Wednesday, September 10, 2025

AB 1705 STEM Pathways: Spotlight on Moorpark College





Presenters

Oleg Bespalov – Moorpark College, Office of Institutional Effectiveness, Grants and Planning

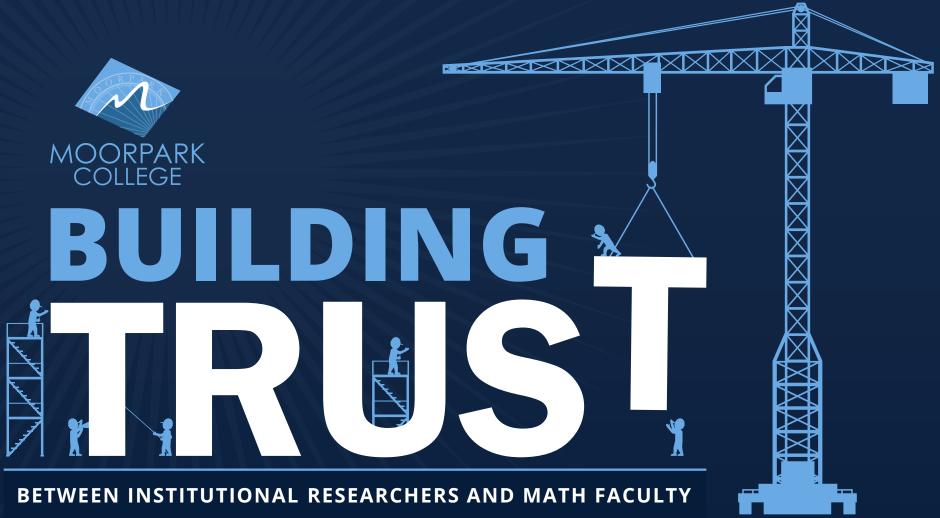
Rena Weis- Moorpark College, Math Professor

Chantée Smith – Community College Specialist, Academic Affairs, CCCCO

Mallory Newell – Director, Institutional Research & Planning, De Anza College & The RP Group's Multiple Measures Assessment Project (MMAP)







PRESENTED BY: Rena Weiss | Math Faculty Innovation Coordinator

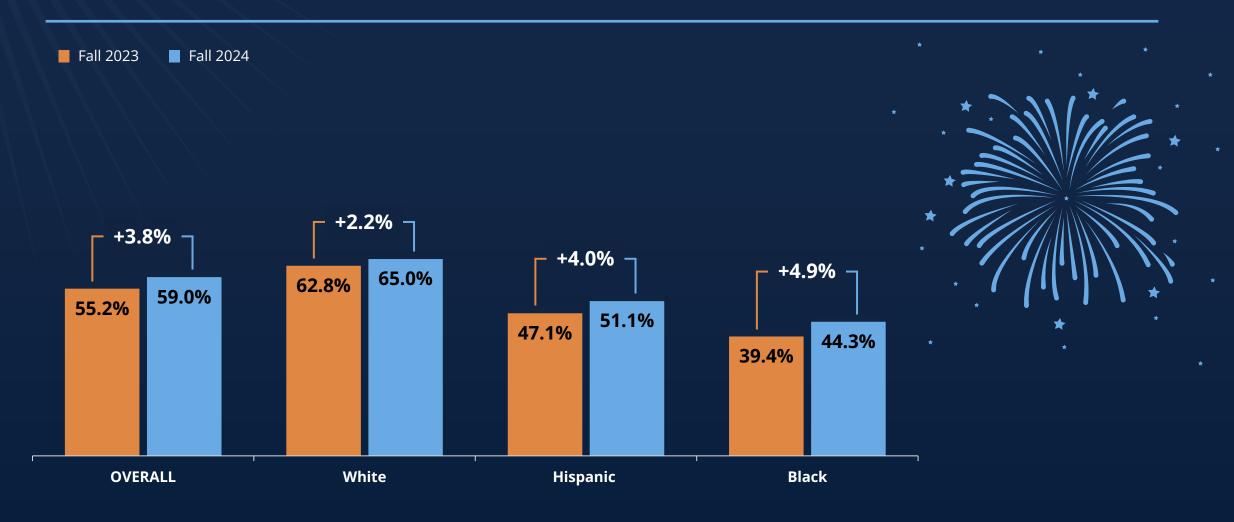
Oleg Bespalov | Dean of Institutional Effectiveness and Marketing

JOINING US FOR Q&A: Kevin Balas | Math Professor

INSPIRED BY THE RESEARCH ON TRUST

tinyurl.com/build-trust-in-a-relationship tinyurl.com/who-can-you-trust

INCREASED MATH SUCCESS RATES



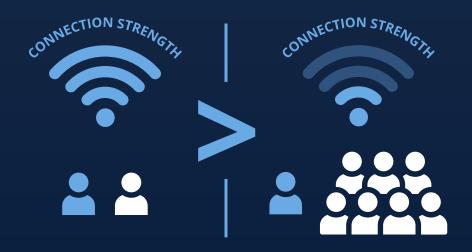
SMALL PERCENTAGE, BIG IMPACT



FOCUS ON ONE FACULTY CONNECTION

ESTABLISH A CLOSE CONNECTION WITH ONE FACULTY MEMBER INSTEAD OF A WEAK CONNECTION WITH THE ENTIRE MATH DEPARTMENT

- Advocate for hiring a Math faculty AB1705 coordinator as an ambassador between the research and math departments.
- It is less intimidating for IE folks to work with one person rather than a whole department.



HONESTY & TRANSPARENCY

BE HONEST AND TRANSPARENT ABOUT THE RAMIFICATIONS OF AB1705

- Acknowledge the pain math faculty are feeling.
- At Moorpark College, 61% of classes taught in fall 2018 will no longer be offered in fall 2026.
- Some faculty will likely be teaching calculus for the first time ever.
- There will likely a reduction in FTES allocated for Math.



GO ABOVE & BEYOND WITH CUSTOMER SERVICE

PROVIDE EXCEPTIONAL CUSTOMER SERVICE FOR AB1705 REQUESTS

- Prioritize and follow through on all math data requests.
- Encourage faculty exploration, even if it means research requests are repeatedly revised.
- Compensate institutional research staff with overtime to handle the increased volume of requests.



MAKE IT OKAY TO TAKE RISKS

CREATE PSYCHOLOGICAL SAFETY— I.E., MAKE IT OK TO TAKE RISKS, TO FAIL, OR SAY "I DON'T KNOW"

- Institutional research can lead by example. For instance, I shared with the math faculty that it's unclear whether corequisites will be effective.
- Normalize that most initiatives will not be successful.
- Instead of abandoning strategies that don't work at first, try adjusting and
 experimenting with new approaches. For example, course-embedded tutors
 were not initially as successful as we hoped, but after we implemented
 two-way texting, student success rates improved.
 Inside Higher Ed article: tinyurl.com/Tutoring-Two-Way-Text
- As an institutional researcher, don't be afraid to pitch some evidence-based initiatives as well, even though you're not a math faculty member.
 For example, I forwarded research which found that giving students shorter exams or more time to complete the exams can close equity gaps, and the math department agreed to try it out. The experiment was a success!
 New York Times article: tinyurl.com/Timed-Exams-Research
 Inside Higher Ed article: tinyurl.com/Extra-Time-Success



TIME IS MONEY

SHOW FACULTY YOU VALUE THEIR TIME BY COMPENSATING THEM

- Advocate for creating stipends for every initiative. This increases faculty
 participation and enhances the statistical power of the research.
- If an initiative is successful, continue compensating faculty until it is fully scaled up. This approach is currently being applied with Course Embedded Tutors (CETs) enhanced by two-way text messaging, and the "shorter test/longer time" initiative.



KEY TAKEAWAYS

FOCUS ON ONE FACULTY CONNECTION HONESTY & TRANSPARENCY

PINOCCHIO!









RENA WEISS | Mathematics Professor & AB1705 Math Innovation Coordinator | rweiss@vcccd.edu

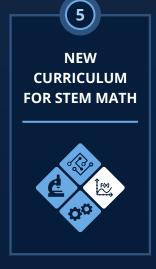
40% release time to coordinate all math innovations and initiatives



















TUTORING INITIATIVES

The following strategies contributed to a significant rise in tutoring session attendance, which in turn led to improved success rates:

- Two-Way Texting was utilized by tutors to communicate with students.
- Tutors in Classrooms: Tutors were invited into math classrooms and students were required to complete an assignment at the tutoring center.
- **Course Embedded Tutors:** 21 CETs supporting 23 sections of math, including:
 - Applied Calculus I
 - Calculus with Analytic Geometry I
 - College Algebra for STEM
 - College Algebra for Liberal Arts
 - Trigonometry
 - Precalculus
- Pathway to Calculus Success: Faculty members offer drop-in tutoring 2 hours/week for students in calculus, differential equations, and linear algebra.





2

COMMUNITIES OF PRACTICE (CoP)

Several collaborative efforts are underway among faculty:

- Districtwide CoP: Math faculty from Ventura, Oxnard, and Moorpark Colleges meet regularly to address AB 705/1705 issues, including pedagogy and grading.
- **Applied Calculus CoP:** Faculty discuss student success strategies, develop common finals, and integrate Course Embedded Tutors.
- **Book Communities:** 21 faculty members share and apply new pedagogical methods from readings to enhance courses.
- **Standards Based Grading (SBG) CoP:** 9 faculty are implementing SBG to better report student understanding, encourage a growth mindset, and clarify learning goals.





3

SENSE OF BELONGING

Math and English faculty had students participate in a 30-minute sense of belonging activity.

- Increased persistence rates
- Increased GPA







SHORTER TEST/LONGER TIME INITIATIVE

Faculty members thoughtfully adjusted math assessments to enhance opportunities for student reflection and learning.

This initiative was implemented across 38 courses.

- Increased course success rates
- Increased success for women and black students (small sample)







NEW CURRICULUM FOR STEM MATH

13 adjunct and full-time faculty reimagined preparation for calculus through the development of new curriculum and pedagogy.

- Corequisite course to Calculus: "Integrated Calculus I"
- Innovative Preparation for Calculus I course: "Calculus I Readiness for STEM"
 - What innovations?
 - Standards Based Grading
 - Mastery Learning
 - Active Learning
 - Entrance Tickets
 - Flipped Classroom
 - No Textbook Cost





6

"ONE AND DONE"

A math course evolves into a vibrant math learning community, fostering greater interaction between students and faculty through shared meals and personalized support. Textbook fees are eliminated, and integrated tutoring, along with other student support services, are readily accessible.

• For One and Done "Mathematical Reasoning for Liberal Arts" course: the success rate is higher than the general population.







ACADEMIC RENEWAL

Two-way texting campaign launched Spring 2024 to notify students eligible for academic renewal (i.e. GPA reset).

Impact:

- Hispanic student persistence increased (57% vs. 47%) and they enrolled in more units (~9.81 vs. ~9.5).
- Students were more likely to enroll in an English or math class, which highlighted the relationship between a student's confidence in their academic ability and their GPA.





OUR AT-A-GLANCE ONE-PAGER tinyurl.com/MC-math-innovations



MOORPARK
COLLEGE
MATHEMATICS
DEPARTMENT

INNOVATIONS AND INITIATIVES

RENA WEISS

Mathematics Professor & AB 1705 Math Innovation Coordinator

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THANK YOU!

Q & A







Thank you for attending

The webinar and materials will be posted to the Chancellor's Office Equitable Placement, Support and Completion <u>AB 1705 Learning</u>
<u>Series Webinars web page</u>

Email: AB1705@cccco.edu



