Multiple Measures Assessment Project (MMAP)

November 9, 2016

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Research and Planning, De Anza College

http://www.rpgroup.org/projects/multiple-measures-assessment-project
MMAP Project Overview

Collaboration
- CAI
- CCCCCO
- Cal-PASS+
- RP Group
- 60 CCCs

Model Development
- English
- Math
- ESL
- Reading
- Non-cognitive Variables
- Self-reported transcript data

Engagement
- Local replication
- Webinars
- Professional development
- Support
- Pilot results inform statewide implementation

• bit.ly/MMAP2015
Growing body of evidence

• **Weak relationship** between assessment tests and college course outcomes: bit.ly/CCRCAssessment

• **Incredible variability** in cut scores; CCCs often use HIGHER cutscores than 4-year institutions: bit.ly/NAGB2012

• **Underestimates** students of color, women, first generation college students, low SES: bit.ly/DefiningPromise

• Long thread of research in the CCCs
  – Hetts, Fuenmayor, & Rothstein, 2012 http://www.lbcc.edu/PromisePathways
Why Multiple Measures?

• Tests have been under-placing students

• Multiple measures
  • provides a more complete picture of student ability
  • provides a way to increase the accuracy of placement, particularly reducing underplacement [http://bit.ly/CCRCPlacementAccuracy](http://bit.ly/CCRCPlacementAccuracy)
  • are required by law (Title V)
  • supported by statewide Academic Senate
De Anza College - First Time College Student English Placement by Ethnicity

First-time college students who took a placement test on March 1 through September 30, prior to the fall term in which they first enrolled. Average of Fall 2015, 2014, 2013. English placement: EWRT 200 and 211 (basic skills) and EWRT 1A (college level). Total N = 11,017 students. Source: FHDAIRP
First-time college students who took a placement test on March 1 through September 30, prior to the fall term in which they first enrolled. Math placement: MATH 210, 212, and 114 (basic skills) and MATH 10, 11, 41, 44, and 46 (college level). Average of fall 2015, 2014, and 2013. Total N = 11,017 Source: FHDAIRP
De Anza College - Course Sequence Completion by Level Placed

<table>
<thead>
<tr>
<th></th>
<th>Starting Three Levels Below</th>
<th>Starting Two Levels Below</th>
<th>Starting One Level Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>21%</td>
<td>48%</td>
<td>88%</td>
</tr>
<tr>
<td>EWRT</td>
<td>N/A</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Reading</td>
<td>N/A</td>
<td>54%</td>
<td>74%</td>
</tr>
<tr>
<td>ESL - Writing</td>
<td>31%</td>
<td>45%</td>
<td>N/A</td>
</tr>
<tr>
<td>ESL - Reading</td>
<td>30%</td>
<td>36%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Math progression to 10, 11, 41, 44, 46; EWRT and READ progression to EWRT1A; ESL progression to ESL 5 or EWRT1A. Students tracked from Fall 2012 through Spring 2015.

Source: CCCCO Basic Skills Progress Tracker and FHDAIRP
Pilot College Examples
Sierra College
College-Level English

Sierra’s placement tool:
http://www.sierracollege.edu/admissions/assessment/appointment.php
Cañada College

Transfer-level Placements

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

Transfer-level Success Rates

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

Bar chart showing:
- **Engl Transfer**: 69% (Test placed) vs. 77% (MIH placed)
- **Math Transfer**: 60% (Test placed) vs. 68% (MIH placed)

Legend:
- Orange: Test placed
- Green: MIH placed
Spring 2016 English Pilot – Mira Costa

Placement into Transfer-Level English

<table>
<thead>
<tr>
<th>Group</th>
<th>Previous</th>
<th>MMAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>57%</td>
<td>71%</td>
</tr>
<tr>
<td>African American</td>
<td>44%</td>
<td>58%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>42%</td>
<td>62%</td>
</tr>
<tr>
<td>Asian</td>
<td>66%</td>
<td>76%</td>
</tr>
<tr>
<td>PI</td>
<td>47%</td>
<td>63%</td>
</tr>
<tr>
<td>White</td>
<td>69%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Cal-PASSPlus
A System of Data

theRPgroup
The Research & Planning Group for California Community Colleges
Mira Costa Transfer-Level English Success rate by year/placement type

- S2013: 63%
- S2014: 64%
- S2015: 66%
- S2016 - Old: 66%
- S2016 - MMAP: 69%
Self-Reported Transcript Data
Potential use of self-reported high school info

- UC admissions uses self-report but verifies after admission
  - 2008: 9 campuses, 60,000 students. No campus had >5 discrepancies between reported grades and student transcripts: http://bit.ly/UCSelfReportGPA


- ACT research often uses self-reported GPA, generally find it to be a highly powerful predictor and highly correlated with students actual GPA: ACT, 2013: $r(1978) = .84$ http://bit.ly/ACTSRGPA
# GPA vs. Self-reported HSGPA

<table>
<thead>
<tr>
<th>HSGPA Level</th>
<th>N</th>
<th>Mean HSGPA</th>
<th>Mean diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual</td>
<td>Self-reported</td>
</tr>
<tr>
<td>3.50–4.00</td>
<td>599</td>
<td>3.79</td>
<td>3.75</td>
</tr>
<tr>
<td>3.00–3.49</td>
<td>451</td>
<td>3.24</td>
<td>3.23</td>
</tr>
<tr>
<td>2.50–2.99</td>
<td>408</td>
<td>2.81</td>
<td>2.76</td>
</tr>
<tr>
<td>2.00–2.49</td>
<td>265</td>
<td>2.24</td>
<td>2.35</td>
</tr>
<tr>
<td>1.50–1.99</td>
<td>172</td>
<td>1.77</td>
<td>2.04</td>
</tr>
<tr>
<td>0.00–1.49</td>
<td>85</td>
<td>1.03</td>
<td>1.85</td>
</tr>
<tr>
<td>Total</td>
<td>1,980</td>
<td>2.95</td>
<td>3.02</td>
</tr>
</tbody>
</table>

Under-reporting was 2-4X as common as over-reporting.

Integration of MMAP with CAI

• Note: Common Assessment updates currently on pause
• Common Assessment platform will house a transcript data repository
  – repository will be source-agnostic & store transcript data from variety of sources, including CalPASS & self-report via CCC Apply
  – statewide decision trees programmed into platform, for internally generated Multiple Measures placement recommendation
  – expect data points used in MM placement recommendation
• Students will receive single placement recommendation created from disjunctive placement model
• Platform users with the “Counselor” role will have access to all placement recommendations for a student
• Initial integration will be available in early 2017
Some lessons learned
(from pilot colleges)

• MMAP rules are performing as expected
• Implementation of MM rules is nuanced, needs to involve members from across the college
• Communication to students should be clear and consistent – 1 placement rather than 2
• Student support should be embedded
• Outreach/communication with local high schools
• Should include a robust research agenda
Upcoming MMAP Event

3rd Annual -Pilot College Convening
Northern California
De Anza College
Friday, December 2 - 10am - 2pm
21250 Stevens Creek Blvd
Cupertino, CA 95014
Campus Center, Conference Room B
RSVP Here