Ready or Not, Here it Comes!
Preparing for AB 705

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Pre-Session Prompt

Within your table group or individually, please reflect on this question before we get started with the workshop:

• Are you planning to continue offering stand-alone below transfer courses? If so, who are they intended for?
• What evidence do you have that speaks to whether stand-alone below transfer courses yield the best outcomes for those students?
Agenda for the Day

8:30-9:10   Pre-session reflection
9:10-9:15   Welcome/introductions (Pam)
9:15-10:00  Research overview (MMAP Team)
10:00-11:30 Optimizing your AB 705 Plan (CAP Team)
11:30-12:00 Lunch!
12:00-1:15  Stations/Deeper Dive
    1.  English (Katie Hearn)
    2.  Math (Myra Snell)
    3.  Developing a Research Plan (John Hetts)
    4.  ESL (Rebecca Beck)
    5.  Messaging Students & Guided Self-Placement (Various Colleges)
1:15-1:45   Q&A Panel with Laura Hope
1:45-2:00   Closing
Multiple Measures Assessment Project

• Ongoing, multiple year collaborative effort of CCCCO, Common Assessment Initiative (CAI), RP Group, Cal-PASS Plus (Educational Results Partnership & San Joaquin Delta College), and now >90 CCC pilot colleges

• Identify, analyze, & validate multiple measures data (including HS transcript data, non cognitive variable data, & self-report HS transcript data)

• Focus on predictive validity (success in course) using classification and regression tree models (robust to missing data, non-linear effects, and interactions)
  – Very conservative approach: target ≥70% success rate in college level course

• Engage pilot colleges to conduct local replications, test models and pilot use in placement, and provide feedback

bit.ly/MMAP2017
MMAP: Placement into college-level courses

FIGURE 2
Increased access to transfer-level math is strongly linked to increases in throughput.

FIGURE 3
Increased access to transfer-level English lead to increases in throughput

Why high school grades?

• AB 705 requires colleges to use one or more of the following when placing students into courses in math and English:
  – High School GPA
  – High School Coursework (which courses, how far you’ve gotten)
  – High School Grades

• If official grades are unavailable, colleges may use self reported grades or guided placement.

• Why is the use of high school grades required?
  – They have been shown repeatedly to be the strongest, most reliable predictor of college performance, including students’ first courses in English and math
A Brief History of AB 705’s Origins and Development

- STEPS started with 14 colleges
- MMAP – started in 2014-15 with the 14 STEPS colleges
- CAI and Multiple Measures Work Group formed
- MMAP decision rules guidance released – over 90 colleges eventually join pilot
- AB 705 passed (October, 2017)
- AB 705 Implementation Committee formed and an ESL subcommittee formed
- Selection bias question: Are students with a certain GPA who were placed into a course representative of all students with that GPA, including those not so placed?
- RP Group adjusted predicted pass rates for the AB 705 Implementation Committee
- RP Group recommendations incorporated into C CCCO guidance memos on English and math
- AB 705 Implementation Committee and ESL subcommittees continue to meet to provide additional guidance
Adapting MMAP to AB 705

• MMAP decision trees were based on identifying students who were highly likely to be successful
  – At least 70% probability of success in transfer-level

• Now, students can only be assigned to developmental education if:
  – They are highly unlikely to succeed at the transfer-level class
  – AND
  – Developmental education maximizes probability of successful completion of transfer-level coursework in one year.
Transfer-Level Course Completion in One Year from First Class in Discipline (error bars represent ±1 se)

- **Transfer-Level English (HS GPA < 1.9)**
  - Lowest Node N=7,294
  - Regression N=1,749
  - 1 level below N=13,241
  - Success in Target Course: 43%

- **Statistics (HS GPA < 2.3)**
  - Lowest Node N=1,485
  - Regression N=809
  - 1 level below N=11,309
  - Success in Target Course: 40%

- **Pre-Calculus (HS GPA < 2.6)**
  - Lowest Node N=1,753
  - Regression N=661
  - 1 level below N=18,917
  - Success in Target Course: 38%
No one is saying that these success rates are acceptable

• However, AB705 requires that we only place students into developmental education if:
  – students are highly unlikely to succeed at transfer-level
  – it maximizes their likelihood of completion of the transfer-level course
• Neither of these conditions appear to be met even for the lowest performing HS students
• That limits us to providing concurrent or corequisite support
FIGURE 4
Co-requisite students completed college composition at more than twice the rate of students who started in traditional remediation.

SOURCE: Authors’ analysis of COMIS data.
NOTES: In the calculation of throughput rates we restrict the analysis to transfer seeking students for which the co-requisite or the one-semester accelerated course was their first course. Porterville College is not included because we only have one term of data.

FIGURE 5
Co-requisite students were more likely to complete transfer-level statistics within one year

SOURCE: Author’s analysis of COMIS data.
NOTE: In the calculation of throughput rates we restrict the analysis to transfer seeking students for which the co-requisite or pre-stats was their first course.

Corequisite performance by GPA Band – BSTEM Corequisite (Cuyamaca)

- GPA Band <2.6: 58%
- GPA Band 2.6-3.4: 88%
- GPA Band >3.4: 90%
Corequisite performance by GPA Band – Statistics
Corequisite (Cuyamaca & Los Medanos)

![Bar Chart]

- **<2.3**
  - Cuyamaca: 57%
  - Los Medanos: 46%

- **2.3-3.0**
  - Cuyamaca: 61%
  - Los Medanos: 67%

- **>3.0**
  - Cuyamaca: 89%
  - Los Medanos: 77%
# Placement/Support Recommendations: English

<table>
<thead>
<tr>
<th>High School Performance Metrics</th>
<th>Recommended AB 705 Placement for English</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSGPA ≥ 2.6</td>
<td><strong>Transfer-Level English Composition</strong></td>
</tr>
<tr>
<td></td>
<td>No additional academic or concurrent support required</td>
</tr>
<tr>
<td>HSGPA 1.9 to 2.6</td>
<td><strong>Transfer-Level English Composition</strong></td>
</tr>
<tr>
<td></td>
<td>Additional academic and concurrent support recommended</td>
</tr>
<tr>
<td>HSGPA &lt; 1.9</td>
<td><strong>Transfer-Level English Composition</strong></td>
</tr>
<tr>
<td></td>
<td>Additional academic and concurrent support strongly recommended</td>
</tr>
</tbody>
</table>

For more information, see the July, 2018 AB705 Implementation Memo at [https://assessment.cccco.edu/resources/](https://assessment.cccco.edu/resources/)
## Placement/Support Recommendations: Statistics/Liberal Arts Mathematics

<table>
<thead>
<tr>
<th>High School Performance Metric</th>
<th>Recommended AB 705 Placement for Statistics/Liberal Arts Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSGPA ≥ 3.0 Or HSGPA ≥ 2.3 &amp; ≥C in Precalculus</td>
<td>Transfer-Level Statistics/Liberal Arts Mathematics No additional academic or concurrent support required</td>
</tr>
<tr>
<td>HSGPA 2.3–3.0</td>
<td>Transfer-Level Statistics/Liberal Arts Mathematics Additional academic and concurrent support recommended</td>
</tr>
<tr>
<td>HSGPA &lt; 2.3</td>
<td>Transfer-Level Statistics/Liberal Arts Mathematics Additional academic and concurrent support strongly recommended</td>
</tr>
</tbody>
</table>
# Placement/Support Recommendations: BSTEM Math

<table>
<thead>
<tr>
<th>High School Performance Metric</th>
<th>Recommended AB 705 Placement for BSTEM Mathematics</th>
</tr>
</thead>
</table>
| HSGPA ≥ 3.4 OR HSGPA ≥ 2.6 & enrolled in HS Calculus | Transfer-Level BSTEM Mathematics  
No additional academic or concurrent support required |
| HSGPA ≥2.6 or Enrolled in HS Precalculus | Transfer-Level BSTEM Mathematics  
Additional academic and concurrent support recommended |
| HSGPA ≤ 2.6 and no Precalculus | Transfer-Level BSTEM Mathematics  
Additional academic and concurrent support strongly recommended |

Note: The BSTEM table presumes student completion of Intermediate Algebra/Algebra 2, an equivalent such as Integrated Math III, or higher course in high school.
Common Questions and Some Answers

Can we place students one or more levels below?

• Yes but only under **very limited** conditions

• You have to use evidence based on high school data that demonstrates that they are highly unlikely to successfully complete the transfer-level course
  
  — Plain meaning interpretations ([https://en.wikipedia.org/wiki/Plain_meaning_rule](https://en.wikipedia.org/wiki/Plain_meaning_rule)) would typically place highly unlikely around 10% on average.

• When asked to interpret range of probabilities indicated by “highly unlikely”, both those using such words professionally (e.g., Kent, 1964) and lay audiences (e.g., [bit.ly/HighlyUnlikely](http://bit.ly/HighlyUnlikely)) interpreted highly unlikely to represent outcomes that happen 5-10% of the time on average. Except for significant outliers, highest individual estimates range between 20-30%

  — CCCCCO Guidance currently defaulting to synonymous with maximization of likelihood

• Has to maximize their likelihood of completion of transfer-level course (compared to students with similar levels of high school performance)
Can we continue to offer courses one or more levels below?

• Yes
  – Such courses may serve specific subsets of a college’s student population

• However:
  – Very likely cannot be required
  – Worth careful consideration whether it’s good practice to offer paths that might attract certain types of students when we have evidence that that path may not be best for them
  – Construction, entrances, and ease, candy placement and deliciousness
Do we have 2 years starting in Fall 2019 to study our current placement/sequence to determine whether it complies with AB705?

- No
- A fair amount of data exists on your existing curriculum that can be reasonably used to determine whether your current placement/sequence might comply
- In addition to your local data/IR team, CalPASS Plus has retrospective datasets immediately available to support local exploration.
Can we adopt new placement rules and prerequisites and study them for two years?

- Possibly but such rules/curriculum would require:
  - evidence-based use of high school achievement data
  - only students demonstratively highly unlikely to succeed be required to take pre-transfer-level courses
  - a meaningful logic model with supportive evidence to explain how the new pre-transfer level courses would be likely to achieve sufficiently higher success rates and persistence rates to maximize students’ likelihood of completing the transfer-level course

- Local placement rules into transfer-level courses with varying required or recommended supports would be easier - don’t need to meet the highly unlikely standard
  - Possibly couldn’t require them for students highly likely to succeed (such as those identified by earlier MMAP research)

- More specific guidance on this will be coming later this Fall.
Do we just have to meet the minimum successful completion rate when students are placed directly in transfer-level per the guidance for a new sequence to be acceptable?

• Not exactly
• It must meet that rate specifically among students that are highly unlikely to succeed (the only students allowed to be assigned to developmental courses) — you cannot use the overall success rates for the sequence if you allow students more likely to succeed to opt to take it
Can we use a standardized test as part of our placement method?

- Right now, barring action from the Board of Governors, no.
Can we require corequisite courses?

• Yes

• The AB705 legislation expressly allows colleges to require concurrent support
  – As a law, supersedes existing regulation (e.g., Title 5) if in conflict
  – Should be able to demonstrate likelihood that required concurrent support
    • will improve student outcomes AND
    • not adversely impact unit requirements/financial aid

• The guidance uses recommended language to speak to the colleges not as examples of language that must be used with students
What happens to students who fail 3 times? Do we have data on what happens after they fail the third time (do they go to different colleges, or do they quit college entirely)?

• Interesting research question that can’t be easily answered.
• However, many, many more “quit college” before completing the sequence when they begin below transfer-level, including students who would have been successful at transfer-level if given the chance.
• Further, colleges have lots of freedom to innovate before a student fails a third or even a second time.
Statistically, how does this play out at very different institutions with very different students and environments? In other words: what is a statistical difference in this kind of work, and what is not?

- It tends to play out very similarly virtually everywhere people do the work to check, even amongst students who are the least prepared using whatever metric they use (various standardized tests, HSGPA, etc.)
- The statistical differences are actually quite easy to check – comparisons of proportions calculators are widely available and free on the internet.
Can you wipe a non-passing grade off of a student's record for a basic skills course if they are now eligible for transfer-level course?

- Colleges can alleviate the previous grade in a basic skills course with the performance in a transfer level course under your local policy related to academic renewal without course repetition.
- It is a local decision if you permit this practice.
What if a student graduated over 10 years ago or they did not take Algebra I or II in high school? How do we place them?

• The 10 year recommendation is only a recommendation. Colleges can place students with HS transcripts older than 10 years.
• If students do not have the appropriate Algebra course, you can use other means to place them, such as guided self-placement.
• Also, students who do not have Algebra I or II will be a small population, so you should check this locally.
The guidance does not indicate the starting point rather mentions the transfer level course. For BSTEM, can the college decide the starting point? Or, are we to give access to all levels of math?

- Colleges continue to control their local curriculum in determining the starting point of their transfer-level curriculum. Some colleges begin their transfer-level coursework post-intermediate algebra at college algebra, some at trigonometry, some at pre-calculus.
  - Colleges will continue to control that starting point.
  - Worth consideration is that college algebra and trigonometry are sometimes covered as part of intermediate algebra and pre-calculus.
  - Colleges will have ability locally to innovate on the most effective structure for their mathematics pathway, including placement above transfer-level.
Can a standardized test be used to discriminate between transfer-levels (E.g. Precalculus and Calculus) post initial placement into transfer-level, for students that want to prerequisite challenge their ability to succeed at an even higher level than the default rules?

• Not until the CCCCO approves its use.
Questions?

All webinars are archived here: http://rpgroup.org/Our-Projects/All-Projects/Multiple-Measures/Presentations-and-Webinars

Archived webinars:

Replicating AB 705 Adjustments Locally

Understanding and Interpreting the AB 705 Adjustments

AB 705, ESL and English Composition

Post-AB705: Supporting Colleges Through the Transition for ESL

Upcoming webinars

Validating Innovative Curriculum Under AB 705
**Tuesday, October 9 | 12 - 1 pm**
[https://cccconfer.zoom.us/j/937608807](https://cccconfer.zoom.us/j/937608807)
1 646 876 9923 (US Toll)
Meeting ID: 937 608 807

AB 705 Adjustments, Ethnicity, Gender and Special Populations
**Thursday, October 25 | 10 - 11 am**
[https://cccconfer.zoom.us/j/553127255](https://cccconfer.zoom.us/j/553127255)
1 646 876 9923 (US Toll)
Meeting ID: 553 127 255

Developing an AB 705 Evaluation/Research Plan
**Wednesday, November 7 | 10:30 – 11:30 am**
[https://cccconfer.zoom.us/j/440539610](https://cccconfer.zoom.us/j/440539610)
+1 646 876 9923 (US Toll)
Meeting ID: 440 539 610