



# RESEARCH BRIEF

**OIR**

Office of Institutional Effectiveness and Student Success Initiatives

No. 13-14

September 2014

## Successful Developmental Math Course Completion of NOVA Students by Full-/Part-Time Status

This Research Brief examines successful developmental math course completion among four cohorts of first-time to NOVA students (Fall 2008 through Fall 2011) by enrollment status (either full-time or part-time) and demographics. 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 considered to be within two years of initial enrollment. Extended Learning Institute (distance learning) courses were excluded from the base cohort data.

Overall, results show that full-time students completed developmental math and progressed to college-level math at higher rates than part-time students. This was true across all demographic segments (gender, age, and race/ethnicity). Among both full- and part-time students, females were more likely to progress from developmental to college-level math than males. Similarly, Asian students were more likely to do so as compared to other racial/ethnic groups, regardless of full- or part-time status. Among full-time students, students ages 18 to 21 were more likely to progress from developmental to college-level math as compared to other age groups. Among part-time students, Black students were generally less likely to progress to college-level math as compared to other racial/ethnic groups.

Table 1 (below) and Figure 1 (next page) present data on developmental math course completion of first-time to NOVA students based on enrollment status. Full-time students were more likely to have completed their developmental math requirements and progressed to college-level math within two years (44 to 47 percent) as compared to part-time students (25 to 31 percent).

**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
<b>Total</b>	<b>1,747</b>	<b>689</b>	<b>39.4</b>	<b>1,973</b>	<b>819</b>	<b>41.5</b>	<b>1,976</b>	<b>815</b>	<b>41.2</b>	<b>2,051</b>	<b>884</b>	<b>43.1</b>

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

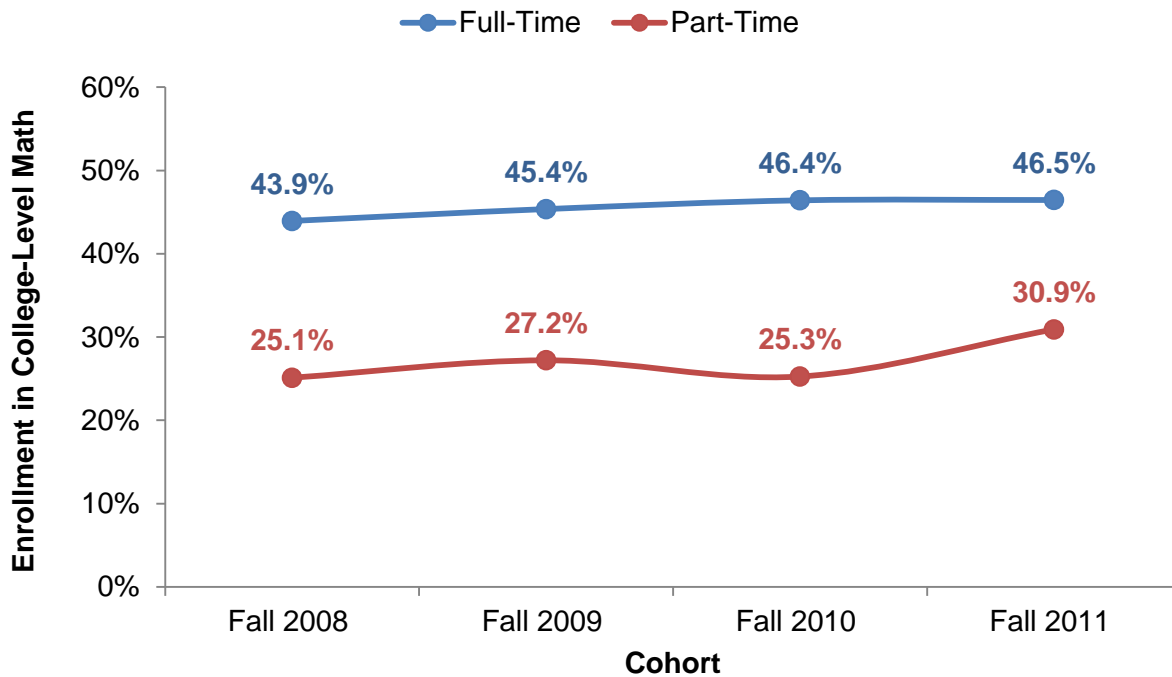


Table 2 displays successful developmental math course completion data for full-time, first-time to NOVA students broken down by gender. Results were largely inconsistent across the four cohorts. In the most recent cohort examined (Fall 2011), a greater percentage of female students progressed from developmental math to college-level math within two years (50 percent) as compared to male students (44 percent). In contrast, results for the Fall 2009 and Fall 2010 cohorts show that a higher percentage of male students progressed to college-level math whereas results for the Fall 2008 cohort were about equal.

**Table 2. Successful Developmental Math Course Completion of Full-Time First-time to NOVA Students by Gender: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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

Table 3 (next page) shows successful developmental math course completion data for part-time, first-time to NOVA students broken down by gender. Similarly to Table 2, results were largely inconsistent across cohorts. A greater percentage of female students in the Fall 2008 cohort and Fall 2011 cohort progressed from developmental math to college-level math as compared to male students. However, the opposite was true for the Fall 2009 and Fall 2012 cohorts where a greater percentage of male students progressed to college-level math as compared to female students.

**Table 3. Successful Developmental Math Course Completion of Part-Time First-time to NOVA Students by Gender: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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

Table 4 presents successful developmental math course completion data for full-time, first-time to NOVA students by age. Among students ages 18 to 21, who constituted more than 90 percent of full-time students in each cohort, between 44 to 47 percent of students progressed to college-level math. Among other groups, students under 18 in the Fall 2011 cohort had the highest rate of progression (68 percent).

**Table 4. Successful Developmental Math Course Completion of Full-Time First-time to NOVA Students by Age: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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

\*Sample size is too small to make accurate comparisons.

Table 5 presents successful developmental math course completion data for part-time, first-time to NOVA students by age. Students ages 18 to 21 progress to college-level math at a rate ranging from 23 to 29 percent. Among all other groups, students ages 30 to 44 in the Fall 2011 cohort had the highest percentage of students who progressed (45 percent), whereas students ages 25 to 29 in the Fall 2008 cohort had the lowest percentage of students who did so (12 percent).

**Table 5. Successful Developmental Math Course Completion of Part-Time First-time to NOVA Students by Age: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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.

Table 6 provides successful developmental math course completion data for full-time, first-time to NOVA students broken down by race/ethnicity. Asian students were generally more likely to progress to college-level math within two years as compared to other large racial/ethnic groups (58 to 62 percent). Among the four largest racial/ethnic groups, Black students were less likely to progress (33 to 36 percent).

**Table 6. Successful Developmental Math Course Completion of Full-Time First-time to NOVA Students by Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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

\*Sample size is too small to make accurate comparisons.

Table 7 provides successful developmental math course completion data for part-time, first-time to NOVA students broken down by race/ethnicity. Results were similar to patterns observed among full-time students (Table 6). Asian students were again more likely to proceed to college-level math within two years (34 to 49 percent). In contrast, Black students were less likely to progress from developmental math to college-level math within two years as compared to other large racial/ethnic groups (14 to 24 percent).

**Table 7. Successful Developmental Math Course Completion of Part-Time First-time to NOVA Students by Race/Ethnicity: Fall 2008 through Fall 2011 Cohorts**

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	
		#	%		#	%		#	%		#	%
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.