Multiple Measures Assessment Project (MMAP) Update

Common Assessment Initiative (CAI) Steering Committee
Sacramento
April 4, 2017
Pilot College Implementation Overview

- 63 pilot colleges have signed a data sharing agreement
  - we have assisted or been in contact with 13 additional colleges, but they have not signed the agreement
- Approximately 20 colleges implemented a pilot in fall 2015 or spring 2016 (or prior)
  - most were small pilots to serve as a trial run
- Approximately 25 colleges reported they piloted in fall 2016 or plan to in spring 2017
- Approximately 17 are still in the planning phase
“Both English and math are using the statewide model with self-reported data. However, English has added a variation to be able to place students into our co-requisite English composition course, so we have 3 placements: regular composition, co-requisite composition, and accelerated developmental reading/writing/critical thinking. But the 2.6 measure places all students into transfer level, those with a higher GPA are placed into the traditional course, and those with a lower GPA into the support course.” – Los Medanos College

“We have been using multiple measures (HS transcripts, EAP, SAT/ACT) for over ten years. The math department recently developed a customized version of MM placement using the MMAP statewide logic as a guide. We wanted to make sure that students would not place lower using the statewide model that they would have placed with the previous MM.” – Fresno City College
“Our college received high school transcripts from the three school districts within our area and created a spreadsheet with placement recommendations for math and English. Counselors were then able to access the placement recommendations spreadsheet and advise students appropriately. The students who attended any of the three school districts were the initial pilot group. We are creating more partnerships with other districts to expand.” – College of Alameda

“The math department made a formal decision/plan to work on modifying the MMAP’s recommended Decision Tree to a locally derived model adjusted by faculty with consideration of local correlation research of course success with self-reported previous math level and grades.” – Santa Rosa Junior College
Multiple Measures @ Mira Costa

Spring/Fall 2016 Placement into Transfer English

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Reform</th>
<th>Post-Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>62%</td>
<td>77%</td>
</tr>
<tr>
<td>Asian</td>
<td>65%</td>
<td>79%</td>
</tr>
<tr>
<td>African American</td>
<td>49%</td>
<td>63%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>52%</td>
<td>69%</td>
</tr>
<tr>
<td>PI</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td>White</td>
<td>72%</td>
<td>83%</td>
</tr>
</tbody>
</table>

*3.0 or above OR 2.5 GPA plus a B in English course, self-reported transcripts. N=1,329 for MMAP
Success by Placement Type at Mira Costa for Transfer-Level English

Comparison of success rates before and after reform for various assessment tools and enrollment years.

- **S2016**:
  - Pre-Reform: 65%
  - Post_Reform: 69%
  - Compass: 64%
  - MMAP: 67%
  - EAP: 71%
- **F2016**:
  - Pre-Reform: 68%
  - Post_Reform: 75%
  - Compass: 70%
  - MMAP: 80%
  - EAP: 72%

Sample sizes:
- S2016: n=1,094
- F2016: n=1,150

The RP group
Las Positas Preliminary F2016 results: English

**Transfer-Level Placement**
- F2015: 35%
- F2016: 78%

**Success Rate**
- F2013: 75%
- F2014: 70%
- F2015: 75%
- F2016 (all): 76%
- F20162 (MM only): 77%

Rule set: self-reported transcripts; >= 2.5 GPA; N = 348
Fall 2015: Cañada College

Cañada College Transfer-level Placements

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compass</td>
<td>191</td>
<td>192</td>
<td>123</td>
<td>123</td>
</tr>
<tr>
<td>MMAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cañada College Transfer-level Success Rates

<table>
<thead>
<tr>
<th></th>
<th>Compass</th>
<th>MMAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>65%</td>
<td>68%</td>
</tr>
<tr>
<td>English</td>
<td>78%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Rule set: English = 2.3 AND B- or better; Math = 3.2 AND C or better

bit.ly/MMAPPilotLessons
Fall 2016 pilot Norco College

Success rates in transfer-level coursework by placement method

Statewide rule set: English = 196; Math = 205
Rule set: GPA 2.7 AND B or better in last English course; N = 471
No significant difference in success rates among the three student groups

- Multiple Measures Cohort (93.01%) significantly more likely to be retained in English courses (overall) than Traditionally Assessed (84.49%) group
- Neither group differed from All Others group (89.54%)

### Spring 2015: Shasta College

#### Success Rate

<table>
<thead>
<tr>
<th></th>
<th>Multiple Measures Cohort</th>
<th>Traditionally Assessed</th>
<th>All Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average (all courses)</td>
<td>67%</td>
<td>64%</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>Transfer level</td>
<td>67%</td>
<td>68%</td>
<td>71%</td>
<td>69%</td>
</tr>
<tr>
<td>Below transfer</td>
<td>65%</td>
<td>60%</td>
<td>55%</td>
<td>58%</td>
</tr>
</tbody>
</table>

#### Retention Rate

<table>
<thead>
<tr>
<th></th>
<th>Multiple Measures Cohort</th>
<th>Traditionally Assessed</th>
<th>All Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average (all courses)</td>
<td>93%</td>
<td>84%</td>
<td>90%</td>
<td>88%</td>
</tr>
<tr>
<td>Transfer level</td>
<td>93%</td>
<td>84%</td>
<td>92%</td>
<td>89%</td>
</tr>
<tr>
<td>Below transfer</td>
<td>94%</td>
<td>85%</td>
<td>87%</td>
<td>86%</td>
</tr>
</tbody>
</table>
Fall 2015: SDCCD Pilot

Transfer-level Success Rates by Method of Entry

<table>
<thead>
<tr>
<th></th>
<th>Accuplacer</th>
<th>MMAP</th>
<th>Other</th>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>60%</td>
<td>58%</td>
<td>61%</td>
<td>59%</td>
</tr>
<tr>
<td>English</td>
<td>68%</td>
<td>79%</td>
<td>69%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Statewide rule set

Considerations

• MMAP decision rules are designed to align with specific transfer-level math courses, i.e. don’t use statistics rules to place into College Algebra

• Implementation of MMAP locally has been nuanced, and in some cases challenging. Once integrated into the CAI platform, it will help streamline the process for colleges
Self-reported high school transcript data

- 69 community colleges are now collecting self-reported data through the Open CCCApply application
  - this includes a mix of pilot and non-pilot colleges
- The team is currently trying to get access to these data to analyze the validity of self-reported data.
  - however preliminary data from the pilot colleges shows reliability between self-reported transcript data and actual transcripts
Social-psychological (non cognitive variables) data

• 14 pilot colleges have reported they are in the process of collecting Social-psychological (noncognitive variables) data
  – the team is currently following up to try to get access to these data
  – these include: Grit, Hope, Mindset, Conscientiousness, Teamwork Scale, Academic Self-Efficacy Scale, College Identity Scale

• Preliminary results from a few colleges have not shown consistent relationships between the measured variables and course outcomes, but this could be due to many factors:
  – small sample sizes
  – limited data to be able to control for prior achievement
Summary

– MMAP rules performing as expected
– Messaging around the use of multiple measures should be done in a single voice and specifically state which course they should enroll in
  - Placing via a test and then trying to overwrite that placement with later messages leads to a reduction in use of the enhanced placement
– Implementation of MM rules is nuanced, requiring careful compliance with details
– MMAP started conversations within departments that did not exist prior
– Collaboration between high schools and colleges has increased and is an important element of success
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