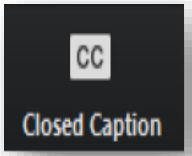
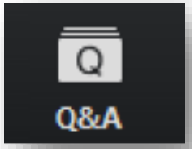
AB 1705 STEM Pathways: Evaluation and Collaboration

Wednesday, December 3, 2025

Webinar Logistics



Click the Closed Caption (CC) tab to read live captions



Click the Question & Answer (Q&A) tab to enter questions for the presenters and to read their responses. You will be muted with your camera off during the entire webinar.

Additional Webinar Logistics

The webinar session will be recorded. Slides and the recording will be available on the Chancellor's Office Equitable Placement and Completion website.

The webinar is part of a Fall 2025 Equitable Placement webinar learning series. Visit the Equitable Placement and Completion website to register for additional webinars.

https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/equitable-placement/resources

Presenters

- **James Todd,** Vice Chancellor of Academic Affairs, CCCCO
- **Terrence Willett,** Assistant Vice Chancellor of Research, Analytics, and Data, CCCCO
- **Mallory Newell,** Project Director of the Multiple Measures Assessment Project, The RP Group & Director of Institutional Research, De Anza College
- **Lan Hao,** Director of Institutional Research, Planning and Effectiveness, Citrus College
- **Xiaoran Yu,** Research Analyst, Citrus College
- **Bala Sethu Raja,** Dean of Mathematics and Business, Citrus College
- **Bri Hayes,** Senior Dean of Institutional Effectiveness, Success and Equity, Cuyamaca College
- **Rachel Polakoski,** Math Professor, Cuyamaca College
- **Gabriel Estrella,** Research ad Planning Analyst, Cuyamaca College

Overview

- Evaluation requirements under the law
- The evaluation template
- Additional options for evaluation outside the law
- Collaboration and evaluation at Citrus and Cuyamaca Colleges

The Evaluation Requirements Under the Law

Reporting Requirements

As indicated in ESLEI 24-15 and Academic Affairs 24-69 any "prior to calculus" pathway will:

- undergo additional validation by July 1, 2027
- must achieve full validation status in order to continue as a placement and enrollment option beyond July 1, 2027
- need to meet all three standards described in Education Code §78213(f)(1))

Which courses need to be validated?

Any "prior to calculus" pathway includes:

- transfer-level preparatory course in which students may enroll prior to enrolling in Calculus 1
- innovative course
- courses granted interim status

What are the “three standards of the law”?

Colleges must verify the benefit of transfer-level preparatory coursework to students by showing all of the following:

(A) The student is highly unlikely to succeed in the first STEM calculus course without the additional transfer-level preparation.
(B) The enrollment will improve the student’s probability of completing the first STEM calculus course.
(C) The enrollment will improve the student’s persistence to and completion of the second calculus course in the STEM program, if a second calculus course is required.

The Evaluation Template

Which students are reported in the template?

Students whose first course of enrollment in math was STEM Calculus 1

- STEM Calculus 1 is a course equivalent to C-ID Math 210, 211 or the first half of Math 900S

Students whose first course of enrollment in math was a transfer-level preparatory course

- For example, College Algebra, Trigonometry, Precalculus

Students with an educational goal of degree, transfer and undecided

- SB14 = A, B, C, M, O*

Who are the students in the lowest STEM Placement Group?

Report only students in the Lowest STEM Placement group:

- students who have a high school GPA less than or equal to 2.6
- or who have not passed high school trigonometry, precalculus or calculus with a C or better

In other words, include:

- all students with a cumulative HSGPA <= 2.6
- as well as those students who did not pass high school trigonometry, precalculus or calculus

Different scenarios to include:

- students with a HSGPA <= 2.6 who have not passed high school trigonometry, precalculus or calculus
- students with a HSGPA <= 2.6 who passed high school trigonometry, precalculus or calculus
- students with a HSGPA above 2.6 who have not passed high school trigonometry, precalculus or calculus

What about students with a STEM major?

Colleges can include either:

- **all students** regardless of major or
- **STEM majors** based on STEM TOP codes

STEM majors should be based on C-ID Transfer Model Curriculum (TMC) that require at least STEM Calculus 1 and should include the following TOP Codes: 1905.00, 0706.00, 0707.00, 0707.10, 0901.00, 1914.00, 1701.00, 1902.00, 0401.00, 4902.00.

Colleges may include additional TOP codes if necessary for local STEM programs that require at least completion of STEM Calculus 1.

What if we have multiple STEM pathways?

- If inputting data for more than one course, **input each course on a separate tab**.

- Data can be entered for any course within a multi-course sequence if Lowest STEM Placement students enrolled in the course as their first math course.

For example, if Lowest STEM Placement students may start in a sequence at different levels (e.g., some students start in Trigonometry while others may start in Precalculus) report each course in which a student can start on a separate tab.

What if we have different student groups that we want to evaluate?

Local disaggregation in addition to the lowest placement group is encouraged. This may include:

- student major
- guided self-placement
- ethnicity
- special population enrollment
- and more…..

Report each additional disaggregated group on a separate tab.

Table 1. Calculus 1 Completion in Two Years

Provide cohort and course details.

Table 1. Calculus 1 Completion in Two Years for the Lowest STEM Placement Group by CCC Starting Level		
Cohort Description	**Cohort Details**	
STEM TOP Codes (SMO2 or SS02): List 6-digit STEM TOP Codes or indicate All Students	1905.00, 0706.00, 0707.00, 0707.10, 0901.00, 1914.00, 1701.00, 1902.00, 0401.00, 4902.00	
Give the cohort timeframe (e.g., 2020-21 and 2021-22 or Fall 2021 and Fall 2022)	Fall 2023-Spring 2025	
Course Details	**Transfer-Level Preparatory Course Start**	**STEM Calculus 1 Start**
Give the Course Control Number (CB00)	CCC000187803	CCC000562587
Give the Local Course ID	MATH105	MATH1A
Give the Course Title (CB02)	College Algebra	Calculus 1

Table 1. Calculus 1 Completion in Two Years

- **Starting Cohort:** enter the number of students in the Lowest STEM Placement group who started in a transfer-level preparatory course in the STEM Calculus pathway or started in STEM Calculus 1 as their first course of enrollment in math
- **# Complete STEM Calculus 1 in Two Years:** track students for two years and input the number of students who successfully complete (with a C or better) STEM Calculus 1
- **# Complete Calculus 1 in Two Years/Starting Cohort:** the Calculus 1 completion rate will be calculated for you

Table 1. Calculus 1 Completion in Two Years for the Lowest STEM Placement Group by CCC Starting Level

Data for Lowest Placement Group	Transfer-Level Preparatory Course Start	STEM Calculus 1 Start
Starting Cohort	146	76
# Complete STEM Calculus 1 in Two Years	56	10
STEM Calculus 1 Completion Rate (%)	38.4%	13.2%

Standard A = Is the completion rate for Calculus 1 start less than 15%?

Table 1. Calculus 1 Completion in Two Years

- **Starting Cohort:** enter the number of students in the Lowest STEM Placement group who started in a transfer-level preparatory course in the STEM Calculus pathway or started in STEM Calculus 1 as their first course of enrollment in math
- **# Complete STEM Calculus 1 in Two Years:** track students for two years and input the number of students who successfully complete (with a C or better) STEM Calculus 1
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# Complete STEM Calculus 1 in Two Years	56	10
STEM Calculus 1 Completion Rate (%)	38.4%	13.2%

Standard B = Is the Transfer-level Prep Start completion rate greater than Calculus 1 start completion rate?

Table 2. Calculus 2 Completion in Three Years

- Using the cohort of students entered in Table 1 above, adjust the cohort to **ensure students have three full years** from their first math enrollment to complete STEM Calculus 2.
- **STEM TOP Codes**: if filtering on STEM majors, students who are not required to complete STEM Calculus 2 based on C-ID TMC or local major requirements may be removed.
- For example, since the Biology TMC (e.g. TOP Codes = 0401.00, 4902.00) does not require completion of STEM Calculus 2, they may be excluded from the cohort in Table 2.

Table 2. Calculus 2 Completion in Three Years for the Lowest STEM Placement Group by CCC Starting Level

Cohort Description	Cohort Details
STEM TOP Codes (SMO2 or SS02): List 6-digit STEM Top Codes or indicate All Students	1905.00, 0706.00, 0707.00, 0707.10, 0901.00, 1914.00, 1701.00, 1902.00
Give the cohort timeframe (e.g., 2019-20 and 2020-21 or Fall 2019 and Fall 2020)	Fall 2022-Spring 2025

Table 2. Calculus 2 Completion in Three Years

- **Starting Cohort**: enter the number of students in the adjusted cohort
- **# Complete STEM Calculus 2 in Three Years**: track the cohort of students for three years and input the number of students who successfully complete (with a C or better) STEM Calculus 2
- **# Complete Calculus 2 in Three Years/Starting Cohort**: the Calculus 2 completion rate will be calculated for you

Table 2. Calculus 2 Completion in Three Years for the Lowest STEM Placement Group by CCC Starting Level

Data for Lowest Placement Group	Transfer-Level Preparatory Course Start	STEM Calculus 1 Start
Starting Cohort	113	67
# Complete STEM Calculus 2 in Three Years	78	15
STEM Calculus 2 Completion Rate (%)	69.0%	22.4%

Standard C = Is the Transfer-level Prep Start completion rate greater than the Calculus 1 Start completion rate for students completing Calculus 2?

Template Example

Additional Options for Evaluation

Additional Measures of Success

The Chancellor's Office encourages colleges to submit **"other" forms of success and completion** to AB1705@CCCCO.edu

Other ways to measure success when comparing students starting in transfer-level preparatory courses to students starting directly in Calculus 1 may include:

- Completion of **major requirements**
- Successful **transfer**
- Students receiving **an additional support structure** (embedded tutoring, concurrent support, learning modules, etc.)
- Students enrolled in a **learning community/special program** (e.g., Puente, MESA, Umoja, DSPS, EOPS, Veteran, etc.)

How can colleges use the template before July 2027?

The Chancellor's Office encourages colleges to use the template as a tool for faculty and institutional research offices to engage in dialogue around STEM pathways.

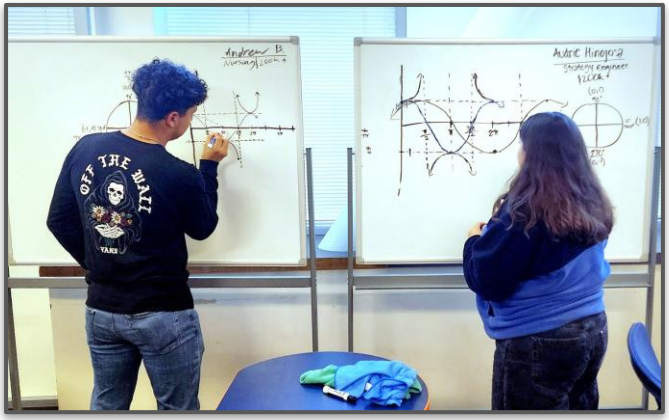
- Evaluation should occur annually, if not more often, to provide faculty with valuable information on their STEM pathways.
- Ongoing evaluation can be a valuable tool during the AB 1705 STEM Calculus innovation timeframe, up to July 2027.
- The institution should engage in conversations around success and successful completion of program requirements and potentially address **additional** ways in which to measure these outcomes.

Institutional Research – Mathematics Collaboration
CCCCO Webinar – Dec 3, 2025

Bala Sethu Raja, Ph.D
Dean of Mathematics, Sciences, Engineering and STEM Center

Lan Hao, Ph.D
Director of Institutional Research, Planning and Effectiveness

Xiaoran Yu, Ph.D
Research Analyst, Institutional Research, Planning and Effectiveness



Timeline of Research and Collaboration

1. Study Launch

May 2023: Kickoff meeting and frequent email communication in research design

2. Research

IR conducting the Precalculus Validation Study

3. Initial Sharing Results

November 2023: IR sharing findings at Math department meeting

- Productive discussion; faculty provided feedback

Timeline of Research and Collaboration

4. Q&A Development

2024: IR developing Q&A, documenting answers to faculty queries

- EdTrust West targeted strategies to close equity gaps – Early Alert

5. Sharing with Counseling

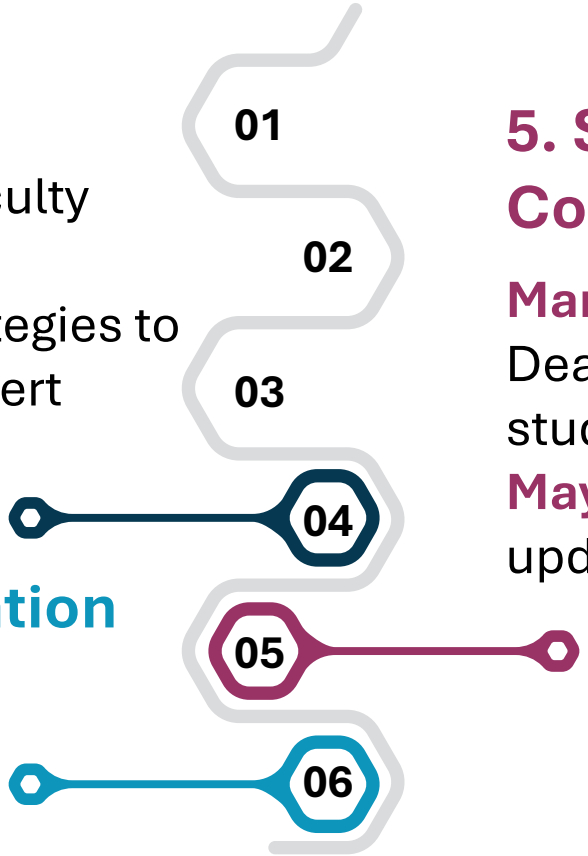
March 2025: IR and Math Dean presenting abbreviated study to counselors

May 2025: Placement charts update

6. Expanded Collaboration

Ongoing data projects:

- Analysis - Precalc & Calc 1 enrollment demand
- CCCCO Curated Support



Precalculus Validation Study: Some Descriptive Results

February 2024

Background

Purpose

The purpose of the study is to examine the Calculus I throughput rate between two groups of students:

1. Pathway One (P1): students who started in **Calculus I (Math 190)** directly, and
2. Pathway Two (P2): students who started in **Precalculus (Math 175).**

Results are disaggregated by students' level of math preparation in high school.

Research Question

The overarching question is: For students with the same high school math preparation[1], does starting in Precalculus (P2) increase the probability of completing Calculus I within a one-year timeframe, compared to students starting in Calculus I (P1) directly?

Specifically, we conducted two sets of analyses:

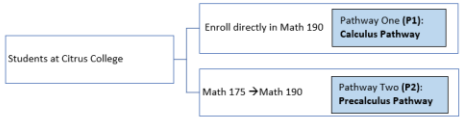
- For students who are academically prepared to take Calculus I (Math 190), do **P2** students complete Math190 at a higher rate than **P1** students within one year?
- What about the students who first enroll in Calculus I with less high school preparation?

Definitions

Pathway

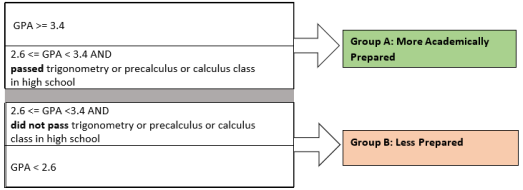
There are two pathways to Calculus I, depending on students' course-taking patterns.

- If a student enrolls in Math 190 directly, the student is considered to be on the Calculus pathway (P1).
- If a student takes Math 175 before enrolling in Math 190, the student is considered on the Precalculus pathway (P2).



Math Preparation in High School

Students are categorized into two groups, Group A and Group B, per RP Group's recommendation for math placement using high school GPA and the highest math course completed in high school. See the illustration below. **Group A students' placement results will allow them to start Calculus I directly.**

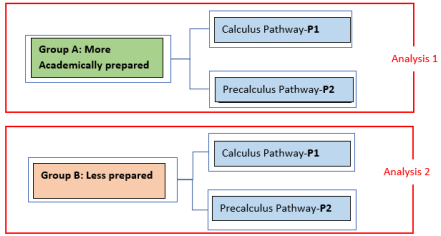


Throughput Rate

The number of students who successfully complete the target course (in this report, Math 190) out of the number of students starting in either Math 175 or Math 190.

Visual Illustration of Analyses

The following graph demonstrates the two sets of analyses conducted in this report.



Findings

Finding #1: For both groups (A and B), more students took the Precalculus pathway (P2) than the Calculus pathway (P1).

There was a total of 3,128 students whose first Math 175 or Math 190 course enrollment occurred in any fall or spring semester between fall 2017 and spring 2022 (the 10 cohorts). Only students who had academic records in high school (***N* = 2,102**) were included in the study. In other words, we excluded 1,026 students (about one-third of the total) because their high school math preparation level was unknown.

As can be seen in Table 1, Group A and Group B had similar sample sizes.

- **Over two-thirds** (699/1,091 = **64%**) of the students in Group A (more academically prepared) started on P2, although they were eligible to take Calculus I directly.
- **A large majority** (975/1,011 = **96%**) of the students in Group B followed their placement result and started on P2. There was a total of **36** students who started Calculus I directly with a Precalculus placement.

Table 1. Frequency Distribution of Students by High School Math Preparation Level and Pathway to Calculus I

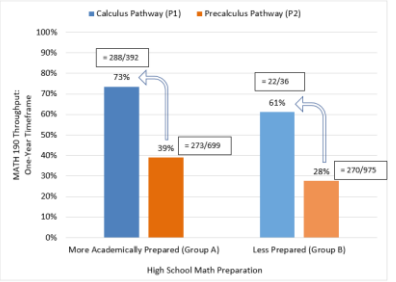
	Calculus Pathway (**P1**)		Precalculus Pathway (**P2**)		Two Pathways Combined	
	Count	Percentage	Count	Percentage	Count	Percentage
More Academically Prepared (**Group A**)	392	36%	699	64%	1,091	100%
Less Prepared (**Group B**)	36	4%	975	96%	1,011	100%
Total	**428**	20%	**1,674**	80%	**2,102**	100%

Finding #4: Direct enrollment into Math 190 (P1) resulted in substantially higher rates of completion of the course within one year relative to students beginning in Math 175 (P2), regardless of high school math preparation.

Pathway P2 had a lower Math 190 throughput rate than P1, as can be seen in Figure 3:

- For students who started with Precalculus (P2), the one-year Calculus I throughput rate was **39%** for Group A and **28%** for Group B.
- For students on P1, the throughput rate was **73%** for Group A and **61%** for Group B.

Figure 3. Math 190 Throughput in One Year by High School Math Preparation and Pathway to Calculus I



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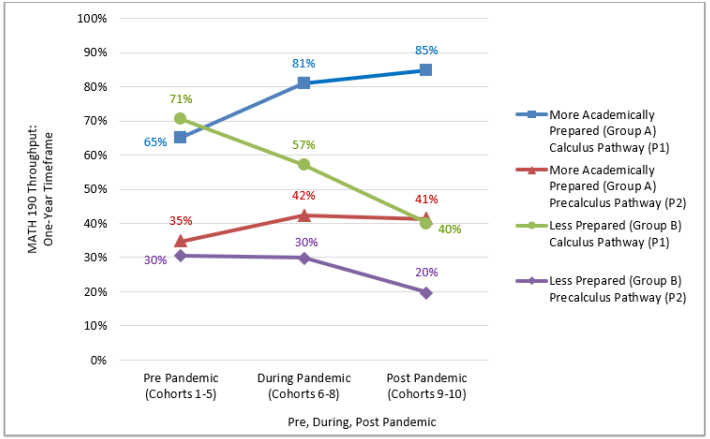
Question 9: Throughput rates for pre-, during-, and post-pandemic cohorts

This is a follow-up question to Q8. What are the one-year throughput rates for cohorts (all students) pre-, during-, and post-pandemic?

Answer:



For reference, here is the sample size of the student groups tracked in the study:

	Pre-Pandemic (cohorts 1-5)	During Pandemic (cohorts 6-8)	Post Pandemic (cohorts 9-10)
Group A – P1	205	115	72
Group A – P2	279	248	172
Group B – P1	17	14	5
Group B – P2	328	415	232

Question 9 Throughput rates

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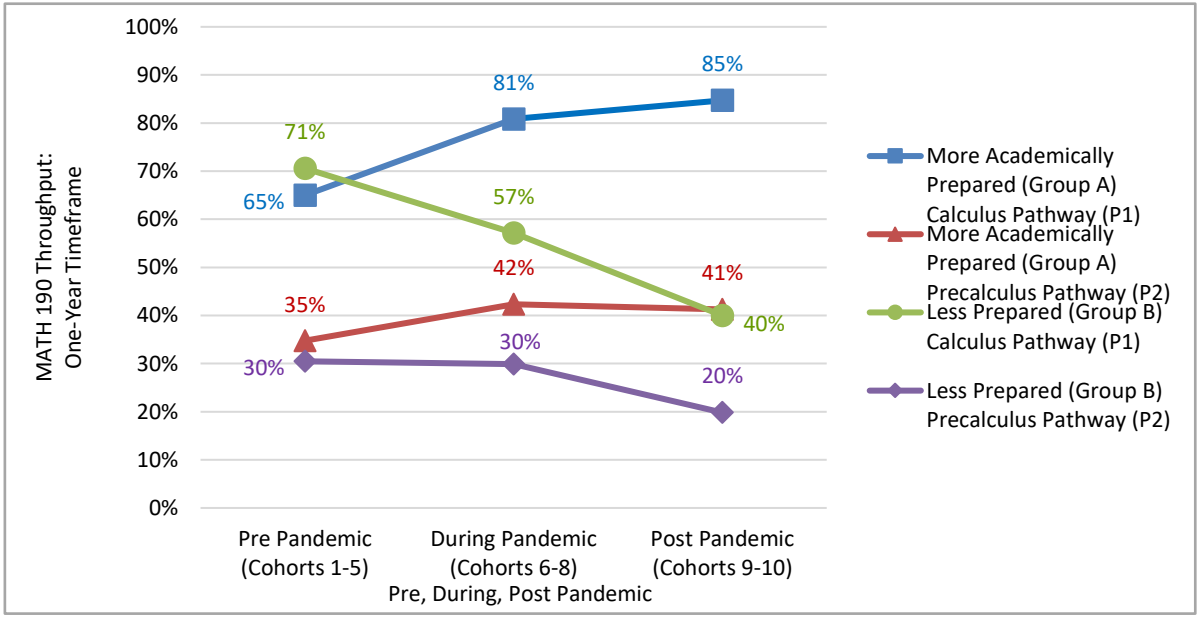

Math 190 Throughout: One-Year Timeframe	Pre-Pandemic (cohorts 1-5)	During Pandemic (cohorts 6-8)	Post Pandemic (cohorts 9-10)
More Academically Prepared (Group A) Calculus Pathway (P1)	65%	81%	85%
More Academically Prepared (Group A) Precalculus Pathway (P2)	71%	57%	40%
Less Prepared (Group B) Calculus Pathway (P1)	35%	42%	41%
Less Prepared (Group B) Precalculus Pathway (P2)	30%	30%	20%

For reference, here is the sample size of the student groups tracked in the study:	Pre-Pandemic (cohorts 1-5)	During Pandemic (cohorts 6-8)	Post Pandemic (cohorts 9-10)
Group A – P1	205	115	72
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Question 24: How many students were stopped at MATH 175?

According to Table 1 (page 4), there are 1,674 Pathway 2 students enrolled in Precalculus, consisting of 699 students in Group A and 975 students in Group B. How many of them succeeded in the course MATH 175 within the extended timeframe (up to 5.5 years)? How many of them were stopped at MATH 175?

Answer: The percentages are 76% (= 530/699) for Group A, and 65% (=630/975) for Group B.

To put it in another way, **24%** of students in Group A and **35%** of students in Group B either never completed the course or completed the course after 6 or more years.

	Completed	Did not Complete	Total
More Academically Prepared (Group A)	530	**169**	699
Less Prepared (Group B)	630	**345**	975

Question 24 Student barriers

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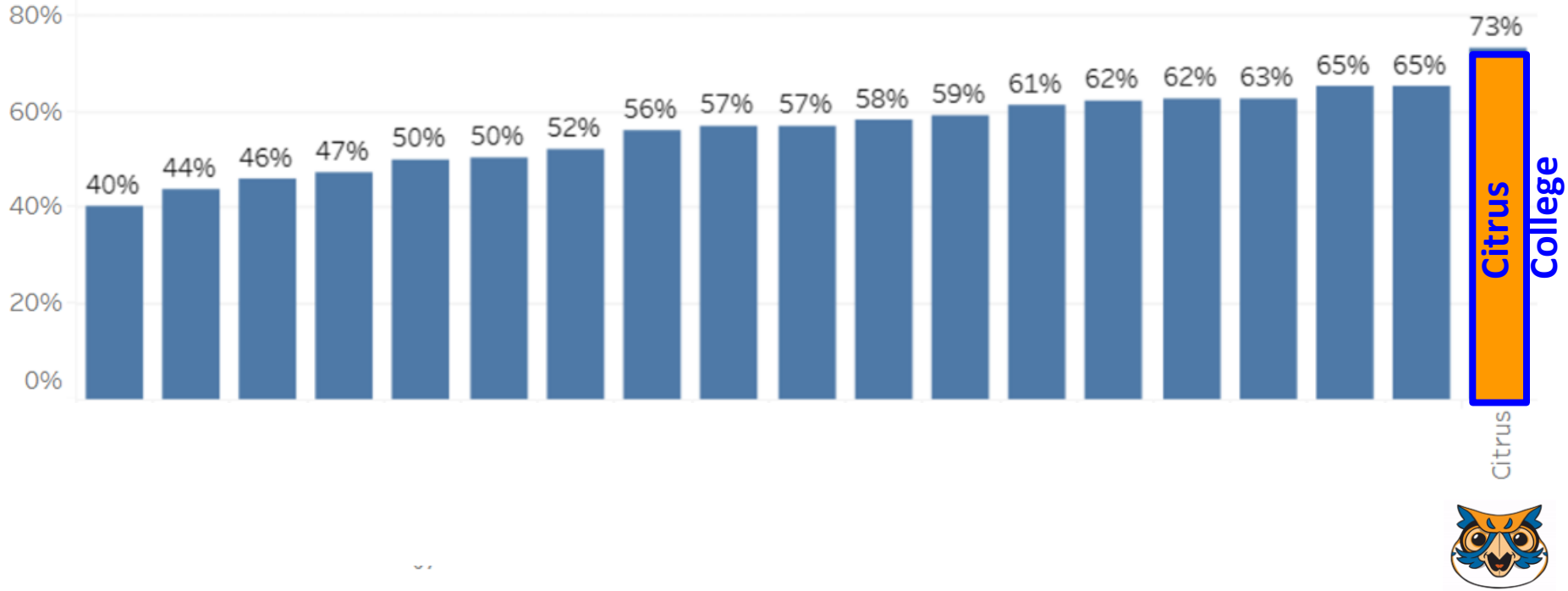
Calculus I Offerings

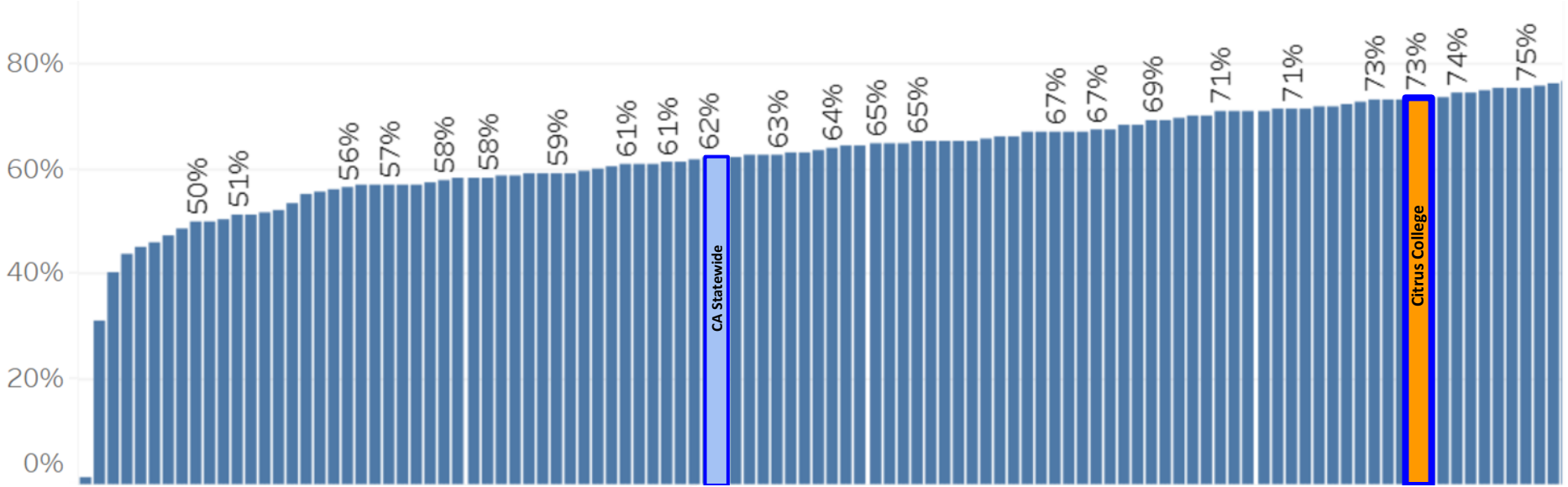
Fall/Spring (16 wks) Winter (6 wks) Summer (6-8 wks)	Traditional Calculus I WITHOUT Support Sections	Corequisite Calculus I WITH Support Sections
Fall 2023	6	3
Spring 2024	6	3
Fall 2024	6	5
Winter 2025	3	1
Spring 2025	6	3
Summer 2025	2	1
Fall 2025	6	5
Spring 2026	5	4

No. 1 in LA County Community Colleges
2023-2024 Transfer-Level Math Throughput Rates



Source: CCCCO Dashboard

Top 20 in all CA Community Colleges
2023-2024 Transfer-Level Math Throughput Rates

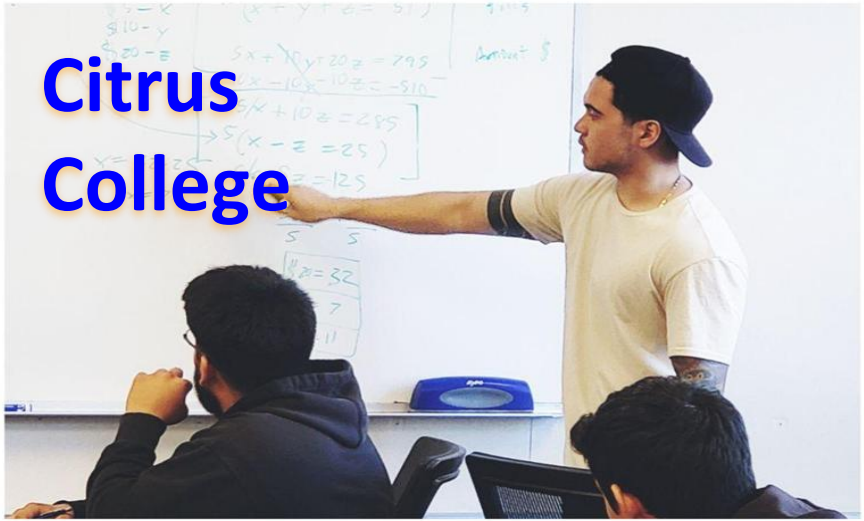


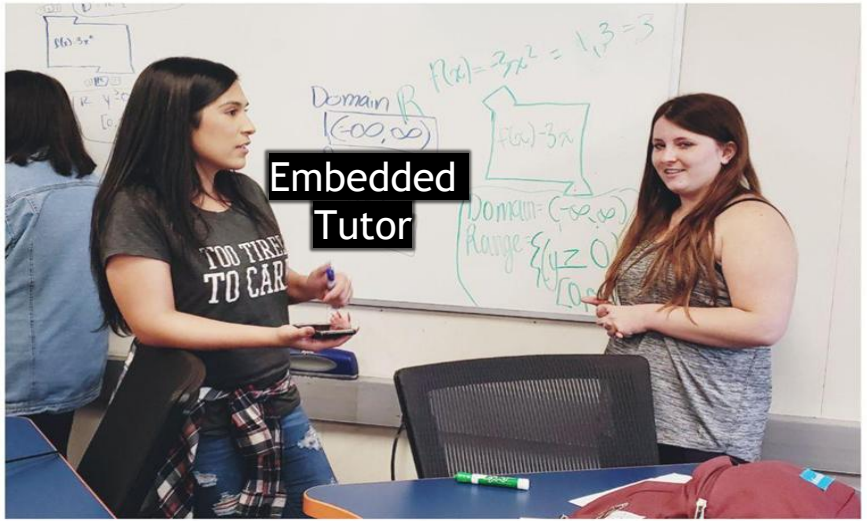
CA Statewide 62%

Citrus College 73%

Source: CCCCO Dashboard

Citrus College





Wraparound Student Support Services
Curated Support – AB 1705 CCCCO

Faculty and Student Partnerships to
Design Race-Conscious & Equitable Student Experiences

- **Motivate Lab (Spring 2025)**
  GPS Mindset and Belonging program for faculty

- **EdTrust West (2024-2025)**
  Targeted strategies to close equity gaps – ‘Early Alert’

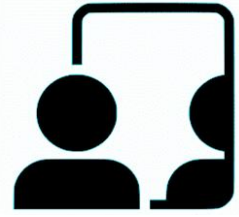
- **Equity Accelerator (Fall 2025)**
  Sense of Belonging survey for newly matriculated students

Wraparound Student Support Services - Faculty

Citrus College Participation - Spring 2025

- **Motivate Lab - Enhance Equity in Classroom - 'Psychological Air'**
  - Designed to support students' (GPS) growth mindset, purpose and relevance, and sense of belonging for faculty
  - Faculty (STEM & English) - 3 to 6 hours to complete
    - Full-time Faculty: 10; Adjunct Faculty & Tutors: 4

Student Engagement



Reflection - Personal Beliefs, Values & Behaviors

Examine - Structures, Systems & Norms

Consider - Student Background, Prior Academic Experiences

Being Mindful - Environmental Factors

Motivate Lab Learners Course (Spring 25) - Faculty

Course Outline

Motivate Lab

Part 1: *We suggest completing these sections during the first week.*

Section 0 **Onboarding: Nuts & Bolts**	Section 1 **Introduction to Learning Mindsets**	Section 2 **Talking the Talk, Walking the Walk**
0.1 Navigating this Course 0.2 Our Approach to Course Design 0.3 Course Outline 0.4 Who "We" Are 0.5 What You'll Learn 0.6 What You'll Create and Why 0.7 Motivate Lab Equity Statement 0.8 Connecting and Working with Others 0.9 What We Do with Your Data 0.10 Connect and Discuss	1.0 Before We Begin… 1.1 Your Current Motivation Strategies 1.2 Transitioning to the Student Perspective 1.3 Introduction to Mindset GPS 1.4 Rewriting Reggie's Story 1.10 Connect & Discuss	2.1 Identifying Supportive and Unsupportive Messages 2.2 Practice Identifying Supportive and Unsupportive Messages 2.3 Leveraging Student Perspectives 2.4 Key Understanding: Learning Mindset Supportive Messaging 2.5 Motivational Planning Your Instruction with Mindset GPS 2.6 Key Understanding: Learning Mindset Supportive Instruction 2.7 Connect & Discuss
estimated time to complete Section 0 .5 hr	*estimated time to complete Section 1* 1 hr	*estimated time to complete Section 2* 2 hrs

Part 2: *We suggest working on projects that you can use in your course during the second week.*

Section 3 **Learning Mindset Materials for Your Instruction**	Section 4 **Next steps**	**Project Options** *Select and submit 2 out of 6*
3.0 Creating Materials for Your Instruction 3.1 Project Options 3.2 FAQs on Choosing Projects 3.3 Ready, Set...	4.1 Final Activities 4.2 Course Wrap Up	Project A: Email Messaging Project B: Introducing Learning Mindsets to your Student Project C: Motivationally Planning your First Day of Class (and Beyond) Project D: Active Learning Routines Project E: Assignment Routines Project: F: Exam Routines
estimated time to complete Section 3 .5 hour	*estimated time to complete Section 4* .5 hour	*estimated time to complete Project Options* 3-6 hrs

Motivate Lab Learners Course (Spring 25) - Faculty

Motivate Lab

Projects

Email Messaging

Apply Mindset GPS towards an: **(1) email to welcome your students at the beginning of the term** or **(2) email to send students, who have struggled on a recent assignment or exam** that contains learning mindset supportive messages.

Introducing Learning Mindsets

Provides ready-to-go activities on how to introduce **(1) Growth Mindset** or **2) Purpose and Relevance** concepts to your students.

Motivationally Planning

Models how you can plan to **support students' Learning Mindsets on your first day of class (as well as to consider motivationally planning additional days after that)**.

Active Learning Routines

Shows you how to **support student learning mindsets by integrating different types of active learning routines into your instruction.** In this project, we provide a list of active learning strategies that support each Learning Mindset, which you can adopt as one-time strategies or more frequently as a class routine.

Assignment Routines

Considers the **assignment routines** you already implement in your course and highlights potential changes to make them more learning mindset-supportive.

Exam Routines

Considers the **exam routines** you already implement in your course and highlights potential changes to make them more learning mindset-supportive.

Wraparound Student Support Services - Faculty

Evidence-based Practices to Advance Student Success

- **EdTrust West - Targeted Strategies to close Equity Gaps**
  Early Alert - 2024 - 2025 Implementation to improve

  - Transfer-level Math and English retention and completion
  - Student engagement with campus resources & support services

  - Administered a 22-question faculty survey on Early Alert on campus
    - Student referral process - clarifications
    - Status acknowledgement and communication - faculty
    - Name change - ‘Early Alert’
    - Potential integration of Early Alert into Canvas
    - Continued outreach to the campus community - data sharing

Wraparound Student Support Services - Students

Citrus College Participation - Fall 2025

- **Equity Accelerator- Enhance Student Belonging**

1. Implement the evidence-based belonging program at California community college campuses in the fall of 2025

2. 30-minute online program helps newly matriculating students understand that initial belonging worries are common & diminish with time, effort, and effective strategies (Reading, Writing Exercises)

3. Students engage more with their social and academic environment, leading to increased persistence and higher achievement (Post program Questionnaire – student experience and demographics)

4. Participation: 73 students (60-82% completed all)

Wraparound Student Support Services - Students

STUDENT EXPERIENCES AND ATTITUDES

After the belonging program, participants were asked to complete a questionnaire about their current and anticipated experiences and attitudes at Citrus College. Their responses provide a broad picture of how participants in the belonging program felt as they began the Fall 2025 term.

Student Goals

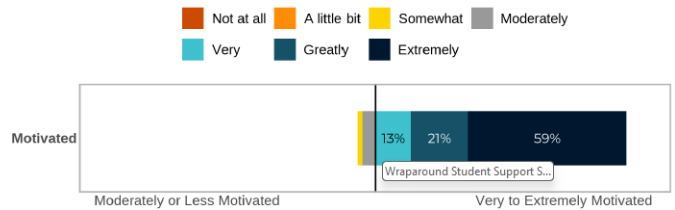
Participants reported various goals as students at Citrus College.

Goal	Percent	N
Earn an Associate Degree	50%	30
Transfer to a 4-year college	67%	40
Earn a certificate (e.g., a Certificate of Achievement)	7%	4
Learn skills that are valuable in the workforce	23%	14
Personal enrichment	15%	9
Goal not listed	2%	1

Note: Participants could select multiple responses.

Academic Motivation

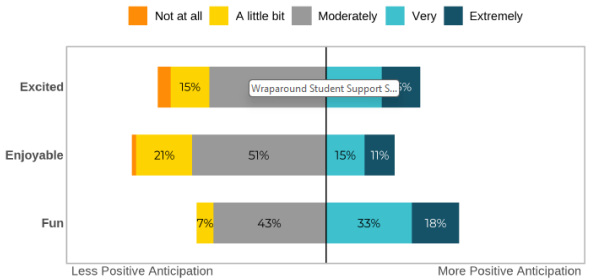
Overall, students reported that they felt highly motivated to do well at Citrus College.



	Not at all	A little bit	Somewhat	Moderately	Very	Greatly	Extremely
Academic Motivation	0%	0%	Estimated 2%	Estimated 5%	13%	21%	59%

Excitement

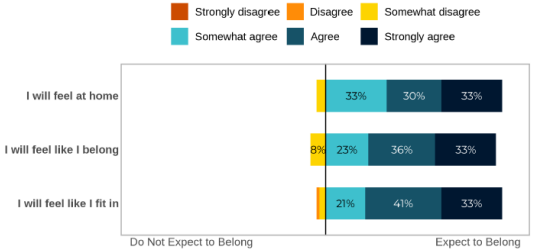
Overall, students reported being somewhat excited and anticipating moderate enjoyment of their time at Citrus College.



	Excited	Enjoyable	Fun
Not at all	Estimated 4%	2%	0%
A little bit	15%	21%	7%
Moderately	Estimated 44%	51%	43%
Very	Estimated 24%	15%	33%
Extremely	Estimated 13%	11%	18%

Future Belonging

Overall, students anticipate that by the end of their time at Citrus College, they will feel like they belong at Citrus College.



	I will feel at home	I will feel like I belong	I will feel like I fit in
Strongly Disagree	0%	0%	0%
Disagree	0%	0%	Estimated 1%
Somewhat disagree	4%	8%	Estimated 4%
Somewhat agree	33%	23%	21%
Agree	30%	36%	41%
Strongly Agree	33%	33%	33%

Mathematics Communities of Practice (COPs)

1. **Calculus** – Innovative STEM Calculus

2. **Statistics** – OER for STAT C1000 (LibreTexts)

3. **Mathematics for Everyday Living** – Contextualizing

4. **Motivate Lab** – Faculty Belonging

5. **Equity Accelerator** – Student Belonging

6. **Ed Trust West** – Targeted Strategies to narrow equity gaps - Early Alert

7. **Equitable and Inclusive Teaching-Learning**

CITRUS COLLEGE

Open to Share Out

Joint Post Conference CCCCO Workshop: Preparing for AB 1705 STEM Implementation: Calculus with support and evaluating outcomes and Presentation: Student Success in Corequisite STEM Calculus at Citrus College, Research and Planning, **RP Group Strengthening Student Success Conference**, Burlingame, CA. 2025

Equitable Placement, Support and Completion strategies for STEM Calculus Student Success, **Complete College America Annual Convening**, Baltimore, MD. 2025

Equity-minded redesign of Citrus College's calculus pipeline. **52nd Research Council on Mathematics Education Annual Conference**, Texas A&M University, College Station, TX & **RP Conference**, Burlingame, CA. 2025

All about Transfer-Level Math: Research Insights on Throughput, Pre-calculus and Odds of Transfer, **RP Conference**, Long Beach, CA. 2024

Strategies that help students achieve equitable outcomes in statistics and STEM Calculus Successes through belonging for faculty & students. **53rd Research Council on Mathematics Education Annual Conference**, Las Vegas, NV. (March 2026)

Acknowledgements

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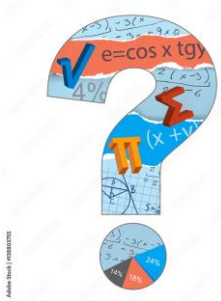
- California Community College Chancellor's Office (**CCCCO**)
  - AB 1705 Funds
  - Curated Support & Technical Assistance

- Seeding Strategies to close Calculus Equity Gaps, **California Learning Lab Grant**, Foundation of California Community Colleges
  - 114 Projects statewide for STEM success

Acknowledgements

- California Acceleration Project
- RP Group Multiple Measures Assessment Project
- Research Council for Mathematics Learning
- Central Valley Higher Education Consortium, Fresno, CA - 28 member consortium of community colleges, CSU's, UC's and other independent Universities
- Academic Senate for California Community Colleges
- Mathematics professionals, Academic Affairs and Student Service teams
- American Mathematics Association of Two Year Colleges, AMATYC



Thank You!

Citrus College Team

bsethuraja, rchen, sophialee
@citruscollege.edu

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Rachel Polakoski, Ed.D.
Math Department Chair & Academic Senate VP

Gabriel Estrella
Research & Planning Analyst

Bri Hays
Senior Dean of Institutional Effectiveness, Success & Equity

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EQUITY, EXCELLENCE, AND SOCIAL JUSTICE THROUGH EDUCATION

Prior Learning Series Webinars

- Calculus with Support
  - Crafton Hills College
  - Ohlone College
  - Napa Valley College
  - Mt. San Antonio College
  - Chaffey College
- Innovative Courses
  - Santa Monica College
  - Chaffey College
- Collaboration between Institutional Research and Faculty
  - Moorpark College

Upcoming Spring Webinars

Collaboration between IR and English Faculty

- Moorpark College, February 4, 12-1 p.m.

AB 1705 Steering Committee Supporting Math Pathways

- Fresno City College, March 11, 12-1 p.m.

AB 705 ESL Pathways: Spotlight on Transferable ESL

- Irvine Valley College and De Anza College, April 22, 12-1 p.m.

Concurrent Support Workshop Series – January-May, 2026

- Focus on curricular design and embedded support structures

Thank You For Attending!

The webinar and materials and recording will be posted to the Chancellor's Office Equitable Placement, Support and Completion webpage

Questions?
Email the Equitable Placement and Completion Team
AB1705@CCCCO.edu