SBVC Math AB 705 Reform

Phase 1: Analysis

- SBVC AB 705 Implementation went into effect Fall 2019.
- Initially Math 095/096
 were still offered to
 support students.
- Co-requisite courses were implemented Spring 2020.

Table 1. Total Success

Math Course Success Rates			
Fall Terms	2017	2018	2019
Math Course	Success	Success	Success
942	68.9%	59.5%	n/a
952	73.5%	83.4%	n/a
962	78.2%	65.3%	33.8%
090	52.6%	56.4%	n/a
095	61.1%	63.3%	39.1%
096	n/a	n/a	34.8%
102	52.2%	62.9%	37.4%
103	49.5%	49.6%	48.4%
108	63.0%	56.8%	55.3%
115	54.2%	70.0%	64.2%
141	n/a	n/a	81.8%
151	63.4%	50.6%	56.9%
250	58.8%	54.1%	55.0%
251	52.8%	59.7%	48.7%
252	90.0%	78.6%	88.9%
265	n/a	28.6%	77.3%
266	88.9%	50.0%	90.2%
Psych-105	61.3%	68.8%	67.6%

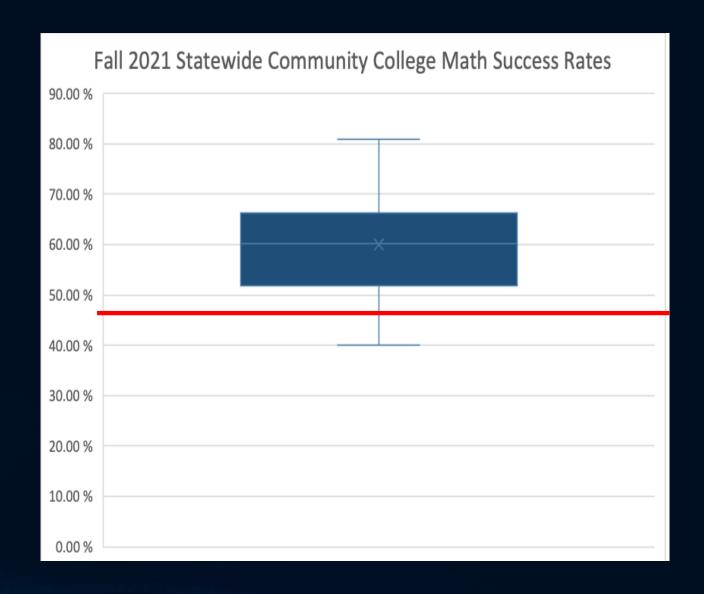
Table 2. Total Retention

Math Course Retention Rates			
Fall Terms	2017	2018	2019
Math Course	Retention	Retention	Retention
942	92.1%	92.3%	n/a
952	94.8%	93.8%	n/a
962	94.6%	92.6%	75.2%
090	87.4%	88.6%	n/a
095	88.9%	91.3%	81.2%
096	n/a	n/a	79.7%
102	84.9%	86.4%	80.8%
103	82.5%	82.9%	82.1%
108	81.9%	81.4%	87.0%
115	83.3%	83.3%	92.7%
141	n/a	n/a	81.8%
151	91.5%	80.9%	88.1%
250	91.2%	87.8%	91.6%
251	83.3%	85.5%	75.0%
252	90.0%	85.7%	94.4%
265	n/a	92.9%	93.2%
266	88.9%	75.0%	97.6%
Psych-105	96.8%	100.0%	91.0%

n/a = 5 or less students

Fall 2021 Assessment of SBCCD's Math Transfer- Level Success Rates

- The median transfer-level success rate of California Community Colleges was 60.09%.
- SBVC places at the 12th percentile with a Fall 2021 transfer-level math success rate of 48.75%.
- Crafton Hills colleges scores at the 61st percentile with a success rate of 52.88%.
- SBVC EMP data has 20-21 success rates at an overall 45%.

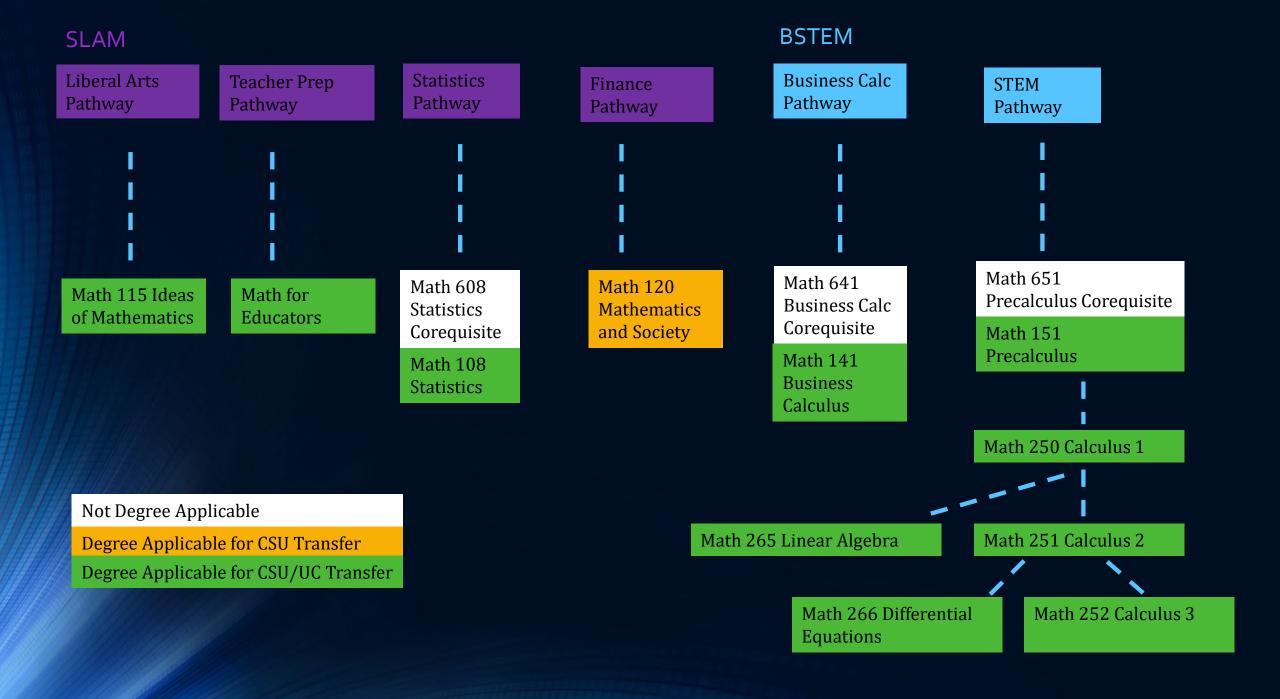


Two Major Issues within Infrastructure:

- 1. Support Courses were not Filling.
- 2. Math Courses Not Aligned with Programs of Study.
- Many majors being filtered into college algebra.
- Matriculation data gives that majority of SBVC students are SLAM majors.

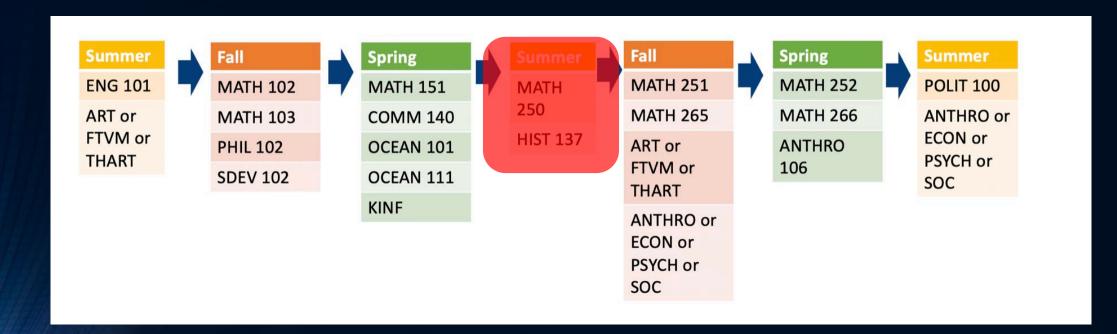


Phase 2: Math Pathways



Phase 3: New Placement Models

AST Full-Time Non Calc Ready



STEM Placement

High School Performance Metric for STEM	Recommended AB 705 Placement
Mathematics	for STEM Mathematics
HSGPA ≥ 3.4	Math 151
Or	Or
HSGPA ≥ 2.6 AND enrolled in HS Calculus Course	Math 250 Per Department Chair
	Challenge
HSGPA ≥ 2.6 or enrolled in HS Precalculus	Math 151 with Math 651
HSGPA < 2.6 and no Precalculus	Math 151 with Math 651
	or
	Math 102/Math 103 Cohort

** Per State Chancellor recommendation, the STEM table presumes student completion of Algebra 2, an equivalent such as integrated Math 3, or higher course in high school. Students 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.

^{*}Students that receive an A/B Combo in Math 102 and Math 103 can bypass Math 151.

Business Calculus

High School Performance Metric for	Recommended AB 705 Placement for
Business Calculus Mathematics	Business Calculus Mathematics
HSGPA ≥ 3.4	Math 141
HSGPA < 3.4	Math 141 with Math 641

** Math 141 assumes you have completed Algebra 2, Math 3, or an equivalent course in high school.

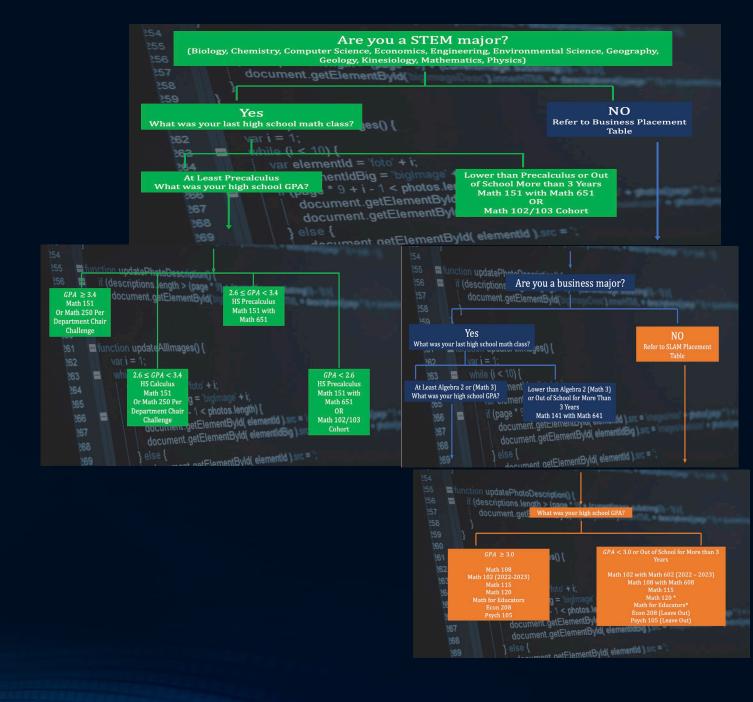
^{*}Business majors should meet with a counselor to review the business program at the university for which they want to transfer as requirements may vary across universities. UC campuses require Math 250 for example.

SLAM (Statistics and Liberal Arts Mathematics)

High School Performance Metric for Statistics/Liberal Arts Mathematics	Recommended AB 705 Placement for Statistics/Liberal Arts Mathematics
HSGPA ≥ 3.0	Math 108,
	Math 115,
	Math 120 (Fall 2023),
	Math for Educators (Fall 2023),
	Econ 208*,
	or Psych 105*
HSPGA < 3.0	Math 108 with Math 608,
	Math 115,
	Math 120 (Fall 2023),
	Math for Educators (Fall 2023),
	Econ 208*,
	or Psych 105*

^{*}Enrollment into Econ 208 or Psych 105 per counseling advisement.

- Self-Guided Placement is currently being updated.
- New launch in summer.
- Advising will be done with new placement charts starting in April.



Phase 4: Full AB 705 Compliance Fall 2022

- Community Colleges will not offer math courses below transfer level starting Fall 2022.
- Math 095/096 will be removed from Fall 2022 schedule.
- Math 601 will be used for credit by examination process for students enrolled in program for local degree.
- Prerequisite course data for 095/096 has been analyzed to determine ramifications of removal. Many CTE programs had another math option available, and math department has worked with other chairs, articulation, and curriculum to remedy prerequisite issue.
- Program map enrollment data will be analyzed to place intermediate algebra students in a more suitable math course for their program of study.

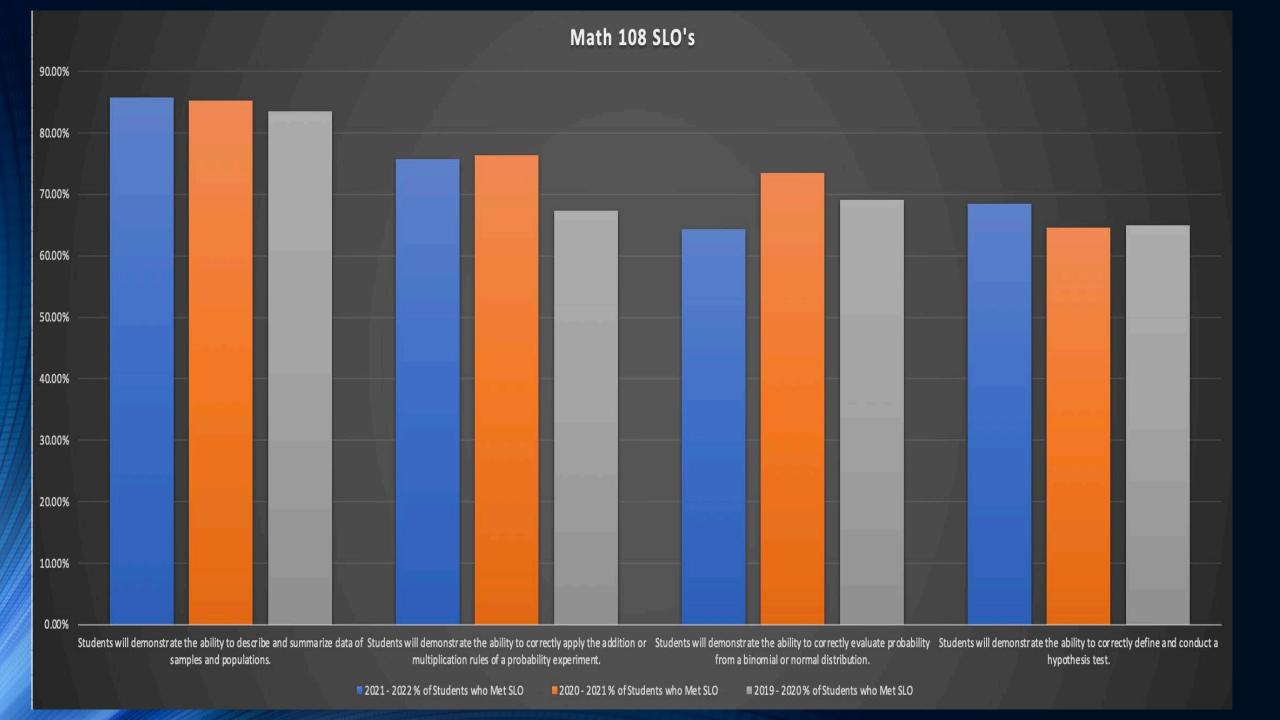




1. Uniform and aligned course models for co-requisite courses for college algebra and statistics. Available to students Fall 2022.

2. Reform tutoring efforts. Incorporate embedded tutoring models into transfer-level courses. Unify tutoring efforts with STEM, MESA, Student Success Center, and DSPS.

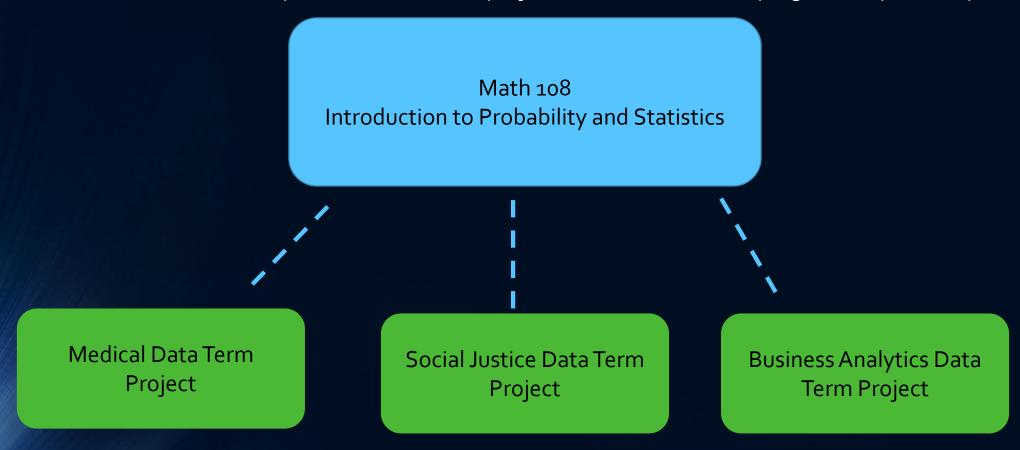
3. Analyze SLO data for instruction improvement in transfer level courses.



- SLO 4 (Students will demonstrate the ability to correctly define and conduct a hypothesis test) is taught near the last quarter of the semester.
- Community of practices efforts will address content issues with all 108 instructors before last quarter of semester to develop instruction techniques for improving outcomes in area.
- Tutoring efforts can be strengthened or enhanced with workshops during time period of semester where chapters are taught.

Course Project Pathways

• Students will have the ability to choose a course project that relates to their program map of study.



Align Math Course with Guided Pathway Maps

- SOAA objective
- Use CurrlQunet Meta capabilities to attach a math course to each program map that is relevant to study's program of study.