Undeclared No More: Effects on Admission, GPA and Retention

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Overview

- Overview of UMass Amherst
- The Exploratory Track Program and how admissions works
- The first year entering class
- Longitudinal Student Database
- One year outcomes
- Case studies on major declaration
- Conclusion/Wrap-up
UMass Amherst Facts

- The flagship campus of the UMass system, the only public Carnegie very high research university in the state
- Enrollment: over 30,000 students (Fall 2016)
  - 78% undergraduate, 22% graduate students
  - Entering class of 4,643 students
- Over 50 academic departments
  - Over 100 undergraduate majors
- Research and development expenditures over $200 million
The Exploratory Track Program

- Late 2014/early 2015: decision to no longer allow students to enter without a major
- Exploratory Track Programs within each School or College
  - 5 programs with open enrollment
  - 3 restricted programs
- Intent:
  - Students will benefit from working closely with academic advisors to explore potential majors within their collegiate unit and across campus
  - Students will also participate in academic programming embedded within their School or College
Admissions – How it Works

Sankey diagrams generated by Google Charts: https://developers.google.com/chart/interactive/docs/gallery/sankey
Yield has been decreasing slightly

- Exploratory Track program did not have negative impact overall
The First-Year Entering Class (Size)

- Size has increased in last 10 years

- Proportion with declared major increased, as did proportion of involuntary.
The First-Year Entering Class (Academic Profile)

- Academic profile has improved in last 10 years

- Profile has always lagged for the Undeclared, now Exploratory Track students, especially the involuntary group.
Longitudinal Student Database (LSDB)

- Tracks cohorts of students semester over semester
- Started with 1989 entering cohort
- Use student census file as base
  - Add data from admissions, academic standing, financial aid, end of term grades, degrees
  - Track certain data points for every semester (enrolled/graduation status, major, honors, STEM, GPA, credits taken)
  - Derive outcome variables
- Future plan is to get this in Tableau with swanky vizzes
One Year Outcomes: Retention & GPA

- 1-year retention is improving – up nearly 5% in last 10 years (86.5% to 91.3%)
- No negative impact from Exploratory Program, increase is larger for those in ET (0.3%) than those with declared majors (0.1%)

<table>
<thead>
<tr>
<th>Fall 2015 Cohort</th>
<th>Declared</th>
<th>ET Student Choice</th>
<th>ET Invol</th>
<th>ET Inv CS</th>
<th>ET Inv ENG</th>
<th>ET Inv BUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>91.8%</td>
<td>90.6%</td>
<td>88.7%</td>
<td>85.5%</td>
<td>88.1%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Corresponding ET</td>
<td></td>
<td></td>
<td></td>
<td>85.3%</td>
<td>92.1%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Other ET</td>
<td></td>
<td></td>
<td></td>
<td>85.7%</td>
<td>85.0%</td>
<td>89.9%</td>
</tr>
</tbody>
</table>

- No change in GPA in 1st semester and end of 1st year
## One Year Outcomes: Major Declaration

- More students declare major after 1 year

<table>
<thead>
<tr>
<th>Fall Cohort</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33%</td>
<td>33%</td>
<td>37%</td>
<td>42%</td>
<td>46%</td>
<td>52%</td>
<td>55%</td>
<td>57%</td>
<td>58%</td>
<td>63%</td>
</tr>
</tbody>
</table>

### Fall 2015

- Business ET
- Computing and Informatics ET
- Education ET
- Engineering ET
- Humanities and Fine Arts ET
- Natural Sciences ET
- Public Health & Health Sciences ET
- Social and Behavioral Sciences ET

- BUS
- ICS
- ICS ET
- EDU ET
- EDU
- ENG ET
- HFA ET
- HFA
- CNS ET
- PUB ET
- PUB
- SBS ET
- SBS
- OTH
- Withdrawn
Case Study (Major Declaration): Business

Fall 2014
- Business ET: 240 students
  - Retention: 88.3%
  - Desired Major: 18%
  - Other Major: 35%
  - Undeclared: 47%

Fall 2015
- Business ET: 78 students
  - Retention: 88.5%
  - Desired Major: 33%
  - Other Major: 37%
  - Other ET: 30%

- Other ET: 169 students
  - Retention: 88.9%
  - Desired Major: 14%
  - Other Major: 33%
  - Other ET: 53%

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Case Study (Major Declaration): Computer Science

- **Fall 2014**
  - 59 students
  - Undeclared: 60%
  - Desired Major: 15%
  - Other Major: 25%
  - Retention: 88.1%

- **Fall 2015**
  - 68 students
  - Undeclared: 52%
  - Desired Major: 29%
  - Other Major: 53%
  - Retention: 85.7%

- **Fall 2015 Computer Science ET**
  - 42 students
  - Undeclared: 31%
  - Desired Major: 17%
  - Other Major: 52%
  - Retention: 85.3%

- **Fall 2015 Other ET**
  - 42 students
  - Undeclared: 31%
  - Desired Major: 17%
  - Other Major: 52%
  - Retention: 85.7%
Conclusion/Wrap-up

- The Exploratory Program seems to be working so far:
  - Retention has increased slightly.
  - More students are declaring a major.
- Still too early to tell true impact since this fall is the first year of true implementation (with caveats)
Questions?

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