

# OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS

No. 02-19

January 2019

#### **RESEARCH BRIEF**

NOVA's Early Momentum and Equity Scorecards: Early Momentum Metrics by Student Type, Age Group, and Race/Gender, Fall 2016 First-Time in College Cohort

#### Introduction

For community college students, gaining momentum early can be a critical predictor of long-term success. In other words, students who are successful early on in their academic career are more likely to achieve long-term academic goals, such as graduating with a two-year degree and/or transferring to a four-year institution. Therefore, by monitoring success metrics associated with early momentum toward long-term goals ("early momentum metrics"), colleges can evaluate where student progress is stagnating.

It is even more critical to monitor early momentum metrics for groups with historically lower success rates—such as part-time students, minority students, and older students. A stronger understanding of how these students are performing early in their academic careers can help colleges to deliver interventions and support services to help them get back on track.

#### In This Brief

- I. This Brief reviews early momentum metrics (i.e., student success metrics from three critical time points in a student's academic career: the first term, first year, and second year) for the Fall 2016 first-time in college (FTIC) cohort of NOVA students.<sup>2</sup>
- II. To show whether there are disparities among certain groups of students, this Brief disaggregates early momentum metrics by student type (e.g., developmental, Pell grant, and part-time students), age group, and a combination of race and gender.

#### **Key Finding**

This Brief finds that part-time students, older students, and male racial/ethnic minorities struggle the most with gaining early momentum. These student groups, on average, accumulate fewer credits each semester, are less likely to return to campus for subsequent semesters, and complete college-level gatekeeper courses at a lower rate.

<sup>&</sup>lt;sup>1</sup> Jenkins, D. and Thomas, B. (2017). *Early Momentum Metrics: Why They Matter for College Improvement*. CCRC Research Brief Number 65. Community College Research Center.

<sup>&</sup>lt;sup>2</sup> Prior cohorts—including Fall 2013, Fall 2014, and Fall 2015—can be found in the Appendix section.

## **Early Momentum Metrics by Student Type**

The figures below present <u>first term</u>, <u>first year</u>, and <u>second year</u> early momentum metrics by student type, including: developmental education (i.e., students who enrolled in at least one developmental course in the first fall term), Pell grant recipients (i.e., students who received a Pell grant award), and part-time students (i.e., students who took fewer than 12 credits).<sup>3</sup>

#### First Term (Figure 1)

- The percentage of students earning a GPA of 2.0+ in their first semester was lower among part-time students, developmental education students, and Pell grant recipients, compared to all FTIC students at NOVA.
- Part-time students are nearly twice as likely to have earned zero credits in their first semester, compared to all FTIC students at NOVA.
- Developmental students also struggled at gaining early momentum: only ten percent completed 80 percent or more of all credits attempted in the first semester and even fewer—4 percent—earned at least 12 credits with a passing grade (A to C-).

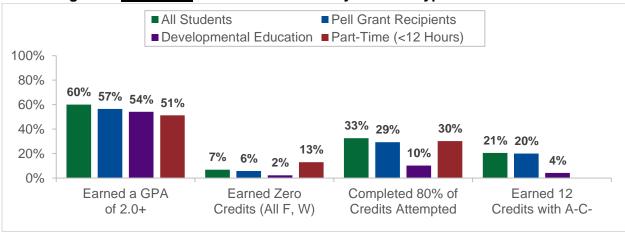


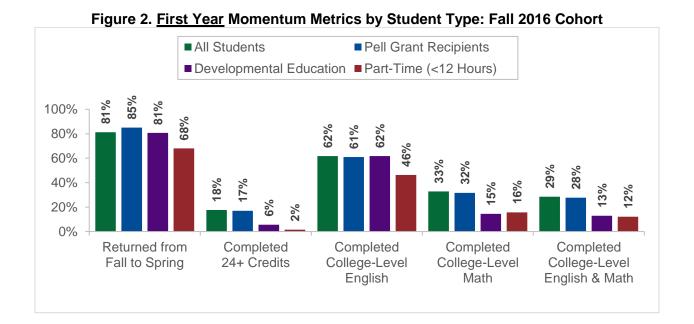
Figure 1. First Term Momentum Metrics by Student Type: Fall 2016 Cohort

#### First Year (Figure 2, next page)

 Overall, part-time students had the lowest success rates on first year early momentum metrics, compared to all FTIC students at NOVA.

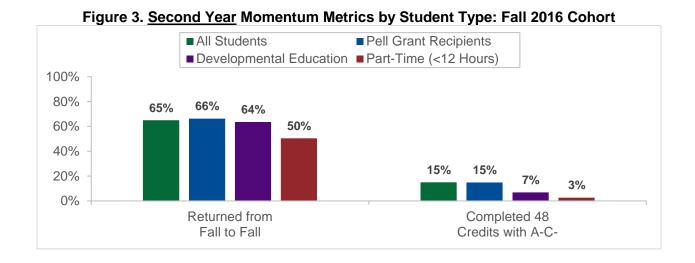
- Most notably, while 81 percent of all FTIC students re-enrolled for the following Spring semester, only 68 percent of part-time students re-enrolled.
- Part-time students also completed college-level courses at lower rates than all FTIC students: 46 percent completed college-level English, 16 percent completed college-level math, and 12 percent completed both English and math (compared to 62 percent, 33 percent, and 29 percent of all students, respectively).

<sup>&</sup>lt;sup>3</sup> It should be noted that the three student type groups are not mutually exclusive. A student can be classified into just one category—for example, a part-time student—or in any combination, such as a student who is part-time, developmental, and received a Pell grant. Therefore, for this data, all FTIC students at NOVA in Fall 2016 is provided as a reference group.



#### Second Year (Figure 3)

- Overall, part-time students had the lowest success rates on second year early momentum metrics, compared to all FTIC students at NOVA.
- Only half of part-time students re-enrolled for a second Fall semester (compared to 65 percent of all students), and even fewer—3 percent—had completed 48 or more credits with a passing grade (compared to 15 percent of all studdents).



## **Early Momentum Metrics by Age Group**

The figures below present <u>first term</u>, <u>first year</u>, and <u>second year</u> early momentum metrics by the following age groups: less than 20 years old, 20 to 24 years old, and 25 years or older. The majority of FTIC students in the Fall 2016 cohort at NOVA (77 percent) are in the first age group, which indicates a traditional college age.

#### First Term (Figure 4)

- Overall, older students (ages 25+) had the lowest success rates on each of the first term early momentum metrics, compared to other age groups.
- Less than half of older students (ages 25+) earned a GPA of 2.0 or higher in the first term compared to a majority of students under the age of 24. Likewise, while nearly one-fourth of students younger than 20 earned 12 or more credits with a passing grade, only 6 percent of students older than 24 earned the same number of credits during this time period.

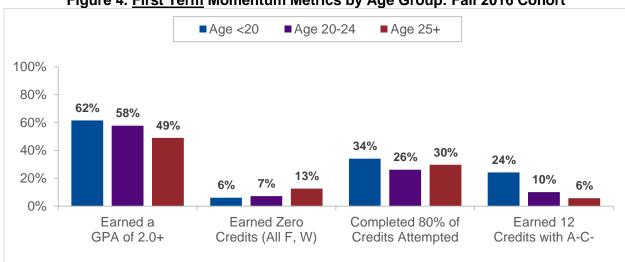


Figure 4. First Term Momentum Metrics by Age Group: Fall 2016 Cohort

#### First Year (Figure 5, next page)

- Overall, older students (ages 25+) had the lowest success rates on first year early momentum metrics, compared to students in other age groups.
- Most notably, while 83 percent of students younger than 20 re-enrolled for the following Spring semester, only 74 percent of students aged 20-24 and 70 percent of students older than 24 re-enrolled the following Spring.
- Older students (ages 25+) also completed college-level courses at lower rates: 31 percent completed college-level English, six percent completed college-level math, and four percent completed both English and math.

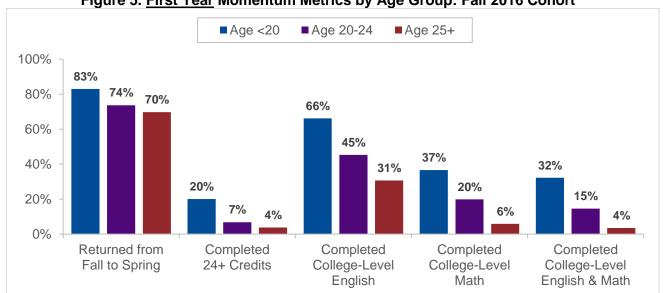
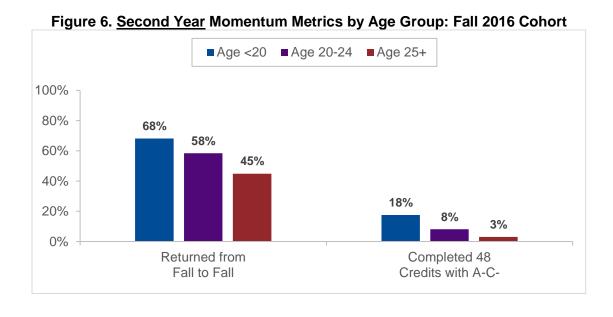


Figure 5. First Year Momentum Metrics by Age Group: Fall 2016 Cohort

## Second Year (Figure 6)

- Overall, older students (ages 25+) also had the lowest success rates on second year early momentum metrics compared to students in other age groups.
- Less than half of older students (ages 25+) re-enrolled at NOVA for a second fall semester, compared to 68 percent of students younger than 20 and 58 percent of those aged 20-24.
- Only three percent of older students (ages 25+) had completed 48 credits with a passing grade by the end of their second year, compared to nearly one-fifth of students younger than 20 and eight percent of students aged 20-24.



5

## Early Momentum Metrics by Race and Gender

The figures below present first term, first year, and second year early momentum metrics by a combination of race and gender.

#### First Term (Figure 7)

- Overall, white females outperformed other race/gender groups on all four first term early momentum metrics. Latina females and white males also outperformed most other race/gender groups.
- African American males, African American females, and latino males had the lowest performance on most early momentum metrics. Of particular note, only between 23 and 26 percent of these groups completed 80 percent of credits attempted.

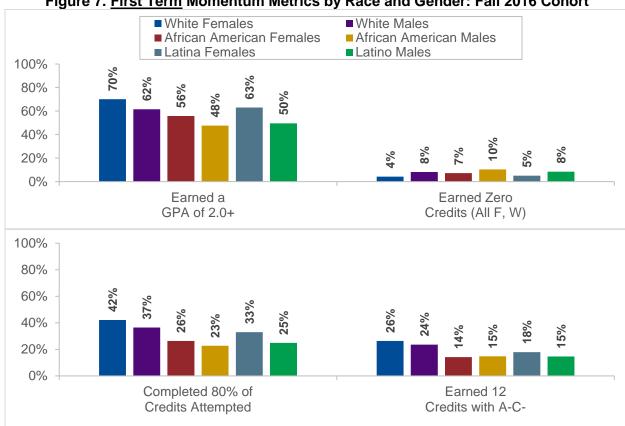
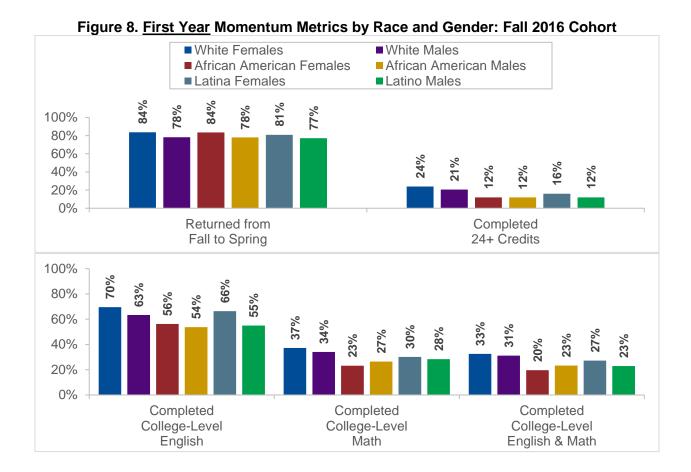


Figure 7. First Term Momentum Metrics by Race and Gender: Fall 2016 Cohort

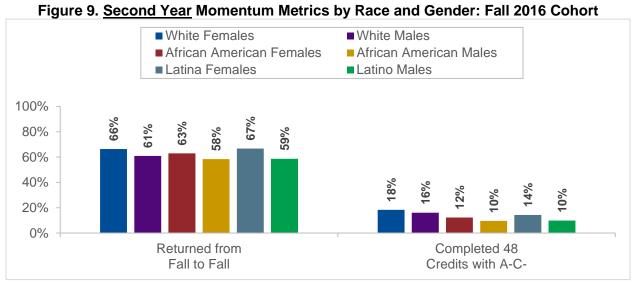
#### First Year (Figure 8, next page)

- All race/gender groups re-enrolled at NOVA for the following Spring semester at similar rates (between 77 and 84 percent).
- White females, white males, and latina females had the highest rates of completion of college-level courses, including English and math.



## Second Year (Figure 9)

- Overall, females of all racial/ethnic groups returned for the following Fall semester at higher rates (between 63 and 66 percent) than male students (between 58 and 61 percent).
- Only ten percent of African American males and Latino males had completed 48 credits with a passing grade by the end of their second year, the lowest of all race/gender groups.



## **Appendix: Data Tables**

# **First Term Early Momentum Metrics**

**Table A1. First Term Momentum Metrics - All Students** 

Metrics	Fall	2013	Fall :	2014	Fall	2015	Fall	2016
Metrics	#	%	#	%	#	%	#	%
Earned a GPA of 2.0+	4,561	58.7	4,635	60.0	4,608	59.5	4,397	60.0
Earned Zero Credits (All F,W)	615	7.9	534	6.9	539	7.0	500	6.8
Completed 80% of Credits Attempted	2,480	31.9	2,496	32.3	2,433	31.4	2,389	32.6
Earned 12 Credits with A-C-	1,473	19.0	1,570	20.3	1,456	18.8	1,512	20.6

Table A2. First Term Metrics by Student Type

Student	Metrics	Fall	2013	Fall	2014	Fall	2015	Fall	2016
Туре	wet ics	#	%	#	%	#	%	#	%
	Earned a GPA of 2.0+	1,681	55.6	1,752	57.0	1,638	55.7	1,525	56.5
Pell Grant	Earned Zero Credits (All F,W)	202	6.7	171	5.6	171	5.8	157	5.8
Recipient	Completed 80% of Credits Attempted	840	27.8	891	29.0	810	27.5	792	29.3
	Earned 12 Credits with A-C-	526	17.4	600	19.5	533	18.1	540	20.0
	Earned a GPA of 2.0+	1,322	51.9	1,509	54.4	1,460	54.2	1,369	54.1
Dev.	Earned Zero Credits (All F,W)	88	3.5	70	2.5	71	2.6	57	2.3
Education	Completed 80% of Credits Attempted	279	10.9	274	9.9	246	9.1	257	10.2
	Earned 12 Credits with A-C-	126	4.9	117	4.2	99	3.7	107	4.2
	Earned a GPA of 2.0+	1,439	51.8	1,467	53.3	1,534	53.5	1,319	51.3
Part-Time	Earned Zero Credits (All F,W)	428	15.4	361	13.1	364	12.7	335	13.0
(<12 hrs.)	Completed 80% of Credits Attempted	898	32.3	840	30.5	875	30.5	775	30.2
	Earned 12 Credits with A-C-								

Table A3. First Term Metrics by Age Group

Age	Metrics	Fall	2013	Fall	2014	Fall	2015	Fall	2016
Group	Wietrics	#	%	#	%	#	%	#	%
	Earned a GPA of 2.0+	3,430	59.5	3,589	61.9	3,623	61.2	3,488	61.6
Age	Earned Zero Credits (All F,W)	415	7.2	347	6.0	389	6.6	346	6.1
<20	Completed 80% of Credits Attempted	1,871	32.5	1,939	33.5	1,920	32.4	1,931	34.1
	Earned 12 Credits with A-C-	1,296	22.5	1,380	23.8	1,320	22.3	1,370	24.2
	Earned a GPA of 2.0+	628	56.3	633	54.8	643	56.0	614	57.8
Age	Earned Zero Credits (All F,W)	108	9.7	100	8.7	84	7.3	78	7.3
20-24	Completed 80% of Credits Attempted	297	26.6	305	26.4	303	26.4	279	26.2
	Earned 12 Credits with A-C-	104	9.3	124	10.7	92	8.0	107	10.1
	Earned a GPA of 2.0+	503	56.5	413	52.9	342	50.4	295	49.0
Age	Earned Zero Credits (All F,W)	92	10.3	87	11.2	66	9.7	76	12.6
25+	Completed 80% of Credits Attempted	312	35.0	252	32.3	210	30.9	179	29.7
	Earned 12 Credits with A-C-	73	8.2	66	8.5	44	6.5	35	5.8

Table A4. First Term Metrics by Race and Gender

Race and	Metrics	Fall 2	2013	Fall 2	2014	Fall	2015	Fall 2016	
Gender	Wetrics	#	%	#	%	#	%	#	%
	Earned a GPA of 2.0+	796	68.9	810	71.9	742	70.8	690	70.1
White	Earned Zero Credits (All F,W)	83	7.2	55	4.9	57	5.4	42	4.3
Female	Completed 80% of Credits Attempted	482	41.7	480	42.6	451	43.0	415	42.1
	Earned 12+ Credits with A-C-	287	24.8	295	26.2	253	24.1	260	26.4
	Earned a GPA of 2.0+	796	57.1	797	58.8	841	59.1	829	61.5
White	Earned Zero Credits (All F,W)	149	10.7	123	9.1	124	8.7	111	8.2
Male	Completed 80% of Credits Attempted	474	34.0	469	34.6	490	34.5	493	36.5
	Earned 12+ Credits with A-C-	297	21.3	298	22.0	289	20.3	319	23.6
	Earned a GPA of 2.0+	403	54.0	358	52.3	347	55.6	353	55.8
African American	Earned Zero Credits (All F,W)	67	9.0	61	8.9	43	6.9	46	7.3
Female	Completed 80% of Credits Attempted	200	26.8	171	25.0	150	24.0	167	26.4
	Earned 12+ Credits with A-C-	97	13.0	91	13.3	72	11.5	90	14.2
	Earned a GPA of 2.0+	337	46.7	332	47.6	330	44.6	296	47.6
African American	Earned Zero Credits (All F,W)	73	10.1	64	9.2	67	9.1	64	10.3
Male	Completed 80% of Credits Attempted	149	20.6	165	23.6	142	19.2	141	22.7
	Earned 12+ Credits with A-C-	71	9.8	94	13.5	71	9.6	92	14.8
	Earned a GPA of 2.0+	646	61.1	691	63.4	647	60.6	690	63.0
Latina	Earned Zero Credits (All F,W)	63	6.0	50	4.6	63	5.9	56	5.1
Female	Completed 80% of Credits Attempted	339	32.1	331	30.4	305	28.6	362	33.0
	Earned 12+ Credits with A-C-	189	17.9	197	18.1	177	16.6	196	17.9
	Earned a GPA of 2.0+	509	53.5	535	50.4	564	52.1	501	49.6
Latino	Earned Zero Credits (All F,W)	82	8.6	90	8.5	84	7.8	85	8.4
Male	Completed 80% of Credits Attempted	256	26.9	272	25.6	288	26.6	252	24.9
	Earned 12+ Credits with A-C-	155	16.3	169	15.9	178	16.4	149	14.7

# **First Year** Early Momentum Metrics

**Table A5. First Year Momentum Metrics – All Students** 

Metrics	Fall	2013	Fall	2014	Fall	2015	Fall 2016	
Wetrics	#	%	#	%	#	%	#	%
Returned from Fall to Spring	6,258	80.6	6,232	80.6	6,338	81.8	5,954	81.2
Completed College-level English	4,286	55.2	4,652	60.2	4,602	59.4	4,523	61.7
Completed College-level Math	2,347	30.2	2,539	32.9	2,462	31.8	2,405	32.8
Completed College-level English + Math	1,977	25.5	2,214	28.7	2,135	27.6	2,088	28.5
Completed 24+ Credits	1,218	15.7	1,303	16.9	1,299	16.8	1,300	17.7

**Table A6. First Year Metrics by Student Type** 

Student	Metrics	Fall	2013	Fall	2014	Fall	2015	Fall	2016
Туре	Metrics	#	%	#	%	#	%	#	%
	Returned from Fall to Spring	2,590	85.7	2,590	84.2	2,549	86.6	2,297	85.0
Poll Cront	Completed College-level English	991	35.7	1,820	59.2	1,757	59.7	1,647	61.0
Pell Grant Recipient	Completed College-level Math	843	27.9	958	31.2	904	30.7	855	31.7
Recipioni	Completed College-level English + Math	725	24.0	825	26.8	797	27.1	747	27.7
	Completed 24+ Credits	431	14.3	503	16.4	488	16.6	460	17.0
	Returned from Fall to Spring	2,109	82.7	2,245	81.0	2,199	81.7	2,042	80.7
Davis	Completed College-level English	1,490	58.5	1,696	61.2	1,638	60.8	1,562	61.7
Dev. Education	Completed College-level Math	452	17.7	419	15.1	363	13.5	366	14.5
Ladoation	Completed College-level English + Math	398	15.6	378	13.6	326	12.1	326	12.9
	Completed 24+ Credits	175	6.9	164	5.9	162	6.0	142	5.6
	Returned from Fall to Spring	1,813	65.3	1,842	66.9	1,988	69.4	1,748	68.0
Dant Time	Completed College-level English	991	35.7	1,218	44.2	1,236	43.1	1,190	46.3
Part-Time (<12 hrs.)	Completed College-level Math	353	12.7	480	17.4	460	16.1	404	15.7
(3.2 1113.)	Completed College-level English + Math	249	9.0	374	13.6	352	12.3	311	12.1
	Completed 24+ Credits	38	1.4	44	1.6	44	1.5	40	1.6

**Table A7. First Year Metrics by Age Group** 

Age	Metrics	Fall 2	2013	Fall	2014	Fall	2015	Fall 2016	
Group	Metrics	#	%	#	%	#	%	#	%
	Returned from Fall to Spring	4,845	84.1	4,887	84.3	4,991	84.3	5,098	83.0
	Completed College-level English	3,608	62.6	3,909	67.5	3,909	66.0	4,064	66.2
Age <20	Completed College-level Math	2,077	36.1	2,261	39.0	2,173	36.7	2,245	36.6
120	Completed College-level English + Math	1,792	31.1	2,018	34.8	1,922	32.5	1,975	32.2
	Completed 24+ Credits	1,072	18.6	1,189	20.5	1,188	20.1	1,235	20.1
	Returned from Fall to Spring	815	73.0	828	71.7	863	75.1	474	73.7
A	Completed College-level English	451	40.4	508	44.0	508	44.2	291	45.3
Age 20-24	Completed College-level Math	197	17.7	221	19.1	240	20.9	128	19.9
20 24	Completed College-level English + Math	139	12.5	156	13.5	180	15.7	94	14.6
	Completed 24+ Credits	92	8.2	73	6.3	77	6.7	44	6.8
	Returned from Fall to Spring	598	67.1	517	66.3	484	71.3	382	69.8
	Completed College-level English	227	25.5	235	30.1	185	27.2	168	30.7
Age 25+	Completed College-level Math	73	8.2	57	7.3	49	7.2	32	5.9
251	Completed College-level English + Math	46	5.2	40	5.1	33	4.9	19	3.5
	Completed 24+ Credits	54	6.1	41	5.3	34	5.0	21	3.8

Table A8. First Year Metrics by Race and Gender

Race and	Matrica	Fall	2013	Fall	2014	Fall	2015	Fall 2	2016
Gender	Metrics	#	%	#	%	#	%	#	%
	Returned from Fall to Spring	935	80.9	944	83.8	861	82.2	825	83.8
	Completed College-level English	724	62.6	771	68.4	719	68.6	685	69.5
White	Completed College-level Math	396	34.3	441	39.1	376	35.9	366	37.2
Female	Completed College-level English + Math	347	30.0	400	35.5	344	32.8	321	32.6
	Completed 24+ Credits	260	22.5	248	22.0	236	22.5	236	24.0
	Returned from Fall to Spring	1,081	77.5	1,056	77.9	1,112	78.2	1,056	78.3
NAM *4	Completed College-level English	728	52.2	770	56.8	832	58.5	854	63.3
White Male	Completed College-level Math	467	33.5	453	33.4	478	33.6	459	34.0
Water	Completed College-level English + Math	380	27.3	384	28.3	402	28.3	420	31.1
	Completed 24+ Credits	234	16.8	259	19.1	258	18.1	276	20.5
	Returned from Fall to Spring	559	74.9	532	77.8	505	80.9	529	83.6
African	Completed College-level English	365	48.9	358	52.3	320	51.3	356	56.2
American	Completed College-level Math	128	17.2	141	20.6	137	22.0	147	23.2
Female	Completed College-level English + Math	116	15.5	126	18.4	123	19.7	124	19.6
	Completed 24+ Credits	79	10.6	73	10.7	63	10.1	76	12.0
	Returned from Fall to Spring	554	76.7	527	75.5	565	76.4	485	78.0
African	Completed College-level English	320	44.3	338	48.4	333	45.0	334	53.7
American	Completed College-level Math	126	17.5	142	20.3	140	18.9	165	26.5
Male	Completed College-level English + Math	105	14.5	121	17.3	115	15.5	145	23.3
	Completed 24+ Credits	54	7.5	60	8.6	55	7.4	74	11.9
	Returned from Fall to Spring	873	82.6	906	83.1	882	82.6	887	80.9
Latina	Completed College-level English	649	61.4	713	65.4	687	64.3	727	66.3
Latina Female	Completed College-level Math	317	30.0	352	32.3	330	30.9	330	30.1
Temale	Completed College-level English + Math	274	25.9	301	27.6	302	28.3	298	27.2
	Completed 24+ Credits	147	13.9	162	14.9	153	14.3	175	16.0
	Returned from Fall to Spring	755	79.3	812	76.5	863	79.7	780	77.2
Latina	Completed College-level English	520	54.6	597	56.3	618	57.1	556	55.0
Latino Male	Completed College-level Math	276	29.0	303	28.6	321	29.6	287	28.4
Maic	Completed College-level English + Math	229	24.1	269	25.4	284	26.2	232	22.9
	Completed 24+ Credits	107	11.2	130	12.3	148	13.7	121	12.0

# **Second Year** Early Momentum Metrics

Table A9. Second Year Momentum Metrics - All Students

Metrics	Fall	Fall 2013		2014	Fall	2015	Fall 2016	
Metrics	#	%	#	%	#	%	#	%
Returned from Fall to Fall	4,757	61.2	4,881	63.2	4,867	62.8	4,755	64.9
Completed 48 Credits with A-C-	1,100	14.2	1,182	15.3	1,202	15.5	1,098	15.0

Table A10. Second Year Metrics by Student Type

Student	Metrics	Fall	2013	Fall	2014	Fall	2015	Fall 2	2016
Туре	Metrics	#	%	#	%	#	%	#	%
Pell Grant	Returned from Fall to Fall	1,861	61.6	1,890	61.5	1,846	62.7	1,787	66.2
Recipient	Completed 48 Credits with A-C-	430	14.2	468	15.2	476	16.2	401	14.8
Dev.	Returned from Fall to Fall	1,563	61.3	1,683	60.7	1,690	62.8	1,609	63.6
Education	Completed 48 Credits with A-C-	196	7.7	214	7.7	206	7.7	172	6.8
Part-Time	Returned from Fall to Fall	1,303	46.9	1,342	48.7	1,342	46.8	1,296	50.4
(<12 hrs.)	Completed 48 Credits with A-C-	81	2.9	84	3.1	97	3.4	67	2.6

Table A11. Second Year Metrics by Age Group

Age	Metrics =		2013	Fall	2014	Fall	2015	Fall 2016	
Group	MIGHTICS	#	%	#	%	#	%	#	%
Age	Returned from Fall to Fall	3,841	66.7	3,987	68.8	3,995	67.5	3,864	68.2
<20	Completed 48 Credits with A-C-	982	17.0	1,075	18.6	1,101	18.6	994	17.5
Age	Returned from Fall to Fall	556	49.8	562	48.7	577	50.2	621	58.4
20-24	Completed 48 Credits with A-C-	82	7.3	71	6.1	76	6.6	86	8.1
Age	Returned from Fall to Fall	360	40.4	332	42.6	295	43.4	270	44.9
25+	Completed 48 Credits with A-C-	36	4.0	36	4.6	25	3.7	18	3.0

Table A12. Second Year Metrics by Race and Gender

Race and	Matrica	Fall	2013	Fall	2014	Fall	2015	Fall 2	2016
Gender	Metrics	#	%	#	%	#	%	#	%
White	Returned from Fall to Fall	713	61.7	726	64.4	662	63.2	654	66.4
Female	Completed 48 Credits with A-C-	215	18.6	226	20.1	201	19.2	180	18.3
White	Returned from Fall to Fall	801	57.5	842	62.1	857	60.3	821	60.9
Male	Completed 48 Credits with A-C-	204	14.6	220	16.2	231	16.2	216	16.0
African	Returned from Fall to Fall	381	51.1	354	51.8	353	56.6	398	62.9
American Female	Completed 48 Credits with A-C-	65	8.7	76	11.1	66	10.6	78	12.3
African American	Returned from Fall to Fall	343	47.5	370	53.0	393	53.1	363	58.4
Male	Completed 48 Credits with A-C-	48	6.6	53	7.6	47	6.4	60	9.6
Latina	Returned from Fall to Fall	709	67.1	719	66.0	677	63.4	732	66.8
Female	Completed 48 Credits with A-C-	138	13.1	140	12.8	141	13.2	157	14.3
Latino	Returned from Fall to Fall	578	60.7	632	59.6	669	61.8	593	58.7
Male	Completed 48 Credits with A-C-	88	9.2	109	10.3	134	12.4	100	9.9