The Main Attraction of Placement: Individualized & Required Remediation

Phil MacLean, Beth Barnett, and T.J. Duda

November 17, 2018
An Institutional Goal

Increase the percent of students completing gateway College Mathematics and English courses within their first year of college from 18.9% to 30%.
Potential Strategies

- **Increase student placement** to reduce or eliminate pre-college coursework.
- Allow students who need pre-college level coursework to **accelerate** and complete it quickly.
- **Change the curriculum** to shorten the pathway to college-level courses.
Brief Examples of Strategies

- Reduced number of developmental mathematics “levels” from 5 to 3; currently in the process of reducing to only 2 levels.

- Implemented emporium-style course to allow students to advance more than one level in a single semester.

- Created shorter pathways by creating “contextual” courses for AAS programs and a Quantitative Literacy pre-req for Statistics.
Issues With Former Process

- Students took placement test “cold”.
- Nearly half of our students were placing into our lowest level Basic Math/Prealgebra course.
- General belief that students were not being properly placed by the tool that we had been using for decades.
Placement Timeline

- Original placement committee formed in 2012; recommended a new process in 2013.
- Piloted placement “boot camps” during several semesters in 2015 and 2016.
- New placement committee formed in 2016 due to elimination of the commercial test that the college had used for several years.
Boot Camp 1.0

- 84 students voluntarily participated.
- Each student already had a placement score from the existing process.
- 10 hours individualized preparation required.
- Met in lab with qualified faculty member.
- 71% of participants improved their placement.
- These students had a 58% success rate in their first MATH or STAT course (57% success overall in those same courses).
Campus-Wide Implementation

- Students took an initial assessment at home (unproctored), but it did not count for placement.
- Students were required to remediate for at least 5 hours before taking the “official” placement test (proctored).
- Students with a “college-ready” test score as defined by the state of Ohio (or one level below) were exempt from this process.
New Placement Process

First Placement Assessment
(Unproctored)

5 Hours (minimum)
Individualized Preparation

2\textsuperscript{nd} Placement Assessment
(Proctored)
(3\textsuperscript{rd}, 4\textsuperscript{th}, and 5\textsuperscript{th} optional)

- Taken at home
- Not valid for placement
- Remediation Plan based on result

- Assistance available
- Could be completed at home

- Taken at college Testing Services
- Official score

COLUMBUS STATE COMMUNITY COLLEGE
Implementation Data

- Placement into our lowest level course was reduced from 46% using the old tool to 28% using the new process and required remediation.

- Approximately 25% of students raised their placement over their initial assessment.

- Approximately 10% of students placed two or more levels below their initial placement (fairly strong evidence of cheating).
Success Rates in Initial MATH or STAT Course – Spring 2017

<table>
<thead>
<tr>
<th>Students Using New Process</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade</strong></td>
<td><strong>Count</strong></td>
</tr>
<tr>
<td>A</td>
<td>158</td>
</tr>
<tr>
<td>B</td>
<td>103</td>
</tr>
<tr>
<td>C</td>
<td>74</td>
</tr>
<tr>
<td>D</td>
<td>29</td>
</tr>
<tr>
<td>E</td>
<td>56</td>
</tr>
<tr>
<td>S</td>
<td>84</td>
</tr>
<tr>
<td>U</td>
<td>27</td>
</tr>
<tr>
<td>W</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>559</strong></td>
</tr>
<tr>
<td>% successful</td>
<td>75.0%</td>
</tr>
</tbody>
</table>
Required Remediation Eliminated

- The 5 hour remediation requirement was viewed as a barrier to enrollment and was eliminated before success data was analyzed.

- Students are still permitted to remediate and re-place, but as is often said in Achieving the Dream, “Students don’t do optional.”
Comparison of Results With and Without Remediation

<table>
<thead>
<tr>
<th>Placement Group</th>
<th>2015 (old process)</th>
<th>Fall 2016 Cohort 9-15-16 to 6-15-17 (remediation reqd)</th>
<th>Fall 2017 Cohort 9-1-17 to 12-12-17 (no remediation reqd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>11.2%</td>
<td>9.3%</td>
<td>15.3%</td>
</tr>
<tr>
<td>A2</td>
<td>35.0%</td>
<td>20.2%</td>
<td>26.1%</td>
</tr>
<tr>
<td>B</td>
<td>29.3%</td>
<td>33.2%</td>
<td>32.0%</td>
</tr>
<tr>
<td>C</td>
<td>10.2%</td>
<td>24.4%</td>
<td>18.8%</td>
</tr>
<tr>
<td>D</td>
<td>6.9%</td>
<td>5.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>E</td>
<td>3.8%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>F</td>
<td>3.0%</td>
<td>4.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>G</td>
<td>0.6%</td>
<td>2.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- Pct. @ DEV level: 46.2% 29.5% 41.4%
- Pct. @ College level: 14.3% 12.9% 7.8%
Moving Forward – Boot Camp 2.0

- Faculty are now incorporating the “Test-Remediate-Retest” placement process in the first week of our emporium-style course.
  - AU 17 – 4 sections
  - SP 18 – 8 sections
  - AU 18 – 25 sections
  - Scale-up to full implementation will be determined by the faculty (advising, late-start classes, 1st week assistance).
Preliminary Results from Emporium Boot Camp 2.0 Pilot

- In Spring 2018, there were 175 students enrolled in the pilot sections.

- 109 of these students (62%) completed the Boot Camp by performing at least 5 hours of remediation and re-testing.

- Of the students that completed the Boot Camp, 36% of them were able to advance their placement by at least one course.

- Students that advanced their placement moved directly on to the next course.
# More Recent Boot Camp 2.0 Data

<table>
<thead>
<tr>
<th>Autumn 2018</th>
<th>Number of Students</th>
<th>Increased Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Algebra</td>
<td>124</td>
<td>49%</td>
</tr>
<tr>
<td>Beginning Algebra</td>
<td>227</td>
<td>27%</td>
</tr>
<tr>
<td>Intermediate Algebra</td>
<td>142</td>
<td>11%</td>
</tr>
</tbody>
</table>