608	747	46.5
Part-Time	418	105	25.1	419	114	27.2	483	122	25.3	443	137	30.9
Total	**1,747**	**689**	**39.4**	**1,973**	**819**	**41.5**	**1,976**	**815**	**41.2**	**2,051**	**884**	**43.1**

Figure 1. Successful Developmental Math Course Completion by Full-/Part-Time Status: Fall 2008 through Fall 2011 Cohorts



Section 2. Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Gender: Fall 2008 through Fall 2011 Cohorts

Table 2, Figure 2, and Figure 3 (both figures on next page) provide successful developmental math course completion data broken down by student enrollment status and gender. Among both full-time and part-time students, course completion varied considerably across the four cohorts. In the most recent cohort examined (Fall 2011), a greater percentage of female students progressed from developmental math to college-level math within two years as compared to male students. This was true among both full-time and part-time students. In contrast, results for the Fall 2009 and Fall 2010 cohorts show that a higher percentage of male students progressed to college-level math, regardless of full- or part-time status. In the Fall 2008 cohort, the percentage of full-time male and full-time female students who progressed to college-level math were similar, whereas among part-time students, a higher percentage of female students progressed to college-level math as compared to part-time male students.

Table 2. Successful Developmental Math Course Completion by Full-/Part-Time Status and Gender: Fall 2008 through Fall 2011 Cohorts

Status	Gender	Fall 2008 Cohort			Fall 2009 Cohort			Fall 2010 Cohort			Fall 2011 Cohort		
		N	College-Level Math		N	College-Level Math		N	College-Level Math		N	College-Level Math	
			#	%		#	%		#	%		#	%
Full-Time	Male	709	311	43.9	832	384	46.2	769	363	47.2	854	374	43.8
	Female	620	273	44.0	722	321	44.5	724	330	45.6	754	373	49.5
Part-Time	Male	239	57	23.8	224	62	27.7	260	69	26.5	220	63	28.6
	Female	179	48	26.8	195	52	26.7	223	53	23.8	223	74	33.2

Figure 2. Successful Developmental Math Course Completion of Full-Time Students by Gender: Fall 2008 through Fall 2011 Cohorts

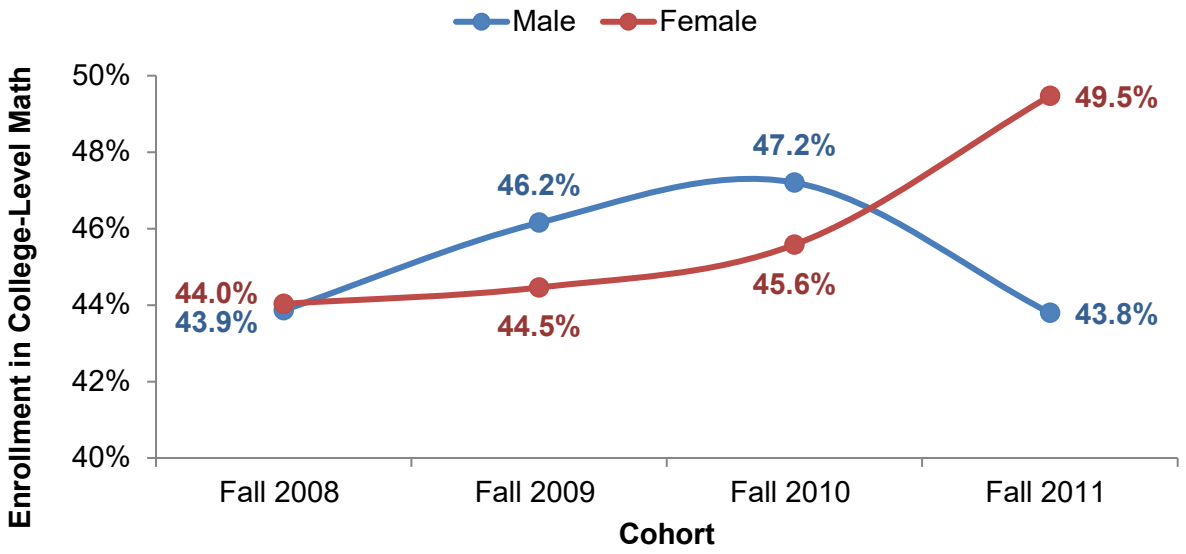
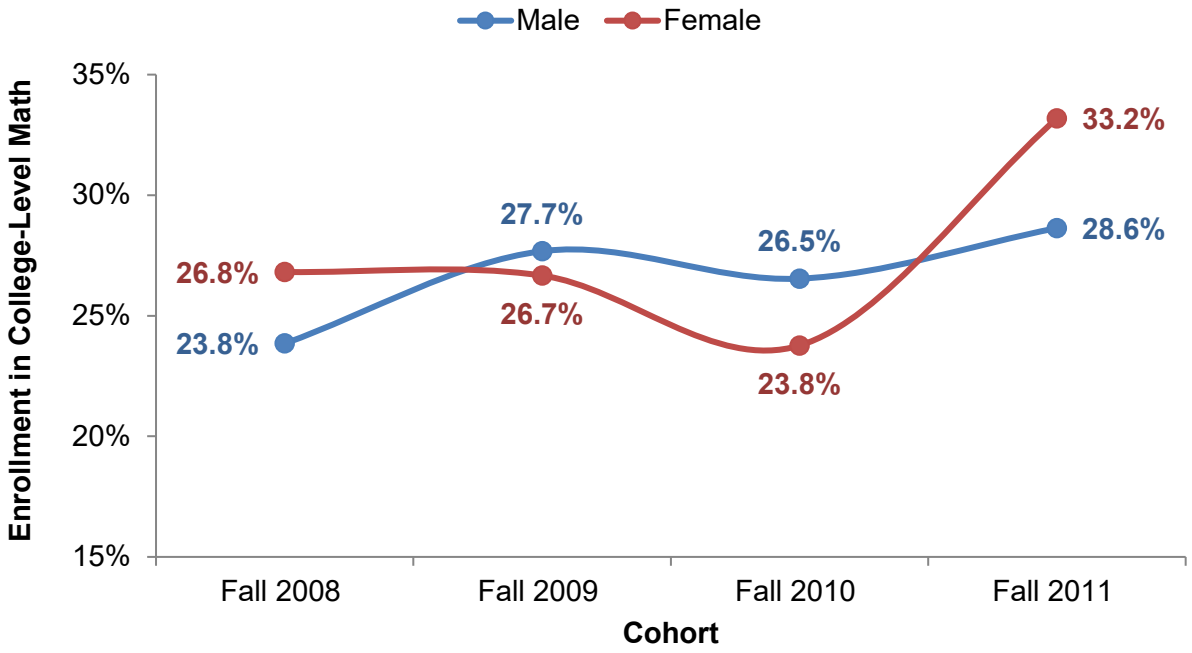


Figure 3. Successful Developmental Math Course Completion of Part-Time Students by Gender: Fall 2008 through Fall 2011 Cohorts



Section 3. Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Age: Fall 2008 through Fall 2011 Cohorts

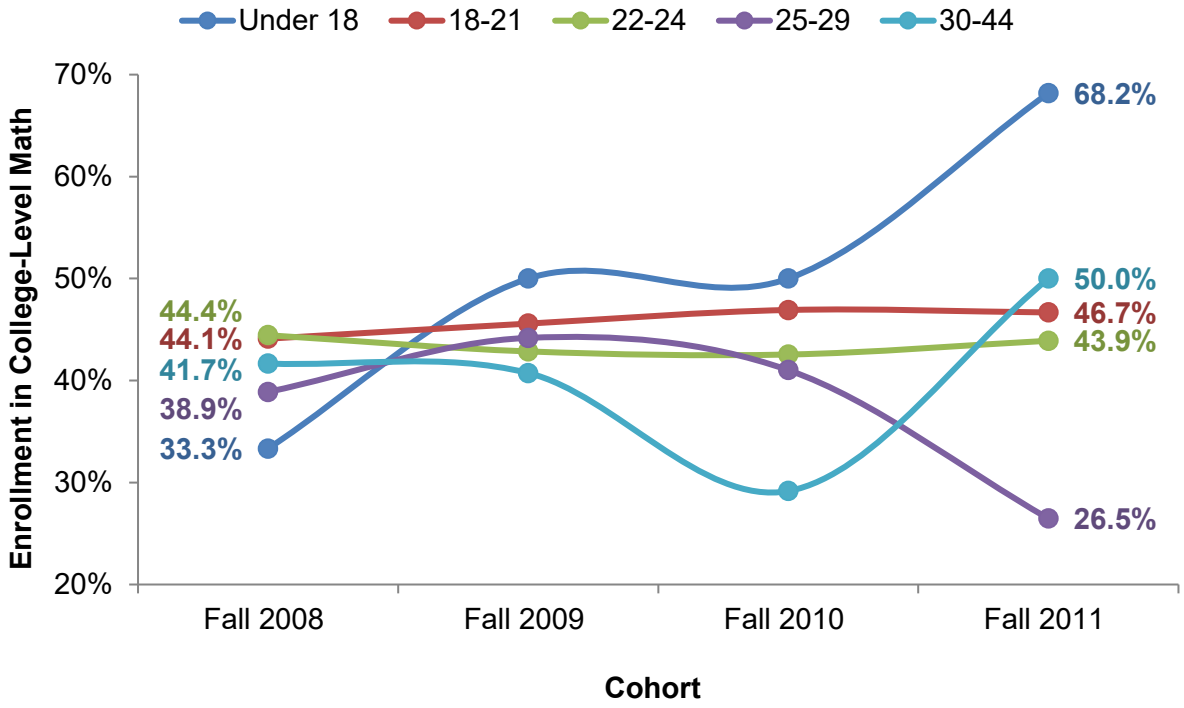
Table 3 Figure 4, and Figure 5 (both figures on next page) provide successful developmental math course completion data broken down by student enrollment status and age. Among full-time students, those between ages 18 to 21 constituted more than 90 percent of full-time students in each cohort and the percentage of students in this age group who progressed to college-level math ranged from 44 to 47 percent. Students between ages 18 to 21 constituted more than 75 percent of part-time students in each cohort and 23 to 29 percent of this age group progressed to college-level math.

Table 3. Successful Developmental Math Course Completion by Full-/Part-Time Status and Age: Fall 2008 through Fall 2011 Cohorts

Status	Age	Fall 2008 Cohort			Fall 2009 Cohort			Fall 2010 Cohort			Fall 2011 Cohort		
		N	College-Level Math		N	College-Level Math		N	College-Level Math		N	College-Level Math	
			#	%		#	%		#	%		#	%
Full-Time	Under 18	15	5	33.3	22	11	50.0	18	9	50.0	22	15	68.2
	18-21	1,247	550	44.1	1,404	640	45.6	1,364	640	46.9	1,491	696	46.7
	22-24	36	16	44.4	56	24	42.9	47	20	42.6	41	18	43.9
	25-29	18	7	38.9	43	19	44.2	39	16	41.0	34	9	26.5
	30-44	12	5	41.7	27	11	40.7	24	7	29.2	18	9	50.0
	45 & Over*	1	1	100.0	2	0	0.0	1	1	100.0	2	0	0.0
Part-Time	Under 18*	8	1	12.5	5	1	20.0	11	1	9.1	3	0	0.0
	18-21	339	90	26.5	306	78	25.5	363	85	23.4	340	99	29.1
	22-24	22	4	18.2	30	10	33.3	40	14	35.0	25	6	24.0
	25-29	17	2	11.8	34	13	38.2	24	7	29.2	36	15	41.7
	30-44	20	8	40.0	36	9	25.0	35	12	34.3	31	14	45.2
	45 & Over*	12	0	0.0	8	3	37.5	10	3	30.0	8	3	37.5

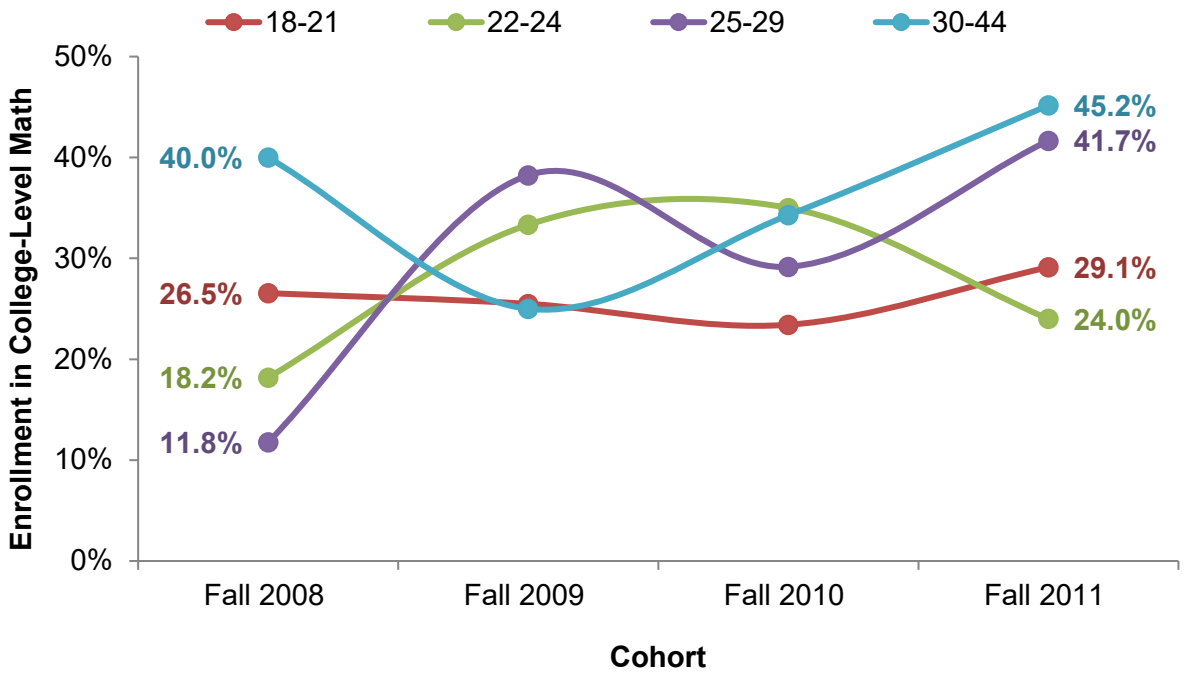
*Sample size is too small to make accurate comparisons.

Figure 4. Successful Developmental Math Course Completion of Full-Time Students by Age: Fall 2008 through Fall 2011 Cohorts



Note: Sub-groups with small sample sizes are not displayed because they are too small to make accurate comparisons.

Figure 5. Successful Developmental Math Course Completion of Part-Time Students by Age: Fall 2008 through Fall 2011 Cohorts



Note: Sub-groups with small sample sizes are not displayed because they are too small to make accurate comparisons.

Section 4. Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts

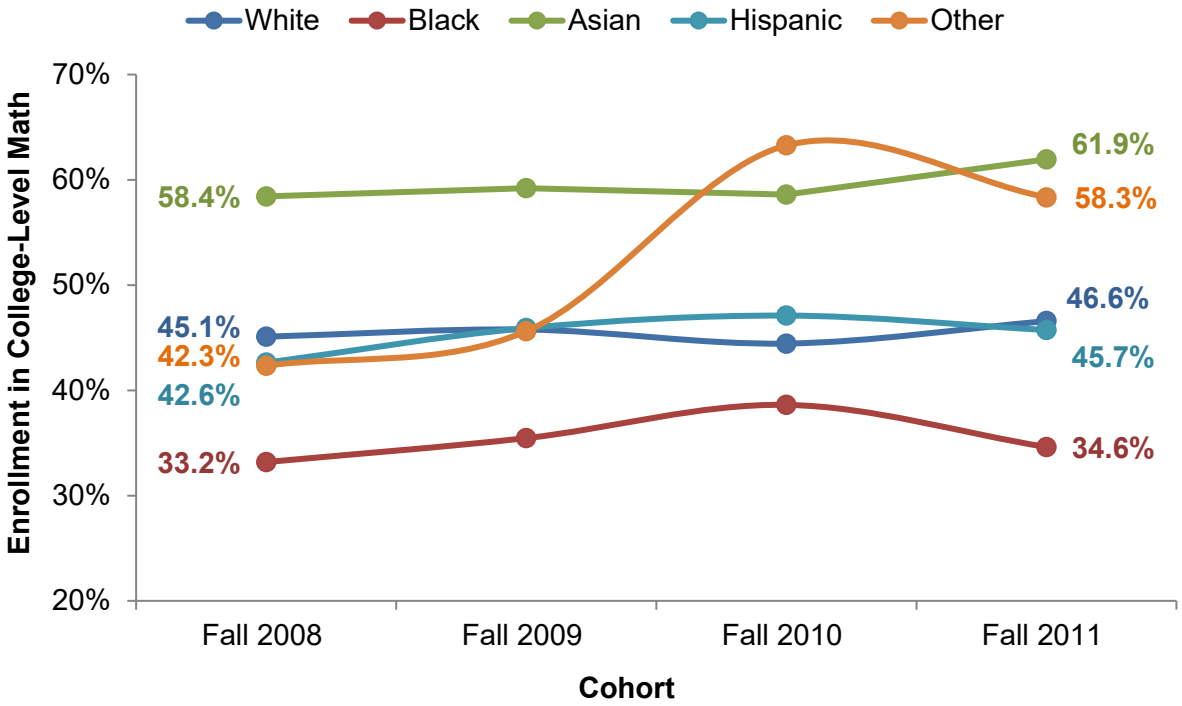
Table 4, Figure 6, and Figure 7 (both figures on next page) provide successful developmental math course completion data broken down by student enrollment status and race/ethnicity. Among full-time students, Asian students were generally more likely to progress to college-level math within two years than other racial/ethnic groups, with 58 to 62 percent progressing. Among part-time students, Asian students also had the highest rates of progression to college-level math within two years (34 to 49 percent). In contrast, part-time Black students had the lowest rates of progression from developmental to college-level math within two years among other large racial/ethnic groups (14 to 24 percent).

Table 4. Successful Developmental Math Course Completion by Full-/Part-Time Status and Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts

Status	Race/ Ethnicity	Fall 2008 Cohort			Fall 2009 Cohort			Fall 2010 Cohort			Fall 2011 Cohort		
		N	College-Level Math		N	College-Level Math		N	College-Level Math		N	College-Level Math	
			#	%		#	%		#	%		#	%
Full-Time	White	561	253	45.1	651	298	45.8	720	320	44.4	715	333	46.6
	Black	223	74	33.2	282	100	35.5	246	95	38.6	312	108	34.6
	Asian	178	104	58.4	179	106	59.2	198	116	58.6	226	140	61.9
	Hispanic	244	104	42.6	318	146	45.9	276	130	47.1	328	150	45.7
	Native American*	12	2	16.7	10	3	30.0	4	1	25.0	3	2	66.7
	Other	111	47	42.3	114	52	45.6	49	31	63.3	24	14	58.3
Part-Time	White	177	38	21.5	159	53	33.3	227	58	25.6	216	74	34.3
	Black	76	18	23.7	106	15	14.2	107	16	15.0	84	19	22.6
	Asian	41	19	46.3	32	11	34.4	41	20	48.8	45	16	35.6
	Hispanic	98	24	24.5	97	27	27.8	89	24	27.0	91	27	29.7
	Native American*	3	0	0.0	1	0	0.0	0	0	0.0	2	0	0.0
	Other	23	6	26.1	24	8	33.3	19	4	21.1	5	1	20.0

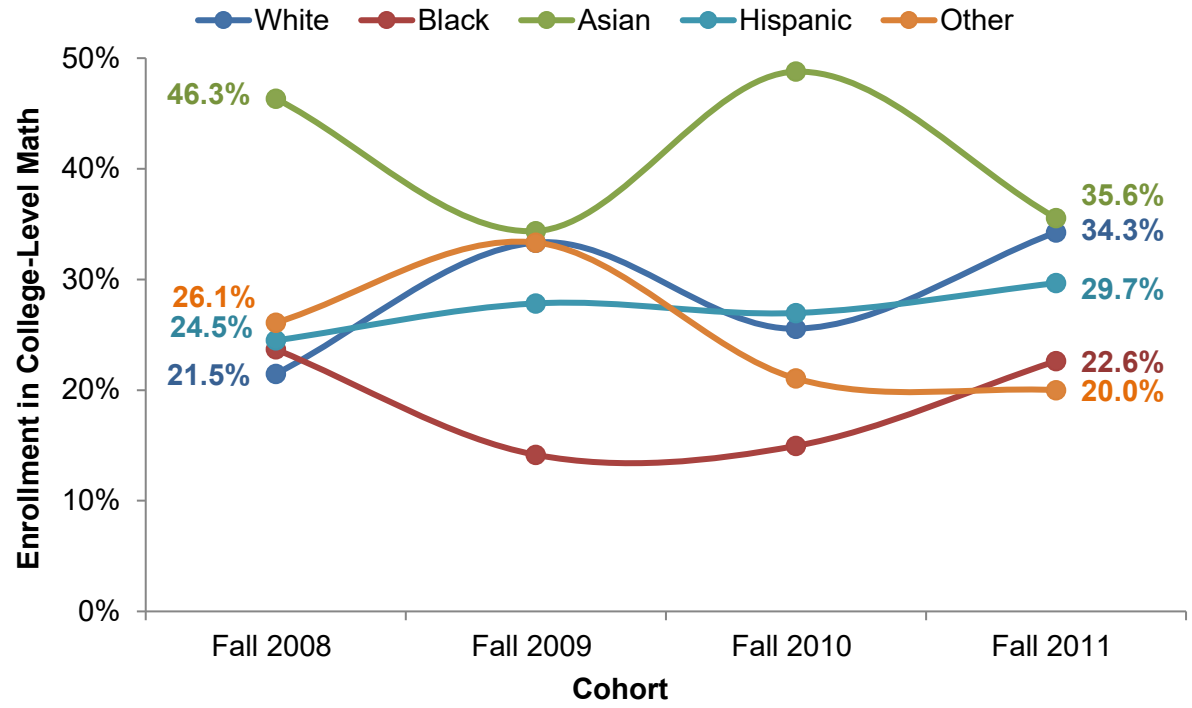
*Sample size is too small to make accurate comparisons.

Figure 6. Successful Developmental Math Course Completion of Full-Time Students by Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts



Note: Sub-groups with small sample sizes are not displayed because they are too small to make accurate comparisons.

Figure 7. Successful Developmental Math Course Completion of Part-Time Students by Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts



Note: Sub-groups with small sample sizes are not displayed because they are too small to make accurate comparisons.

Section 5. Successful Developmental Math Course Completion of First-Time to NOVA Students by Full-/Part-Time Status and Program Placement: Fall 2008 through Fall 2011 Cohorts

Table 5, Figure 8, and Figure 9 (both figures on next page) provide successful developmental math course completion data broken down by student enrollment status and program placement. Among full-time students, those in A.S. degree programs had the highest percentage of students progressing to college-level math among full-time students in the Fall 2008 and Fall 2009 cohorts (47 and 49 percent, respectively), and the second-highest rate among the Fall 2010 and Fall 2011 cohorts (49 and 51 percent, respectively). Students in A.A.A. programs generally had the lowest rates of progression (29 to 35 percent). Among part-time students, rates of progression to college-level math varied widely across cohorts. In the most recent cohort examined (Fall 2011), students in A.S. programs had the highest rate of progression to college-level math (33 percent), whereas students not placed in degree programs had the lowest rate of progression to college-level math (21 percent).

Table 5. Successful Developmental Math Completion by Full-/Part-Time Status and Program Placement: Fall 2008 through Fall 2011 Cohorts

Status	Program Placement	Fall 2008 Cohort			Fall 2009 Cohort			Fall 2010 Cohort			Fall 2011 Cohort		
		N	College-Level Math		N	College-Level Math		N	College-Level Math		N	College-Level Math	
			#	%		#	%		#	%		#	%
Full-Time	A.A.	207	90	43.5	199	81	40.7	186	95	51.1	207	90	43.5
	A.S.	593	279	47.0	825	407	49.3	864	420	48.6	1,028	520	50.6
	A.A.A.	22	7	31.8	14	4	28.6	17	6	35.3	13	4	30.8
	A.A.S.	333	138	41.4	297	126	42.4	267	109	40.8	237	82	34.6
	Certificate	55	22	40.0	71	24	33.8	69	26	37.7	49	12	24.5
	Not Placed	119	48	40.3	148	63	42.6	90	37	41.1	74	39	52.7
Part-Time	A.A.	58	13	22.4	43	13	30.2	51	9	17.6	47	13	27.7
	A.S.	169	46	27.2	199	56	28.1	254	61	24.0	262	87	33.2
	A.A.A.*	6	0	0.0	7	1	14.3	11	5	45.5	5	1	20.0
	A.A.S.	111	28	25.2	108	31	28.7	86	25	29.1	71	22	31.0
	Certificate	10	0	0.0	16	3	18.8	27	7	25.9	19	6	31.6
	Not Placed	64	18	28.1	46	10	21.7	54	15	27.8	39	8	20.5

*Sample size is too small to make accurate comparisons.

Figure 8. Successful Developmental Math Course Completion of Full-Time Students by Program Placement: Fall 2008 through Fall 2011 Cohorts

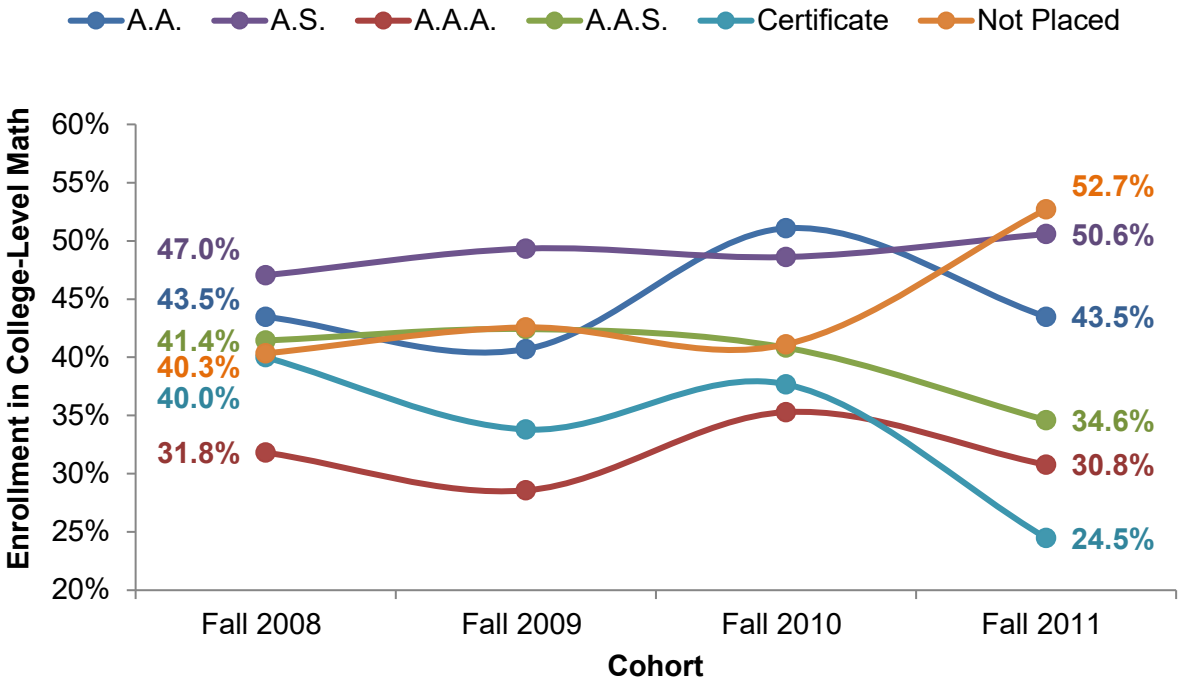
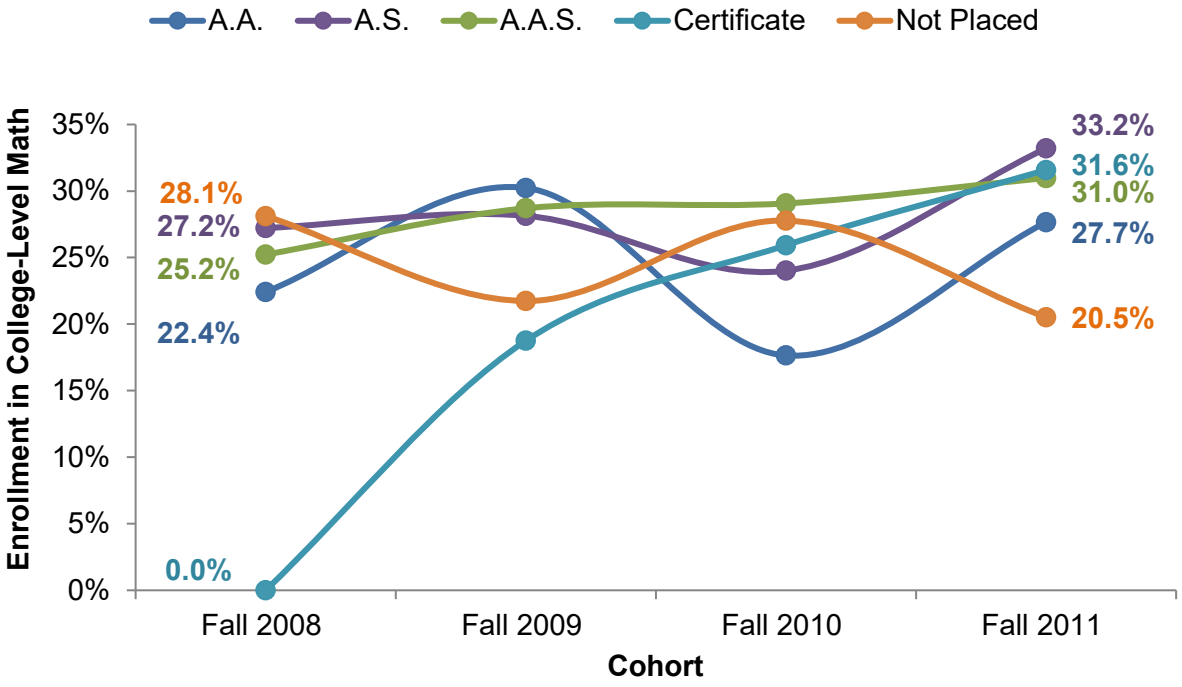


Figure 9. Successful Developmental Math Course Completion of Part-Time Students by Program Placement: Fall 2008 through Fall 2011 Cohorts



Note: Sub-groups with small sample sizes are not displayed because they are too small to make accurate comparisons.

NOVA Mission and Strategic Goals: 2005 – 2015

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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