

Major Switching Analysis Fall 2011 Cohort

January 17, 2019

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Purpose

- ▶ To examine the impact of undergraduate students switching majors at UMass Boston
- ▶ Research questions:
 1. What are the attributes of students that switch majors?
 2. Does switching majors have an impact on student success?
 3. What are the programs that are most impacted by major switching?
 4. Does major switching have an impact on program metrics?

Methodology

- ▶ Fall 2011 cohort of new undergraduate degree-seeking students
 - ▶ 3,084 students
- ▶ Grouped majors into 2-digit CIP codes (common discipline)
- ▶ Switching fields created based on students changed major to new discipline
- ▶ Calculated retention rates and graduation rates

Findings

- ▶ For FYR students that are retained:
 - ▶ 7% switch from fall-spring in first year
 - ▶ 13% switch in first year
 - ▶ 32% switch in first two years
- ▶ For FYR students that complete degree within 6 years
 - ▶ 51% switched at least once

Findings

- ▶ Full-time students switch more often than Part-time students
 - ▶ 28% FT vs. 14% PT switch in first two years
- ▶ Students of Color switch more often than White/NRA
 - ▶ 32% SOC vs. 22% white, 16% NRA
- ▶ FYR students switch more often than TRN students
 - ▶ 32% FYR vs. 20% TRN

Findings

First College	Fall-Spring Switch	Fall-Fall Switch	Switch by 5 th Sem	6-YR Grad Switch
CLA	9%	16%	36%	44%
CSM	7%	16%	35%	49%
CM	1%	4%	8%	11%
CNHS	<1%	3%	9%	9%

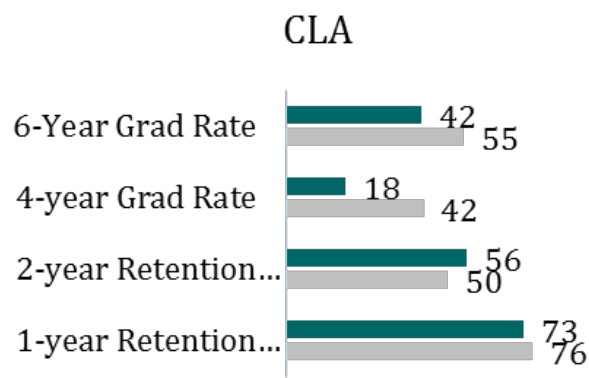
Declaring a Major

- More than 60 percent undecided students declared a major in their third year.
- Students are more successful if they declared a major in their second or third year. Statistically significantly higher 1-year retention and 4-year and 6-year graduation rates for both colleges, for those who declared a major in their second and third year comparing to their undecided peers. Higher 2-year retention rate for CSM for those who declared in the second year.

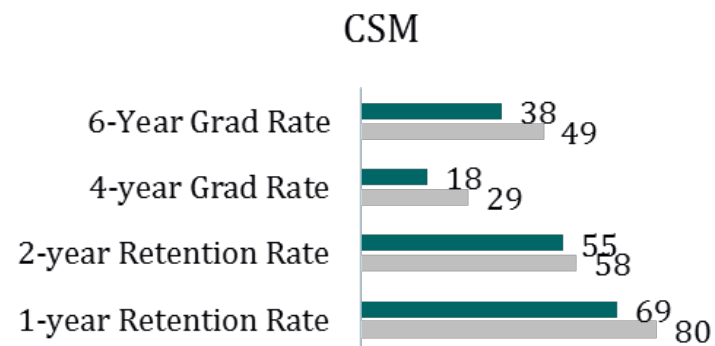
Undecided CLA	% Declared in 2nd Year	% Declared in 3rd Year
First-year (<i>n</i> = 294)	18	55
Transfer (<i>n</i> = 156)	36	69
All (<i>n</i> = 450)	24	60
Undecided CSM	% Declared in 2nd Year	% Declared in 3rd Year
First-year (<i>n</i> = 100)	23	60
Transfer (<i>n</i> = 39)	48	71
All (<i>n</i> = 139)	29	63

Student Success of Declared and Undecided Students

- Declared CLA and CSM students have statistically significantly higher 4-year and 6-year graduation rates than the undecided students.
- Declared CLA students have statistically significantly higher 1-year retention rate than the undecided students, however, the 2-year retention rate is statistically significantly higher among the undecided students than the decided students.
- Declared CSM students have statistically significantly higher 1-year retention rate than the undecided students. Declared CSM students have a higher 2-year retention rate than the undecided students, but it is not statistically significant.



■ Undecided- Liberal Arts
■ Declared- Liberal Arts



■ Undecided- Science and Math
■ Declared- Science and Math

Student Success of Declared and Undecided Students

- The mean of the cumulative GPA is higher for the declared CLA and CSM students, but not statistically significant
- Declared CLA students take statistically significant lower number of credits to complete the degree than the undecided students
- Declared CSM students take a higher number of credits to complete the degree than the undecided students, but this is not statistically significant

College of Liberal Arts							
	<i>n</i>	1-year Retention Rate*	2-year Retention Rate**	4-year Grad Rate**	6-Year Grad Rate**	Average credits taken**	Average Cumulative GPA
Declared	884	76	49.8	42.3	54.8	124	3.27
Undecided	450	73.1	55.8	18.0	41.6	126	3.14
College of Science and Math							
	<i>n</i>	1-year Retention Rate**	2-year Retention Rate	4-year Grad Rate**	6-Year Grad Rate**	Average credits taken	Average Cumulative GPA
Declared	501	80.0	58.1	28.9	49.3	130	3.16
Undecided	139	69.1	54.7	18.0	38.1	126	3.13

* $p < .05$; ** $p < .01$