MMAP: AB 705 Evaluation

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Overview

1. Evaluation examples from colleges
2. Requirements of Title 5, AB 705, and AB 1805
3. Defining throughput and establishing baseline rates
4. The impact of COVID-19: Handling spring 2020 data
5. Validating placement rules
6. Validating corequisite models

Title 5: https://bit.ly/Title5Regs
Examples from Colleges
Placement Results for West Hills CCD Students and Applicants Assessed on or Between March 1, 2019 and March 1, 2020

Number Assessed = 21,728

- English:
  - Transfer-Level: 74.0% (16,079/21,728)
  - Transfer-Level with Support: 26.0% (5,649/21,728)

Number Assessed = 21,734

- Statistics, Liberal Arts, Teacher Prep Math:
  - Transfer-Level: 59.2% (12,874/21,734)
  - Transfer-Level with Support: 40.8% (8,860/21,734)

Number Assessed = 21,721

- STEM Pathway Math*:
  - Transfer-Level: 25.0% (5,432/21,721)
  - Transfer-Level with Support: 31.4% (6,816/21,721)
  - College Level Math: 43.6% (9,473/21,721)

*Note: In line with the Chancellor’s Office GPA Placement Guidelines, students that have not completed Algebra 2, Integrated Math 3, or other equivalent course in high school are placed into one-level-below transfer algebra as preparation for STEM programs; at a minimum, all students have access to transfer-level with support for math in statistics, liberal arts, and teacher prep math tracks.
Table 4.1. MATH1A Success Rates by Placement Type

<table>
<thead>
<tr>
<th>Placement Type</th>
<th>Success</th>
<th>Non Success</th>
<th>Withdraw</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grades</td>
<td>Percent</td>
<td>Grades</td>
<td>Percent</td>
</tr>
<tr>
<td>All Other Placements</td>
<td>251</td>
<td>71%</td>
<td>56</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>46</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>353</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH1A - Guided Self-Placement</td>
<td>87</td>
<td>71%</td>
<td>22</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>123</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH1A - High School GPA</td>
<td>190</td>
<td>67%</td>
<td>62</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>282</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>528</td>
<td>70%</td>
<td>140</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>90</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>758</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Success rates are very similar across the various ways students were placed.
- Students who had a placement that was older than two years old which placed them into a course other than MATH1A had a success rate of 71%, similar to students who were placed via guided self-placement with a success rate of 71% as well. Students who were placed with high school data had a slightly lower success rate at 67%. 
Transfer-level and Pre-Transfer Math

More Transfer-level Sections of Math than Pre-Transfer as of Fall 2019

- Pre-Transfer Level
- Transfer Level

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-Transfer Level</th>
<th>Transfer Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Fall 2019</td>
<td></td>
<td>79%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21%</td>
</tr>
</tbody>
</table>
Increasing Access to Transfer-Level Math

Enrollments in transfer-level math have more than doubled since Fall 2015.
Successful transfer-level Math completions

Number of successful students doubles despite small dip in success rate

- Fall 2015: 1,002 successes, 985 non-successes, 50% success rate
- Fall 2016: 1,308 successes, 1,000 non-successes, 60% success rate
- Fall 2017: 1,515 successes, 1,013 non-successes, 60% success rate
- Fall 2018: 1,718 successes, 1,261 non-successes, 50% success rate
- Fall 2019: 2,064 successes, 1,500 non-successes, 55% success rate

Successes: red, Non-successes: gray, Success Rate: black line
Multi-Term vs. Corequisite Remediation: BSTEM

Multi-Term Remediation vs. Corequisite for BSTEM Students Without Algebra 2

- Essentials of Algebra
- Precalculus with corequisite

Note: Highest GPA band (3.40+) combined with middle band because very few students with high school GPAs of 3.40 or better had not completed Algebra 2.
Multi-Term vs. Corequisite Remediation: SLAM

Multi-Term SLAM vs. Corequisite & Direct Placement

- **Statistics**
- **Statistics w. Coreq.**
- **Gen. Math (non-transferable)**
- **Psych. Statistics**

Never the best option

- **<2.30**
  - Statistics: 31%
  - Statistics w. Coreq.: 32%
  - Gen. Math: 23%
  - Psych. Statistics: 56%

- **2.3 - 2.99**
  - Statistics: 36%
  - Statistics w. Coreq.: 46%
  - Gen. Math: 47%
  - Psych. Statistics: 61%

- **>=3.0**
  - Statistics: 54%
  - Statistics w. Coreq.: 58%
  - Gen. Math: 54%
  - Psych. Statistics: 79%
Fall 2018 was first term of AB 705 access and Fall 2019 was first term of corequisites. Spring 2020 success rates not yet available.
Requirements of AB 705

AB 705 (Irwin), Title 5, § 55003 and 55522, and Chancellor’s Office guidance* requires California Community Colleges (CCC) placement methods be designed to maximize the probability that students will enter and complete transfer-level coursework in English and mathematics (or quantitative reasoning) within one year.

Title 5: https://bit.ly/Title5Reg
Title 5 refers to the maximizing of completion in one year as the “throughput rate.” MMAP defines the throughput rate as the percentage of students attempting an English or math course and successfully completing a gateway course with a grade of C or better within a one-year timeframe (two semesters or three quarters). Gateway courses are typically those courses that satisfy the transfer math or English course requirements.
Timeframe for Evaluation

Placement decisions have important implications for students, making it important to assess the efficacy of a pilot as soon as there are sufficient data, especially as the maximum time for piloting developmental coursework is two years, per title 5, § 55003.

Title 5: https://bit.ly/Title5Regs
When Can We Place Students into Pre-transfer Level Courses?

Colleges cannot require students to enroll in a pre-transfer level course unless the student is highly unlikely to succeed in the transfer-level course AND enrolling in the pre-transfer course will increase the likelihood of success in the transfer-level course. Both conditions must be met in order to place students one level below transfer level.

Title 5: https://bit.ly/Title5Regs
What about Corequisite Courses?

Corequisite remediation (a low-unit course attached to a transfer-level course) need only demonstrate that students are more likely to succeed in the transfer-level course than are similar students who enroll directly into transfer-level coursework without the corequisite.

Title 5: https://bit.ly/Title5Regs
Types of Course Structures to Evaluate

Structures may include placement into a:
1. transfer level course with a required credit or noncredit corequisite;
2. below transfer-level course with or without a corequisite;
3. two-course sequence where a student takes a below transfer-level course in one term and a transfer-level course in a following term or a transfer-level course stretched over two terms (e.g. stretch course).

*Note there does not appear to be current evidence supporting structures 2 or 3

Evaluating for Disproportionate Impacts

Disproportionate impacts (DI) are required to be evaluated in assessment. DI exists when one or more subgroup of students have outcomes at a substantially lower level than other groups. The determination of “substantial” is somewhat arbitrary but a few indices have been created to guide decisions such as the 80% rule and the proportionality index.

Title 5: https://bit.ly/Title5Regs
Requirements of AB 1805

Title 5 regulations (cf. § 78213) refer to AB 705 implementation timeframe (i.e., fall 2019) as start of reporting period:

— Inform students of their **rights** to access transfer-level coursework and/or ESL coursework, and of the college’s multiple measures placement policies.

— This information needs to be easily understandable and prominently featured in the community college **catalog, orientation materials, and website**, as well as any written communication by a college counselor to a student about the student’s course placement options.

bit.ly/AB1805Bill
Requirements of AB 1805

Waiting on additional guidance from the CO:

- Annually report the following to the Chancellor’s Office, consistent with the requirements of § 78213:
  
  • The community college’s placement policies.
  
  • The number of students assessed and the number of students placed into:
    
    • transfer-level coursework
    
    • transfer-level coursework with concurrent support
    
    • transfer-level or credit ESL coursework
  
  • The results need to be disaggregated by race and ethnicity.

bit.ly/AB1805Bill
Waiting on additional guidance from the CO:

- Pre-transfer placements require the college to provide local placement research that explains how the practice aligns with the requirement to maximize throughput.
## Defining Throughput

<table>
<thead>
<tr>
<th></th>
<th>Column 1: Success Rate at Pre-Transfer Level</th>
<th>Column 2: Persistence into Transfer Level Course the Next Term</th>
<th>Column 3: Success Rate in Transfer Level Course</th>
<th>Column 4: Throughput Rate</th>
<th>Column 5: Baseline Throughput Rate for Similar Student Group Directly Placed in Transfer Level</th>
<th>Column 6: Expected Improvement over Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students “least likely” to succeed in transfer-level English with a high school GPA less than 1.9</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>13%</td>
<td>43%</td>
<td>-30%</td>
</tr>
</tbody>
</table>
What do we do about spring 2020?

Let’s not just throw it out. Let’s turn it into an opportunity!

– What did happen in the spring? Did success rates really drop? Were there more withdraws?
– How does it compare to your throughput with students placed directly into transfer level compared to historical throughput when students were placed into basic skills?
– Look at your online (OL) vs face to face (FtF) in the fall compared to online only success in the spring.
– Compare students with previous OL experience to those with only FtF.
– Look at drops, withdraws, and course repetition.
What do we do about spring 2020?

Look into the excused withdrawal (EW) grade

- Intended for students facing a catastrophic circumstance e.g. major illness or accident of self or dependent, natural disaster, etc.

- EW parameters
  - Do not count for progress/academic probation
  - Can drop and keep financial aid eligibility
  - cf. BoG revision to title 5
  - Can request retroactively

What do we do about spring 2020?

EWs continued:
- Track students who take EWs in math, English, and ESL
- Calculate success and throughput both with and without EWs
  - EWs act as if student was never enrolled, left out of the throughput, but for evaluation purposes, you can consider them separately to evaluate impact and DI.
  - What if scenario – with or without EWs included, what were the successes relative to all of those included and excluded (this would not be official, but people will want to know about it).
- What percent of students return after an EW?
- Do they come back at varying rates compared to unsatisfactory grades?
  - Track course repetition in the fall 2020 term (e.g., took and EW and repeated it)

Other Spring 2020 Grading Anomalies

“IP” or In Progress grades may increase

- "IP" symbol is used when courses extend beyond the normal end of an academic term. Used if a course has been temporarily suspended but is expected to reconvene and complete instruction.

“I” or Incomplete grades may increase

- The "I" may be made up no later than one year following the end of the term in which it was assigned. Do not use the "I" symbol to calculate units attempted.
What do we do about spring 2020?

Comparing face to face vs online corequisites

- Possible designs include pre-post or comparing within the same term
- Online Education Initiative (OEI) California Virtual College (CVC)
  - OEI/CVC provides OL course design standards to support title 5 requirements [https://cvc.edu/professional-development/online-course-design-standards/](https://cvc.edu/professional-development/online-course-design-standards/)
  - Educational quality must be ensured at the section level
  - Regular and effective contact between instructor and students and among students
  - Accessible to all students / ADA compliant
  - see also: [https://www.asccc.org/content/title-5-and-distance-education-separate-course-review-enough](https://www.asccc.org/content/title-5-and-distance-education-separate-course-review-enough)
  - Evaluations could include course design fidelity of implementation and controlling prior student OL experiences, prior instructor training and/or experience (i.e. instructor or section effects)
Online Success Rates, California Community Colleges

Data Source: 2017 CCC Distance Education Report, CA Community College Chancellor’s Office
Online Course Success Rate Comparison

OEI Aligned Course Sections vs. Statewide
Fall 2017 + Spring 2017 Success Rates

- OEI Pilot Sections: 67.4%
- OEI Pilot Colleges Overall: 64.4%
- Statewide Overall: 62.5%

Data Source: CCCCO’s Data Mart for all credit, internet-based courses, matched on the same TOP code. OEI pilot data based on data voluntarily submitted by pilot colleges and does not include ALL OEI pilot sections.
What do we do about spring 2020?

How do you control for teacher effects?

- If you have data on teacher professional development (e.g. online teaching certificate) can include that in analysis
- Dependent within subject design – where the dependency is the instructor of record and the independent variable is modality and the dependent variable is success in the course.
- Online vs face to face where the instructor is controlled for is an important academic.
- Until you control for the faculty success of the instructor, you can’t just lump everything together.

bit.ly/Faculty_IR
### Setting a Baseline

One-year Throughput Rates for the Lowest High School GPA Band by Ethnicity with Direct Placement into Transfer Level Courses: A Baseline Comparison from a 2019 Statewide Data Set

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>English HSGPA &lt; 1.9</th>
<th>Statistics/Liberal Arts Math HSGPA &lt; 2.3</th>
<th>BSTEM Math HSGPA ≤ 2.6 and no Precalculus</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>44.3%</td>
<td>39.3%</td>
<td>43.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>59.9%</td>
<td>55.2%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>48.2%</td>
<td>46.0%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Native American</td>
<td>39.1%</td>
<td>39.3%</td>
<td>45.2%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>43.4%</td>
<td>55.0%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>47.4%</td>
<td>49.4%</td>
<td>42.6%</td>
</tr>
<tr>
<td>White</td>
<td>53.1%</td>
<td>49.9%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Unknown</td>
<td>49.8%</td>
<td>46.8%</td>
<td>48.8%</td>
</tr>
</tbody>
</table>

NOTE: for methodology regarding the sample, see here: bit.ly/AccessEnrollmentSuccess
Validating Placement Rules

Title 5: A district placement method using localized research must be supported by data and research showing throughput rates at or above those achieved by direct placement into a transfer-level course (or college-level courses where appropriate).

- Colleges should validate placement models that place students into:
  - Basic skills sequences
  - Multi-term developmental sequences - basic skills stretch curriculum and/or transfer level course stretched over two terms, or a compressed sequence
  - Example: Students take pre-algebra then statistics, transfer English over two terms, students complete basic skills and transfer course in one term
Validating Placement Models

Evaluation examples:

- Compare students with the same high school GPA
- One group has direct placement into transfer level and the other was placed below transfer level
- Track successful completion of the gateway course over one year
- Current data or historical data can be used to create the cohorts
- Construct DI groups
  - Looking at one group and then cross tab the results with others, for example, Latinx and low SES
  - Proportionality index vs percentage point gap
Evaluating Placement Models
Template Example
## Evaluating Placement Models

### Template Example

<table>
<thead>
<tr>
<th>Lowest HSGPA performance band</th>
<th>Students Enrolled in Pre-Transfer Level Sections using Local Placement Rules or Local Measures</th>
<th>Students Enrolled in Transfer level Sections using Default Placement Rules</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Total Enrolled</td>
<td>B. Subtotal who completed TL course within one year</td>
<td>C. Throughput Rate</td>
</tr>
<tr>
<td>Local model</td>
<td>77</td>
<td>51</td>
<td>66%</td>
</tr>
<tr>
<td>Guided-Self Placement</td>
<td>41</td>
<td>18</td>
<td>44%</td>
</tr>
</tbody>
</table>

- **Local model**: Enrolment and completion rates are compared between local and default placement rules. The throughput rate differences indicate a 38% improvement in the local model compared to default rules.
- **Guided-Self Placement**: The throughput rate for the guided-self placement is 44%, which is lower than the local model but still effective.

### Results

- **A. Total Enrolled**: The number of students enrolled in pre-transfer level sections.
- **B. Subtotal who completed TL course within one year**: The number of students who completed the transfer level course within one year.
- **C. Throughput Rate**: The percentage of students who completed the course within one year.
- **D. Total Enrolled**: The number of students enrolled in transfer level sections.
- **E. Subtotal who completed TL course within one year**: The number of students who completed the transfer level course within one year.
- **F. Throughput Rate**: The percentage of students who completed the course within one year.
- **G. Throughput Rate Differences**: The difference in throughput rates between the local model and default rules.

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**Default Rules: AB 705 Implementation Memo | July, 2018**
Validating Corequisite Models

Corequisite example: students take transfer level course with additional required units
- Compare students with the same high school GPA
- One group has direct placement into transfer level without the corequisite and the other was required to take the corequisite
- Track successful completion of the gateway course over one year for both groups
- Current data or historical data can be used to create the cohorts
- Construct DI groups
  - Looking at one group and then cross tab the results with others, for example, Latinx and low SES
  - Proportionality index vs percentage point gap
### Evaluating Corequisite Models

#### Template Example

<table>
<thead>
<tr>
<th>Lowest HSGPA performance band</th>
<th>Students Enrolled in Innovative Curricular Sections</th>
<th>Students Enrolled in Transfer Level Course with or without a Corequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Total Enrolled</td>
<td>D. Total Enrolled</td>
</tr>
<tr>
<td></td>
<td>B. Subtotal who completed TL course within one year</td>
<td>E. Subtotal who completed TL course within one year</td>
</tr>
<tr>
<td></td>
<td>C. Throughput Rate</td>
<td>F. Throughput Rate</td>
</tr>
<tr>
<td>Overall</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Instructional Modality</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Subgroup 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subgroup 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subgroup 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Throughput Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>60%</td>
</tr>
<tr>
<td>Instructional Modality</td>
<td>50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Throughput Rate Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
</tr>
</tbody>
</table>
MMAP Spring Webinars

AB 705 AND ESL
Friday, April 17
bit.ly/RPGroupWebinars

COREQUISTE SUPPORT MODELS FOR ENGLISH AND MATH
Thursday, April 30 | 12 pm to 1 pm
https://cccconfer.zoom.us/j/169501710

SUPPORTING DSPS STUDENTS THROUGH AB 705
Wednesday, May 13 | 12 pm to 1 pm
https://cccconfer.zoom.us/j/639155076
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