AB705 – A DISCUSSION

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LEGISLATION AND EXECUTIVE ORDERS

WHY DO WE HAVE TO DO THIS?

AB705 SUMMARY - PLACEMENT

- Placement
  - High school GPA, coursework, grades
  - Official transcripts or self-reported

- "A community college district or college cannot require a student to enroll in remedial English or mathematics coursework that lengthens their time to complete a degree unless placement research that includes consideration of high school grade point average and coursework shows that those students are **highly unlikely to succeed** in transfer-level coursework in English and mathematics."

AB705 SUMMARY - COMPLETION

- Completion within one year
  - Two semesters or 3 quarters from enrollment

- "Placement models selected by a community college demonstrate that they guide English and mathematics placements to achieve the goal of **maximizing the probability** that a student will enter and complete transfer-level coursework in English and mathematics within a one-year timeframe."

AB705 IMPLEMENTATION

- The Chancellor's Office has interpreted these portions of AB 705 to mean that colleges may only place students into basic skills courses if they are highly unlikely to succeed at the transfer level AND taking the basic skills course will improve the likelihood that a student will complete transfer level coursework in one year.
- This does not mean that colleges must get rid of their basic skills courses.
- Students can still choose to take a basic skills course if that is what they want.

CSU EOs 1100 & 1110

- Eliminates explicit Intermediate Algebra requirement as it was not required consistently in CSUs
- Intermediate Algebra is still required for certain courses within majors
- CSU is trusting the CCCs to teach B4 courses at an appropriate level of content and rigor
- Allows for corequisite models
- Requires multiple-measures for placement

MATH & QUANTITATIVE REASONING TASK FORCE

WHO, WHAT, AND WHY?

MATH AND QUANTITATIVE REASONING TASK FORCE (MQRTF)

- Proactive effort to assist math faculty at CCs with options for implementing AB705.
- Partnership with representatives from ASCCC, CMC^3 and CMC^3-South
- Task force includes diverse perspectives – Math, Statistics, Chemistry, and Education faculty
- Guided by a commitment to equity attained by empowering students to be successful in a technologically evolving society
- Considerations for both STEM (B-STEM) and non-STEM (SLAM) curriculum pathways

MQRTF RECOMMENDATIONS

SUPPORTED BY ASCCC RESOLUTION 9.02 AT THE SPRING PLENARY

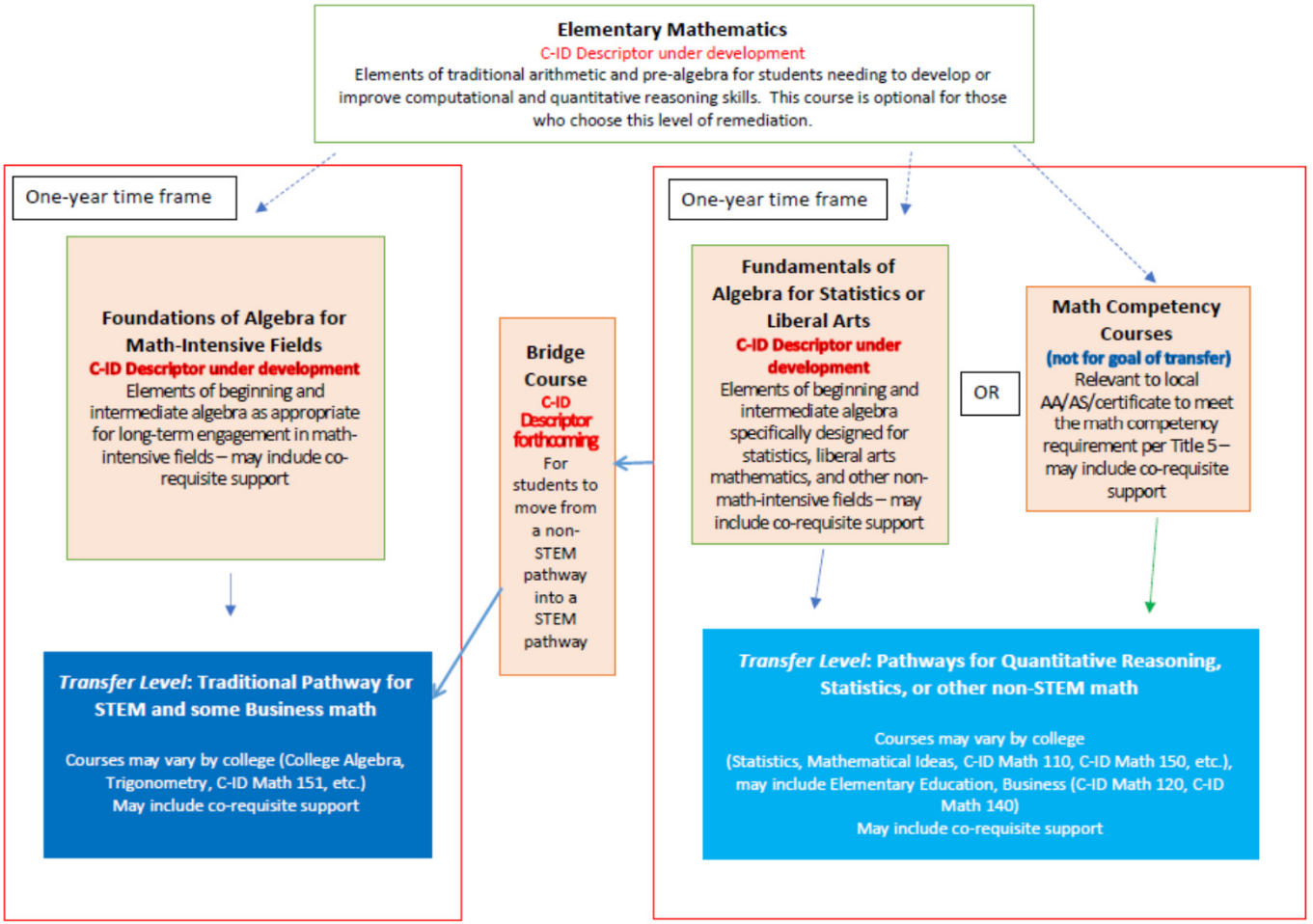
PART I

- C-ID descriptors for classes below transfer level
- "Drop back" policy considerations
- Professional Development
- Data & Research
- Title 5 compliance

MATH AND QUANTITATIVE REASONING PATHWAYS

OFFERED AS AN OPTION, NOT A REQUIREMENT

EXAMPLE CURRICULAR PATHWAYS IN MATH/QUANTITATIVE REASONING



C-ID DESCRIPTORS FOR CLASSES BELOW TRANSFER LEVEL

- Foundations for Algebra for Math Intensive Fields
- Fundamentals of Algebra for Statistics or Liberal Arts
- Elementary Mathematics
- Bridge course from SLAM to B-STEM
- Pre-statistics course with minimal Algebra*

OTHER THINGS TO CONSIDER

LOOKING AT DATA – A FIRST GLANCE

RECOMMENDATIONS FROM THE RP GROUP

Statistics Throughput Rates

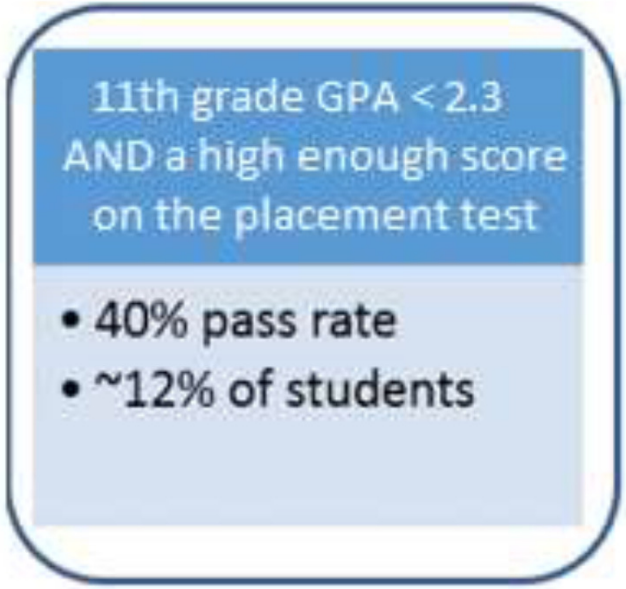
AB 705 Analysis of Pass Rates of Groups of Students in Transfer-level Statistics

11th grade GPA < 2.3	11th grade GPA>=2.3 and C- or worse in Algebra II	11th grade GPA>=2.3 and C or better in Algebra II	11th grade GPA>=2.3 and C or better in Pre-Calculus	11th grade GPA >=3.0
• 40% pass rate • ~12% of students	• 49% pass rate • ~10% of students	• 58% pass rate • 12% of students	• 70% pass rate • ~4% of students	• 80% pass rate • ~62% of students

ERP EDUCATIONAL RESULTS PARTNERSHIP

theRPgroup

A MORE ACCURATE REPRESENTATION



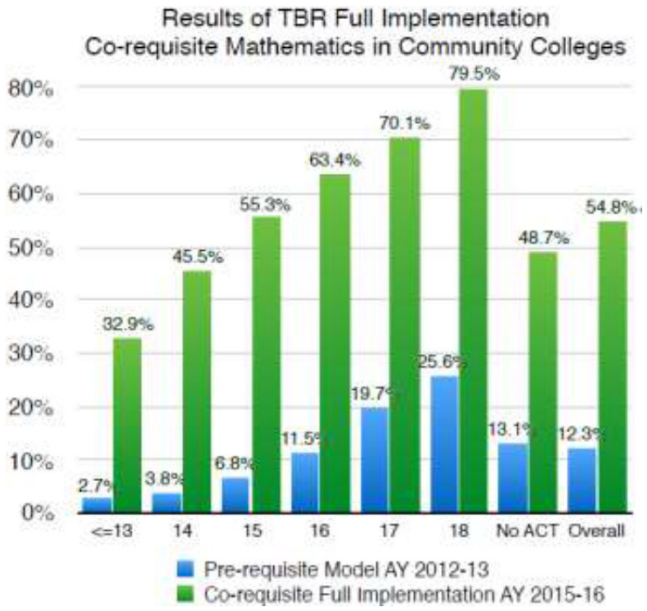
- The data on the slide is presented as using "all students in the CCC system w/ HS data available in CalPASS Plus… enrolled directly out of high school… whose first math class at a CCC was Statistics."
- Bulk of data from 2008-2014… These students most likely had a sufficient score on some sort of placement exam.
- Analysis courtesy of Mike Greenberg, CCSF

TENNESSEE BOARD OF REGENTS

Their Program

- Direct transfer-level placement
- Developmental math using a corequisite model
- Often cited as the model we should use

Their Results



IT LOOKS GOOD, RIGHT?

- CCCs offer a sequence that is different from what was offered in TN in 2012-2013 (traditional STEM)
- Many CCCs now have some sort of acceleration to Statistics and Liberal Arts math in place
  - More complicated Int. Alg. topics have been removed from these courses and are no longer a barrier
- With the use of HS transcripts, GPAs, and even guided placement, many (most?) students already qualify for a 1 – 3 semester path to completion of a transfer-level math course

QUESTION: DO WE HAVE THE SAME STUDENTS?

Tennessee Graduation Requirements

- Four years of math
- Must include Algebra II, Geometry, and a 4th higher-level math class
- Students must score proficient on TCAP to earn a diploma (Algebra I content)
- Source: TN Dept. of Education www.tn.gov/education/instruction/graduation-requirements.html

California Graduation Requirements

- Two years of math
- Must include Algebra I
- Source: CA Dept. of Education www.cde.ca.gov/ci/gs/hs/hsgrtable.asp

- Answer: No, we do not.

WHAT MIGHT WE STAND TO LOSE?

- Those with the weakest math backgrounds will likely still struggle
  - May lose the option of lower-level courses
- Statistics is not STEM – those placed directly into transfer-level STEM are not seeing the same success (even TN does not place directly into Pre-Calculus)
- Is equity found only in the attainment of a degree or also in the preparedness students have for a technologically advancing society?
- What is the meaning of a college degree? Is a foundational understanding of mathematics an inherent part of that?
- Faculty primacy in designing and implementing curriculum.

IMPLEMENTATION MEMO

THIS MIGHT LOOK FAMILIAR

SLAM

High School Performance Metric for Statistics/Liberal Arts Mathematics	Recommended AB 705 Placement for Statistics/Liberal Arts Mathematics
HSGPA ≥ 3.0 Success rate = 75%	**Transfer-Level Statistics/Liberal Arts Mathematics** No additional academic or concurrent support required for students
HSGPA from 2.3 to 2.9 Success rate = 50%	**Transfer-Level Statistics/Liberal Arts Mathematics** Additional academic and concurrent support recommended for students
HSGPA < 2.3 Success rate of 29%	**Transfer-Level Statistics/Liberal Arts Mathematics** Additional academic and concurrent support strongly recommended for students

B-STEM

High School Performance Metric BSTEM Mathematics[1]	Recommended AB 705 Placement for BSTEM Mathematics
HSGPA ≥ 3.4 **OR** **HSGPA ≥ 2.6 AND enrolled in a HS Calculus course** Success rate = 75%	**Transfer-Level BSTEM Mathematics** No additional academic or concurrent support required for students
HSGPA ≥2.6 or Enrolled in HS Precalculus Success rate = 53%	**Transfer-Level BSTEM Mathematics** Additional academic and concurrent support recommended for students
HSGPA ≤ 2.6 and no Precalculus Success rate = 28%	**Transfer-Level BSTEM Mathematics** Additional academic and concurrent support strongly recommended for students

THEY KNOW THERE'S A PROBLEM

[1] 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. Students who have not completed Algebra 2 or higher in high school but who enter college with intentions to major in STEM fields are rare. However, good practice suggests they should be informed that Algebra 2 is highly recommended as preparation for a STEM-oriented gateway mathematics course and that their likelihood of success will be higher in a statistics course.

WHAT ABOUT TITLE 5?

- Title 5 §55502(i) mandates that California community colleges use multiple measures in their assessment processes: "'Multiple measures' are a **required** component of a district's assessment system and refer to the use of more than one assessment measure in order to assess the student" [emphasis added].
- Title 5 §53200 gives academic senates the responsibility for making recommendations about academic and professional matters concerning "standards or policies regarding student preparation and success."

YOU HAVE SOME WIGGLE ROOM

- Multiple Measures
  - You get to decide what you want to use
- Allows for Innovation
  - "Students with similar levels of high school achievement"
  - Refer admin back to that footnote – Int. Algebra before B-STEM
- Collect Your Own Data
  - Minimum thresholds expected to be met

TIME FOR DISCUSSION

PLEASE KEEP IT RESPECTFUL