Corequisite Support for Students With a Low Placement Profile in the California Community Colleges: Implementation and Impact Post-AB 705

Five-Year Trends, 2019–2020 through 2023–2024

Daisy Segovia
Mallory Newell
Lauren Ilano
Kelley Karandjeff
January 2026
www.rpgroup.org/mmap

Table of Contents

Executive Summary

INTRODUCTION

In California, a key aspect of the developmental education reform advanced by Assembly Bill (AB) 705 and furthered by AB 1705 is the use of *corequisite* support for community college students. Corequisite courses offer academic assistance via a separate support course taken concurrently with transfer-level math or English courses. These courses are designed to help students who desire or need extra support to succeed in the English and math courses required by their program of study. This approach particularly seeks to boost completion rates in transfer-level English and math among students with a *low placement profile*, based on their high school coursework and grade point average (GPA) (see sidebar).[1]

Corequisite Support Basics

- Identified as a primary intervention in AB 705 and AB 1705.
- Involves student enrollment in a support course concurrent with the transfer-level English or math course required for their program.
- Intended to provide academic assistance to low-placement-profile students, based on low overall high school GPA and/or given their course-taking history.

This report details new findings from the Research and Planning Group for California Community Colleges' (The RP Group) Multiple Measures Assessment Project (MMAP) on corequisite support implementation and enrollment across the California Community Colleges since AB 705 implementation (2019–20 through 2023–24). It also looks at the impact of corequisite support on students' timely completion of transfer-level English and math—both compared to students starting in developmental education courses pre-AB 705 and to students enrolled in standalone courses without this support post-AB 705. It particularly explores whether students with a low placement profile are receiving the support they need to succeed in these required courses.

ENGLISH

Scope of English Corequisite Support Implementation

Most California community colleges now offer transfer-level English courses with corequisite support. Since AB 705's implementation in 2019, roughly 90 of the system's 115 colleges offering transfer preparation have provided students this option each year, almost double the number of colleges in 2018–19.

However, the vast majority of the sections offered are still standalone courses. While most colleges have provided corequisite-supported sections over the past five years, the proportion of students enrolling in a transfer-level English course with corequisite support has remained consistent at 10%. Corequisite English sections and enrollments both peaked in 2019–20 and then declined—sections by 22% and enrollments by 26%. Corequisite-supported section counts fell faster than overall transfer-level English sections during this period, but the drop in corequisite-supported enrollments was similar to overall transfer-level English enrollment trends.

Moreover, enrollment data indicate corequisite-supported English courses are mostly populated by students with a higher placement profile. Corequisite-supported sections of transfer-level English are primarily filled with students in the highest high school GPA band, who also comprise the largest proportion of

[1] This report focuses on corequisite support courses. *Considerations for Strengthening Concurrent Support Courses in English and Math* provides details on the differences between enhanced and corequisite support.

all first-time English enrollments. While this intervention is intended to assist those in the lowest high school GPA band,[2] fewer than one in 10 students in corequisite-supported courses had a lower GPA.

Further, less than one-quarter of students with a low placement profile enroll in corequisite-supported English. In 2023–24, 22% of students with a low placement profile enrolled in corequisite-supported courses. While a higher enrollment rate than other placement groups (7% of those in the highest placement group enrolled in corequisite-supported courses), participation among low-placement-profile students still represents a small proportion of the group overall.

English Corequisite Support Impact

To understand the effect of different curricular approaches, analysis compared the outcomes of students who started in developmental education pre-AB 705 to those who began in a corequisite-supported or standalone course post-AB 705. **Students with a low placement profile who started in transfer-level English courses with corequisite support had much higher completion than those who began in developmental education.**[3] Regardless of high school performance, a transfer-level start produced higher rates of completion within one year of entering the sequence for every level of preparation relative to historical outcomes for developmental education. Importantly, **students with a low placement profile had similar outcomes in corequisite-supported English versus standalone courses.**

At the same time, **English completion rates for students with a low placement profile varied considerably across colleges, both pre- and post-AB 705 implementation.** Completion rates in corequisite-supported courses ranged by 75 percentage points (from 25% to 100%), compared to a roughly 40-percentage-point range for both developmental education and standalone courses. Notably, low-placement-profile students in corequisite-supported courses outperformed their counterparts in standalone sections at 11 colleges, indicating an opportunity to examine how institutions with higher completion rates structure and implement these courses.

MATH

Scope of Math Corequisite Support Implementation

Most California community colleges now provide transfer-level math courses with corequisite support. In the year following the full implementation of the legislation, the number of colleges with corequisite-supported math courses increased more than twofold from 43 to 94. Since then, the number of institutions offering students this assistance has inched up slightly to 96 in 2023–24.

Still, similar to English, most transfer-level math sections are standalone courses. Since AB 705 implementation, only about 12% of transfer-level math students have enrolled in sections with corequisite support. Corequisite sections and enrollments peaked in 2019–20 and then declined—sections by 13% and enrollments by 15%. Although the drop in corequisite sections was steeper than the overall decline in transfer-level math sections, the decrease in corequisite enrollments was actually smaller than the overall enrollment drop in transfer-level math.

[2] See statewide default placement rules for English and math in Appendix B.

[3] Transfer-level English course completion rates from one year of starting in the sequence were 19% for students who started in developmental education, 39% for students who started in corequisite-supported courses, and 41% for students who started in standalone courses.

Scope of Corequisite Implementation by Math Pathway

A student's math pathway depends on their major area of study. Options include Statistics and Liberal Arts Math (SLAM), which represents the largest share of math enrollments across the CCC system; Science, Technology, Engineering, and Math (STEM) math; and business math (see sidebar, Math Pathway Basics).

Enrollment in corequisite-supported courses varies by math pathway:

- **SLAM has consistently had the largest proportion of corequisite-supported enrollments since AB 705 implementation compared to other math pathways**, hovering around 15% of all transfer-level enrollments in the pathway.
- **STEM math students are least likely to enroll in corequisite-supported courses compared to other math pathways.** In 2023–24, just 13% of transfer-level STEM math students enrolled in corequisite-supported courses (up slightly from 10% in 2019–20).
- **Business math has shown the largest increase in corequisite utilization** over the same period compared to other math pathways, growing from 8% of all transfer-level enrollments in 2019–20 to 15% in 2023–24.

Math Pathway Basics

SLAM: Intended for non-STEM and non-business majors. Includes courses such as statistics or liberal arts math.

STEM math: Intended for students majoring in chemistry, computer science, engineering, geology, math, physics, and biology; includes college algebra, trigonometry, and STEM Calculus 1 courses.

Business math: Intended for business administration majors; includes finite math or any math course with "business" in the title or description.

Enrollment data show that **corequisite-supported math courses are more likely to serve students with a low placement profile as intended**, especially in the STEM and business math pathways. Placement guidelines vary by math pathway; while SLAM placement is based on high school GPA alone, STEM and business math also consider the level of students' high school math coursework in the process.

Since AB 705 implementation, SLAM courses with corequisite support have been largely populated by students with the highest placement profile, although the proportion of students with a low placement profile has increased over time (reaching 16% in 2023–24). On the other hand, students with a low placement profile comprise the majority of enrollments in corequisite-supported transfer-level math courses in the business and STEM math pathways (53% and 82%, respectively, in 2023–24).

While students with a low placement profile are more likely to enroll in corequisite-supported math courses than their higher-placement-profile peers, participation is still low across all math pathways. Like English, less than a quarter of the low-placement-profile students receive this support across all pathways.

Math Corequisite Support Impact

We looked at completion of transfer-level coursework within one year of starting in the sequence (all math pathways combined) for students with a low placement profile and compared their starting course type (i.e., developmental education, corequisite supported, standalone). [4] Overall, we found that **students with a low placement profile who start in transfer-level math courses with corequisite support have significantly higher completion rates than those who begin in developmental education.** When comparing outcomes for low-placement-profile students in transfer-level math with and without corequisite support, **standalone courses produced the highest completion rates across all math pathways.**

[4] 15% developmental education, 54% corequisite supported, 60% standalone.

Again, **math completion rates for students with a low placement profile varied considerably across colleges, both pre- and post-AB 705 implementation.** As with English, the completion range is much wider for corequisite-supported math versus standalone courses, also raising questions about corequisite implementation across the system.

CONCLUSION

While most California community colleges have offered corequisite support courses for transfer-level English and math since AB 705 implementation in fall 2019, **student participation remains highly limited**. **Moreover, colleges variably engage low-placement-profile students—the intended population—with this support,** even though AB 1705 clarified that corequisites can be required for this student group.[5]

At present, **the impact of corequisite support is mixed**. Low-placement-profile students who start in transfer-level courses with corequisite support achieve significantly higher completion than those who begin in developmental education. In English, these students perform similarly in corequisite-supported and standalone courses, while in math, standalone offerings yield the best completion. Yet, **results range widely across colleges**.

Taken together, these insights suggest that ensuring students with a low placement profile receive the support they need to succeed in transfer-level English and math—an essential educational milestone—will depend on refining existing corequisite models, further understanding the impact of different implementation approaches, and exploring the promise of enhanced courses that embed support.

[5] Find additional information in the *FAQ for STEM Calculus Pathway Placement and Initial Enrollment*.

Introduction

In California, a key aspect of the developmental education reform advanced by Assembly Bill (AB) 705 and furthered by AB 1705 is the use of *corequisite* support for community college students. Corequisite courses offer academic assistance via a separate support course taken concurrently with transfer-level math or English courses. These courses are designed to help students who desire or need extra support to succeed in the English and math required by their program of study. This approach particularly seeks to boost completion rates in transfer-level English and math among students with a *low placement profile*, based on their high school coursework and grade point average (GPA) (see sidebar).[6]

Corequisite Support Basics

- Identified as a primary intervention in AB 705 and AB 1705.
- Involves student enrollment in a support course concurrent with the transfer-level English or math course required for their program.
- Intended to provide academic assistance to low-placement-profile students, based on low overall high school GPA and/or given their course-taking history.

Ample evidence indicates that students with a low placement profile are more likely to complete transfer-level English and math requirements if they enroll directly in these courses; it also indicates that students' outcomes are better if they receive corequisite support when they start at the transfer level instead of starting in preparatory *prerequisite* coursework (Boatman, 2012; Cho et al., 2012; Cuellar Mejia et al., 2020; Cuellar Mejia et al., 2023; Jenkins et al., 2010; Logue et al., 2016; Logue et al., 2019; Ran & Lin, 2022). However, little research compares the outcomes of students in standalone transfer-level courses without support to those receiving corequisite assistance.

In California's community colleges, all students now start at the transfer level in English and math.[7] Most colleges have offered corequisite-supported coursework in these disciplines since AB 705 was implemented in 2019–20. This context offers a new opportunity to assess whether students with a low placement profile are receiving this assistance as intended and whether it is improving their outcomes as anticipated.

IN THIS REPORT

This report details new findings from the Research and Planning Group for California Community Colleges' (The RP Group) Multiple Measures Assessment Project (MMAP) on corequisite support adoption across California's community colleges post-AB 705 and the impact on students' timely completion of English and math requirements. It particularly explores whether students with a low placement profile are receiving the support they need to succeed.

We begin with an overview of the data and methods used in these analyses, followed by a summary of key findings organized first by English and then by math. For each discipline, we provide an overview of corequisite support implementation and enrollment across the California Community Colleges and the effect of participation in corequisite support on transfer-level English and math completion for students with a low placement profile. Where relevant, we disaggregate results by students' level of preparation as indicated by high school academic performance. We conclude with recommendations for when the use of corequisite support is most advantageous and for which students, based on these results.

---

[6] This report focuses on corequisite support courses. *Considerations for Strengthening Concurrent Support Courses in English and Math* provides details on the differences between enhanced and corequisite support.

[7] Find more information in *Student Enrollment and Success in Transfer-Level English and Math: Analysis of AB 705 Impact in the California Community Colleges (CCC) through 2023-2024*.

DATA AND METHODS

The RP Group obtained data for this analysis from the Chancellor's Office Management Information System (COMIS).[8] For English, we identified courses by the Taxonomy of Programs (TOP) code 1501.00 (English). For math, we included courses with the TOP codes 1701.00 (Mathematics) and 1702.00 (Mathematics Skills) as well as specific *non-math* department courses that meet math transfer requirements (e.g., PSYCH 258 - Behavioral Science Statistics) in other TOP code areas, which were identified in partnership the Academic Senate for the California Community Colleges (for list of TOP codes, see Appendix A).

We excluded data from noncredit and adult education colleges since they primarily do not offer transfer-level coursework or corequisite support, and for students who were dually enrolled as high school students.[9] We also excluded data for enhanced courses, where students take a single, higher-unit transfer-level English or math course, as they are structured differently from the corequisite support model.

Understanding Corequisite Support Implementation and Enrollment Across California's Community Colleges

To first understand the extent of corequisite support adoption since the implementation of AB 705 (2019–20 through 2023–24),[10] we determined the number of California community colleges offering sections of transfer-level English and math courses with an associated corequisite support course and the number of students enrolled in these offerings. In English, this analysis yielded 211,567 corequisite enrollment records at 99 colleges during the five-year period, and in math, it yielded 254,463 corequisite enrollment records from 104 colleges during the same timeframe. We further segmented these enrollments by math pathway: Statistics and Liberal Arts Math (SLAM); Science, Technology, Engineering, and Math (STEM) math,[11] and business math.[12] Then, we disaggregated both English and math corequisite enrollments by students' high school performance based on the statewide default placement rules (see Appendix B) to determine if these courses were comprised of students with a low placement profile as intended.

English default placement rules are based on students' high school GPA; similarly, math default placement rules are based on high school GPA, and in some cases, high school coursework. We obtained students' self-reported high school GPAs and coursework from data students submitted on their CCCApply application. In the English cohort, 80% of students reported their high school GPA on their application. In the math cohort, 76% of students reported their high school GPA, and 70% provided high school math course grades, resulting in an unduplicated total of 77% with the application data necessary to calculate their placement profile. For the purposes of these analyses, students in the *low placement profile* group are students whose high school academic performance placed them in the low high school GPA placement band, where concurrent support may be strongly recommended or required. (See Appendices C and D for a breakdown of the GPA distribution for these data samples.)

Determining the Impact of Corequisite Support for Low-Placement-Profile Students

Second, we analyzed the impact of corequisite support on the timely completion of transfer-level English and math for students with a low placement profile. We focused on colleges that offered corequisite support since

---

[8] Data extracted using the MMAP data file methodology.

[9] AB 705 excludes special admit students, including students who are dually enrolled as high school students in community college courses; therefore, these analyses also exclude them. Students who subsequently enroll in a community college post-high school graduation are captured in the data at that time.

[10] The most recent year for which data were available when analysis was completed.

[11] STEM math courses consisted of college algebra, trigonometry, precalculus or calculus courses not designated as *business* or *applied* math in the course title or description.

[12] Business math courses consisted of Finite Math or any math with *business* in the course title or description.

AB 705 implementation (i.e., fall 2019 and after) and first-time enrollments in the discipline. In English, the total cohort size was 217,968 across 99 colleges. In math, the total cohort size was 794,150 from 104 colleges. Cohorts included low-placement-profile students starting in the following courses and timeframes:[13]

- **Developmental education courses (pre-AB 705):** These students enrolled in an English or math course, one level below college level;[14] we filtered students to only include those who were degree-seeking or transfer-intending, or who had unknown educational goals[15] to ensure they ultimately planned to take a transfer-level course. Since most colleges did away with developmental education courses in the wake of AB 705, we used data from before its implementation (fall 2012 through spring 2017).[16]

- **Corequisite-supported courses (post-AB 705):** We identified corequisite courses via an extensive review of catalog course descriptions; then, we identified students who took the corequisite course and its associated transfer-level English or math course in the same term. For these courses, we used data for student cohorts that entered college during the period after the legislation's implementation (fall 2019 through spring 2023).[17]

- **Standalone courses (post-AB 705):** These students enrolled directly in a transfer-level English or math course with no associated corequisite support section; again, we used data for student cohorts that entered college during the period after the legislation's implementation (fall 2019 through spring 2023).

Then we looked at students' successful completion of a transfer-level course within one year of first enrollment in the sequence. We compared the rates of students experiencing different curricular approaches in English and math to determine how receiving corequisite support affected transfer-level course completion for low-placement-profile students compared to starting in developmental education or a standalone course. In English, assessing timely completion is more straightforward, as there is just one transfer-level course all students take: college composition. For math, we examined students' completion of *any transfer-level math course* within one year of first enrollment in the math sequence based on math pathway (SLAM, STEM math, or business math).

[13] We analyzed the first course in which a student enrolled in each subject with a valid grade. Valid grades included: A, A-, A+, B, B-, B+, C, C+, D, D-, D+, EW, F, F+, FW, IA, IA-, IB, IB-, IB+, IC, IC+, ID, ID-, ID+, IF, INP, IPP, IX, NP, P, and W. For more information on enrollment grades used by the CCC system, see COMIS data element SX04. In cases where a student was enrolled in more than one course in the same term within the same subject, we analyzed the lowest-level course.

[14] As indicated by CB21 code of A.

[15] As indicated by SB14 code of A, B, C, or M.

[16] Transition years fall 2017 through spring 2019 were excluded, when corequisite courses were not yet required, and some, but not all, colleges implemented this approach.

[17] While enrollment data are available through spring 2024, monitoring timely completion requires one year from enrollment in the sequence; therefore, spring 2023 represents the last semester possible for observing completion rates for the cohort.

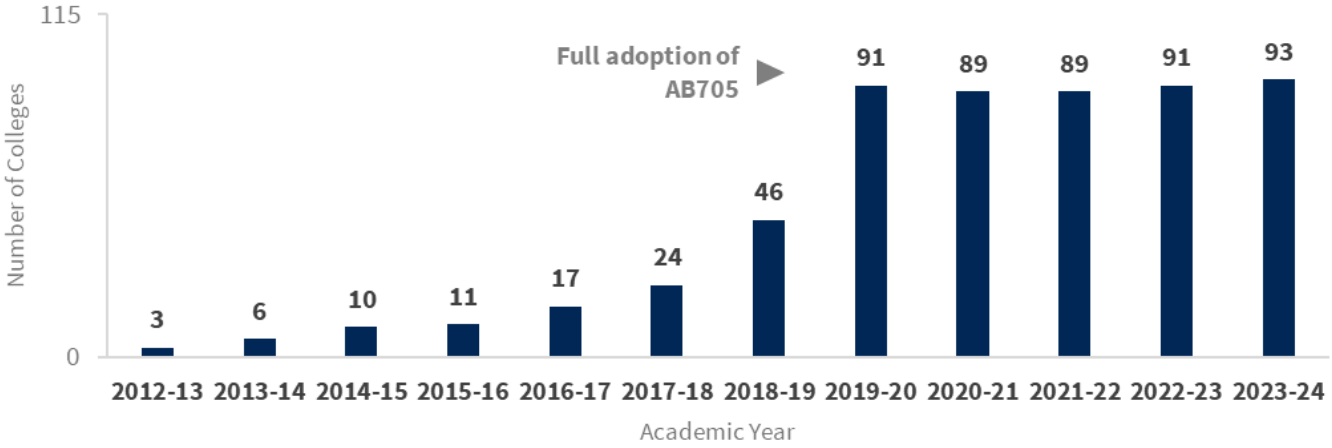
English

SCOPE OF ENGLISH COREQUISITE SUPPORT IMPLEMENTATION

Most California community colleges now offer transfer-level English courses with corequisite support. Following AB 705's implementation in 2019, roughly 90 of the system's colleges have offered students this option each year (Figure 1), almost double the number of colleges in 2018–19.

Figure 1. By 2023–24, 81% of 115 California community colleges offered corequisite support for transfer-level English courses.[18]

Number of colleges offering corequisite-supported English courses by academic year



However, the vast majority of English sections are standalone courses. While most colleges have provided corequisite-supported sections over the past five years, the proportion of students enrolling in a transfer-level English course with corequisite support has remained consistent at 10% (Table 1).

Corequisite English sections and enrollments both peaked in 2019–20 and then declined—sections by 22% and enrollments by 26%. Corequisite-supported section counts fell faster than overall transfer-level English sections during this period, but the drop in corequisite-supported enrollments was similar to overall transfer-level English enrollment trends.

[18] Calbright College—the 116th California community college—is excluded from analyses because it does not grant degrees or provide transfer preparation.

Table 1. Since AB 705 implementation, just 10% of English Composition students take corequisite-supported courses; standalone courses still represent most of the sections offered.

All transfer-level vs. corequisite-supported English enrollments by academic year

Sections	All English Composition Sections		Corequisite-Supported Sections		
Academic Year	Sections	Enrollments	Sections	Enrollments	% of Total Enrollments
2019–20	23,842	459,128	2,973	53,653	10%
2020–21	21,838	385,339	2,539	42,101	10%
2021–22	20,601	333,966	2,362	36,983	10%
2022–23	20,311	338,844	2,382	39,285	10%
2023–24	20,689	348,283	2,323	39,545	10%
Change	**-13%**	**-24%**	**-22%**	**-26%**	**0%**

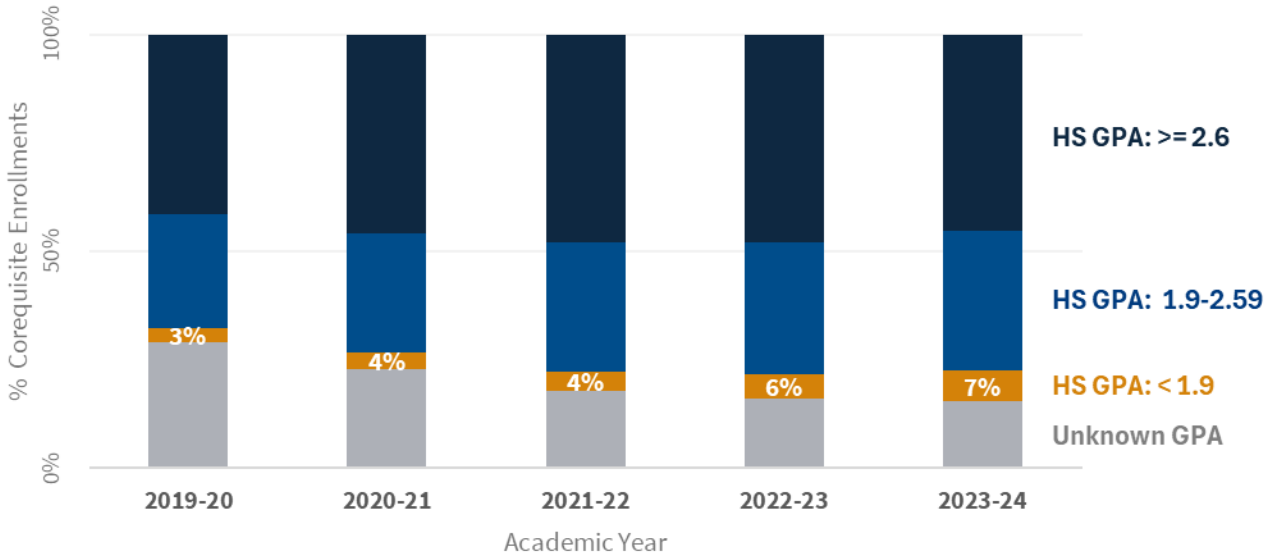
Notes: Percentages are rounded to the nearest whole number. All English composition sections enrollment counts represent enrollments for both corequisite-supported and standalone transfer-level English courses across colleges that offered corequisite support.

Moreover, enrollment data indicate corequisite-supported English courses are mostly populated by students with a higher placement profile. Corequisite-supported sections of transfer-level English are primarily filled with students in the highest high school GPA band, who also comprise the largest proportion of all first-time English enrollments.[19] While the California Community Colleges Chancellor's Office guidance allows colleges to locally determine whether to require or recommend students' participation in corequisite support (and AB 1705 clarifies that corequisite support can be required), this intervention is intended to assist those in the low high school GPA band. However, fewer than one in 10 students in corequisite-supported courses had a low GPA, with the largest percentage enrolled in 2023–24 (Figure 2).

[19] See additional detail in Appendix C.

Figure 2. Students with a low placement profile consistently represented the smallest share of corequisite-supported English enrollments.

Percent of corequisite-supported English enrollments by HS GPA placement band and academic year

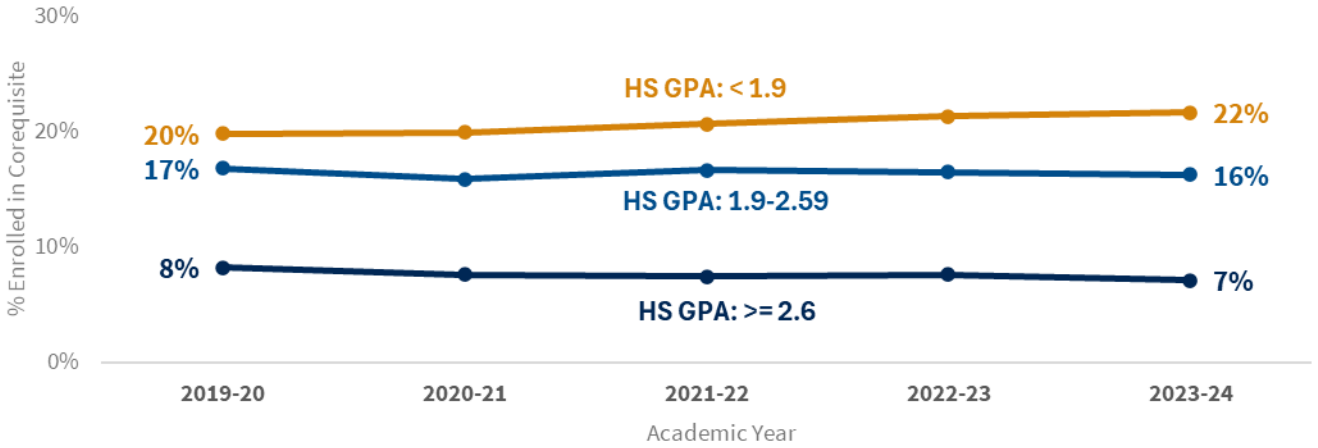


Notes: Percentages rounded to the nearest whole number. Students enrolled in transfer-level English courses with corequisite support in each academic year since 2019–20 by HS GPA placement band, based on statewide English default placement rules. See additional detail in Appendix C.

Less than one-quarter of students with a low placement profile enroll in corequisite-supported English courses (Figure 3)—a consistent trend since 2019–20. For example, 22% of students with a low placement profile enrolled in corequisite-supported courses in 2023–24. While a greater rate than their peers with higher high school GPAs, proportionally speaking, corequisite participation among low-placement-profile students remains limited.

Figure 3. While higher than other groups, students with a low placement profile still enroll in corequisite-supported English courses at consistently low rates.

Percent within each HS GPA placement band enrolled in corequisite-supported English courses by academic year



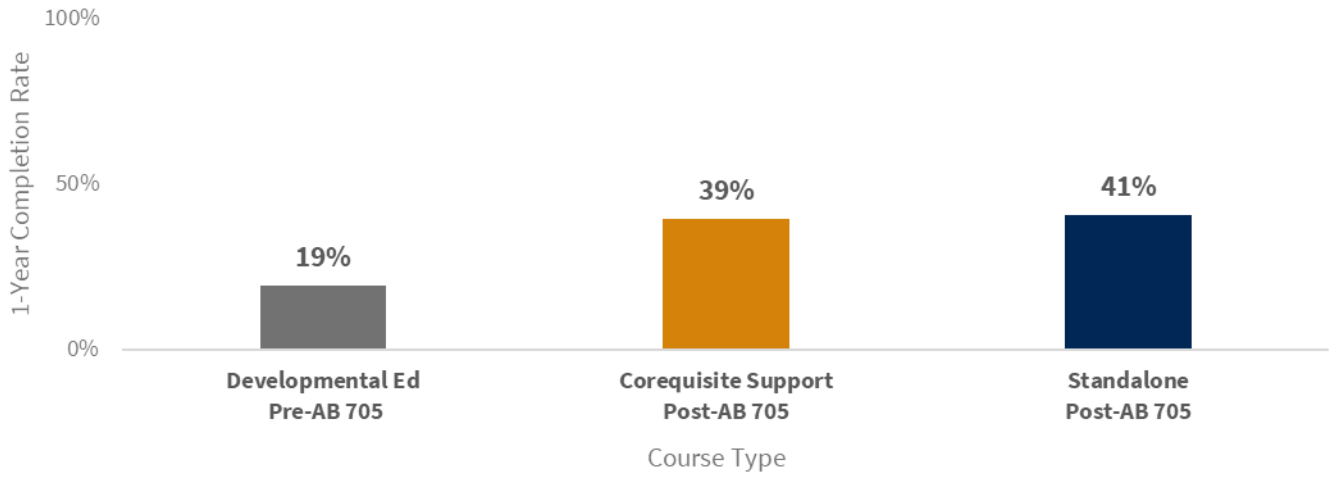
ENGLISH COREQUISITE SUPPORT IMPACT

To determine how different curricular approaches impact students' successful completion of transfer-level English in one year, we compared those who started in developmental education pre-AB 705 to those who began in a corequisite-supported or standalone English Composition course post-AB 705. Results showed that **students with a low placement profile who start in transfer-level English courses with corequisite support have much higher completion than those who begin in developmental education.** Regardless of high school performance, a transfer-level start produced higher rates of completion within one year of entering the sequence for every level of preparation relative to historical outcomes for developmental education.

Importantly, **students with a low placement profile have similar outcomes in corequisite-supported English versus standalone courses.** When narrowing the comparison groups to students enrolled in transfer-level English with and without corequisite support since AB 705 implementation, students with a low placement profile in the two types of courses demonstrated similar one-year course completion (Figure 4).

Figure 4. Students with a low placement profile starting in corequisite-supported English Composition outperformed those who began in developmental education.

One-year English completion (%) for students with a low placement profile by starting course type



Notes: Cohort: Focus on colleges that have offered students the option of transfer-level English with corequisite support since 2019–20, with at least 10 enrollments per course type. Developmental Ed = Students with a degree, transfer, or unknown education goal whose first English enrollment was one level below transfer between fall 2012 and spring 2017. Corequisite Support = Students whose first English enrollment was in a transfer-level course with corequisite support between fall 2019 and spring 2023. Standalone = Students whose first English enrollment was in a standalone transfer-level course between fall 2019 and spring 2023.

The success of students with a low placement profile in corequisite-supported English courses ranges widely across California's community colleges. Colleges showed significant variation in transfer-level English completion within one year for low-placement-profile students, regardless of starting course type (Figure 5; see also Appendix C).

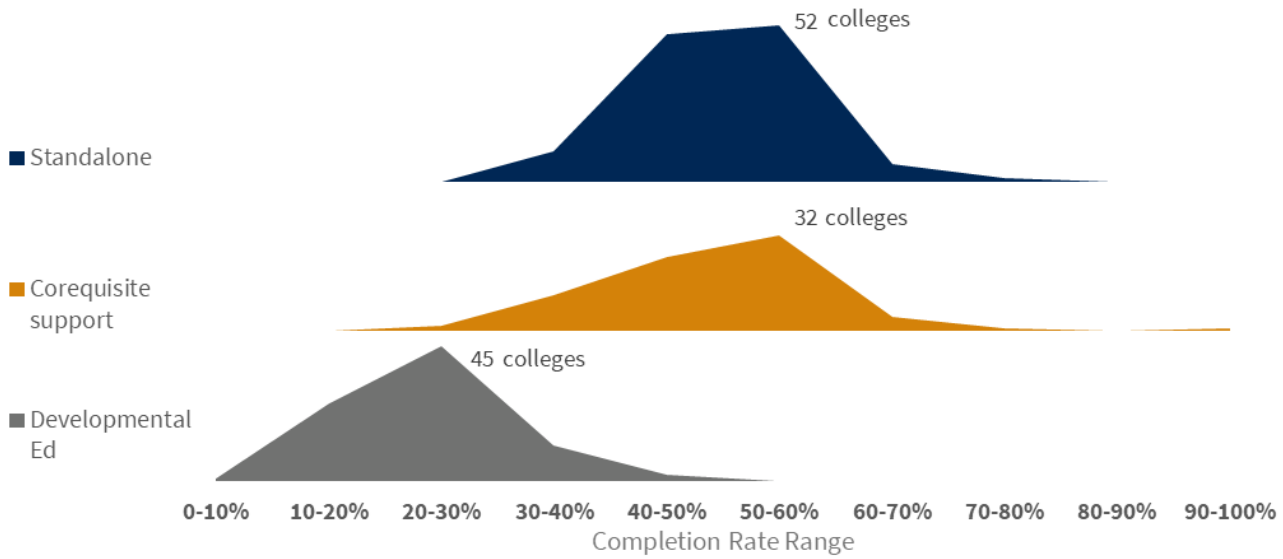
For students with a developmental education start, the largest number of colleges (45) clustered around the lower range (20–30%). While outcomes varied for those with a developmental education start, even the highest rates were still less than 50%.

The greatest number of colleges (52) had completion rates in standalone sections in the 50–60% range. Similarly, the greatest number of colleges (32) had completion rates in corequisite-supported sections in the same range.

Completion rates in corequisite-supported courses ranged by 75 percentage points (from a low of 25% to a high of 100%), compared to a roughly 40-percentage-point range for both developmental education and standalone courses. Notably, low-placement-profile students in corequisite-supported courses outperform their counterparts in standalone sections at 11 colleges (see p. 18-19 for college spotlights). This range indicates an opportunity to examine how colleges with higher completion rates for low-placement-profile students in corequisites structure and implement these courses.

Figure 5. English completion rates for students with a low placement profile varied across the system, both pre- and post-AB 705 implementation.

Distribution of colleges within each English completion range for students with a low placement profile by starting course type



Notes: Cohort: Focus on colleges that have offered students the option of transfer-level English with corequisite support since 2019, with at least 10 enrollments per course type. Developmental Ed = Students with a degree, transfer, or unknown education goal whose first English enrollment was one level below transfer between fall 2012 and spring 2017. Corequisite Support = Students whose first English enrollment was in a transfer-level course with corequisite support between fall 2019 and spring 2023. Standalone = Students whose first English enrollment was in a standalone transfer-level course between fall 2019 and spring 2023.

SPOTLIGHT ON COREQUISITE ENGLISH SUCCESS[20]

Norco College

Corequisite Quick Facts:

- **Corequisite Course:** ENG 91 – Academic Support for English 1A
- **Main Course:** ENG 1A – English Composition or ENG 1AH – Honors English Composition*
- **Corequisite Course Structure:** 2.0 units, 36 term lecture hours; non-degree credit; pass/no pass grading

At Norco College (Norco), low-placement-profile students in corequisite-supported English courses achieve completion rates that are 13 percentage points higher than those of students in standalone sections. Faculty credit this success, in part, to their intentional approach to corequisite development and implementation. Lisa Hernandez, a key leader in the department's corequisite efforts, underscores the importance of having a "clear and consistent idea" of how the corequisite course can effectively support the main course. In this case, students receive additional time and support to practice reading strategies and writing processes, develop soft skills, and engage in metacognitive reflection.

Hernandez notes that faculty buy-in is also essential. Getting instructors to believe in the corequisite's value for student success and adopt best practices in corequisite instruction makes a meaningful difference. To support this work, Norco has cultivated a dedicated group of full- and part-time faculty who participate in multiple communities of practice (COPs) to support the development of these corequisite courses. These groups have collaboratively built a library of effective strategies and resources to improve corequisite adoption and outcomes.

Hernandez additionally shares that utilizing the corequisite experience to connect students to college resources is pivotal to their success. She explains:

> *Too often, students in our corequisite-supported courses could most benefit from college resources yet are unaware these resources exist. Using a variety of communication methods (Canvas, syllabi, etc.) to share these resources with students can increase their use [and ultimately their outcomes].*

*Updated to ENGL C1000 or ENGL C1000H in 2025–26 catalog due to common course numbering, an effort of the California Community Colleges to assign the same course number to comparable courses across all institutions in the system. Learn more about the Common Course Numbering Project.

[20] The RP Group reached out to 11 colleges via email with a request to spotlight their success with corequisite-supported courses, asking them to (a) confirm the details of specific corequisite offerings identified in the data set based on their 2023–24 catalog, and (b) respond to a brief survey about what they attribute this success to and what advice they would give other colleges about corequisite support design and delivery. Two of three colleges contacted about their English corequisites responded. All eight colleges contacted about their success with corequisite-supported math either did not respond or declined to participate.

Santa Rosa Junior College

Corequisite Quick Facts:

- **Corequisite Course:** ENG 50 – English 1A Support Course
- **Main Course:** ENG 1A – English Composition*
- **Corequisite Course Structure:** 2.0 units, 2 weekly lecture hours; non-degree credit; pass/no pass grading only

At Santa Rosa Junior College (SRJC), low-placement-profile students enrolled in corequisite-supported English courses demonstrate completion rates eight percentage points higher than similar students in standalone sections. English Department Chair Sheryl Cavales Doolan attributes this success to a strong sense of connection fostered in both the corequisite structure and instructional practices. While the corequisite and English Composition courses maintain independent course outlines, their objectives, topics, and assignments closely align. The two courses are also connected structurally; students participate in two, 3-hour class sessions per week. The department strives to hold all support classes in a computer lab, allowing students to immediately apply tools and strategies and get real-time feedback from their instructors.

The same instructor teaches both the English Composition and its linked support course. From Cavales Doolan's perspective, this approach may be the most critical factor in students' success. She explains, "This structure is especially beneficial to students learning with instructors who have adopted culturally responsive and culturally sustaining teaching practices, contract or labor-based grading, and other equity-oriented pedagogies." Combined, these strategies give students "time to engage more deeply with the instructor, with each other, and the course content."

**Updated to ENGL C1000 in 2025–26 catalog due to common course numbering.*

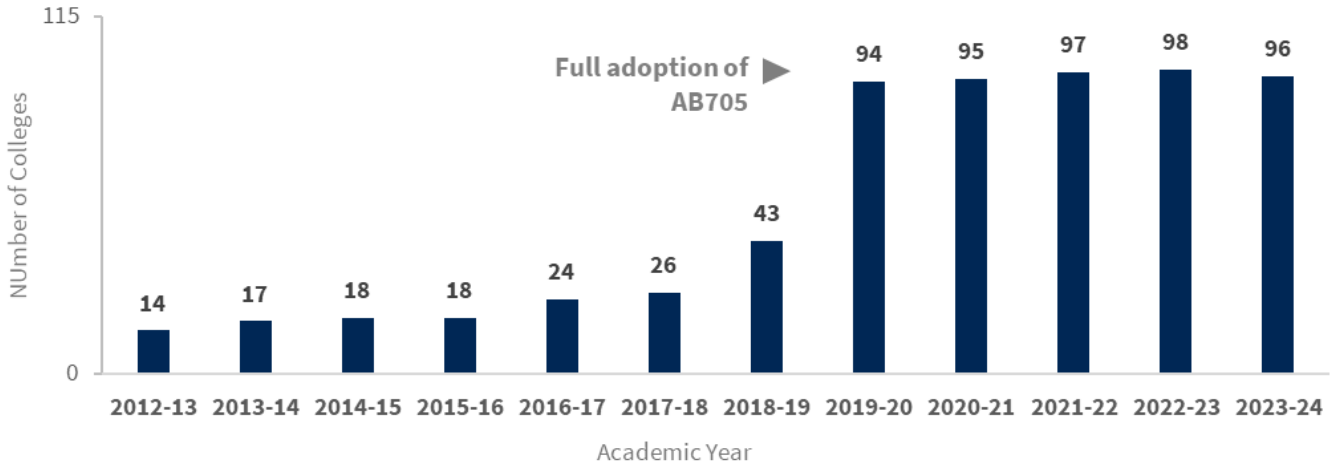
Math

SCOPE OF MATH COREQUISITE SUPPORT IMPLEMENTATION

Most California community colleges now provide transfer-level math courses with corequisite support. In the year following the full implementation of the legislation, the number of colleges with corequisite-supported math courses increased more than twofold from 43 to 94. Since then, the number of institutions offering students this assistance in transfer-level math has inched up slightly to 96 in 2023–24 (Figure 6).

Figure 6. By 2023–24, 83% of 115 California community colleges offered corequisite support for transfer-level math courses.

Number of colleges offering corequisite-supported math courses by academic year



Data show that, similar to English, **most transfer-level math sections are standalone courses** (Table 2). Since AB 705 implementation, only about 12% of students have enrolled in sections with corequisite support. Corequisite math sections and enrollments peaked in 2019–20 and then declined—sections by 13% and enrollments by 15%. Although the drop in corequisite sections was steeper than the overall decline in transfer-level math sections, the decrease in corequisite enrollments was actually smaller than the overall enrollment drop in transfer-level math.

Table 2. Most students enroll in standalone sections of transfer-level math, which still make up the vast majority of all sections offered.

All transfer-level vs corequisite-supported math enrollment by academic year

Sections	All Transfer-Level Main Sections		Corequisite-Supported Sections		
Academic Year	Sections	Enrollments	Sections	Enrollments	% Total Enrollments
2019-20	19,333	469,777	2,939	59,287	11%
2020-21	18,258	412,303	2,726	52,849	11%
2021-22	17,463	330,099	2,549	42,876	11%
2022-23	17,633	342,136	2,698	49,064	13%
2023-24	17,886	365,320	2,570	50,387	12%
Change	**-7%**	**-22%**	**-13%**	**-15%**	**1%**

Notes: Percentages are rounded to the nearest whole number. All transfer-level math sections enrollment counts represent enrollments for both corequisite-supported and standalone transfer-level math courses across colleges that offered corequisite support.

Scope of Corequisite Implementation by Math Pathway

Unlike English, where all students take one course to satisfy their transfer requirements (i.e., English Composition), students' math pathway depends on their major area of study. Options include SLAM, which represents the largest share of math enrollments across the CCC system; STEM math; and business math (see sidebar, Math Pathway Basics).

Enrollments in corequisite-supported courses vary by math pathway:

- **SLAM has consistently had the largest proportion of corequisite-supported enrollments since AB 705 implementation compared to other math pathways**, hovering around 15% of all transfer-level enrollments in the pathway.
- **STEM math students are least likely to enroll in corequisite-supported courses compared to other math pathways.** In 2023–24, just 13% of transfer-level STEM math students enrolled in corequisite-supported courses (up slightly from 10% in 2019-20).
- **Business math has shown the largest increase in corequisite utilization** over the same period compared to other math pathways, growing from 8% of all transfer-level enrollments in 2019–20 to 15% in 2023–24.

Math Pathway Basics

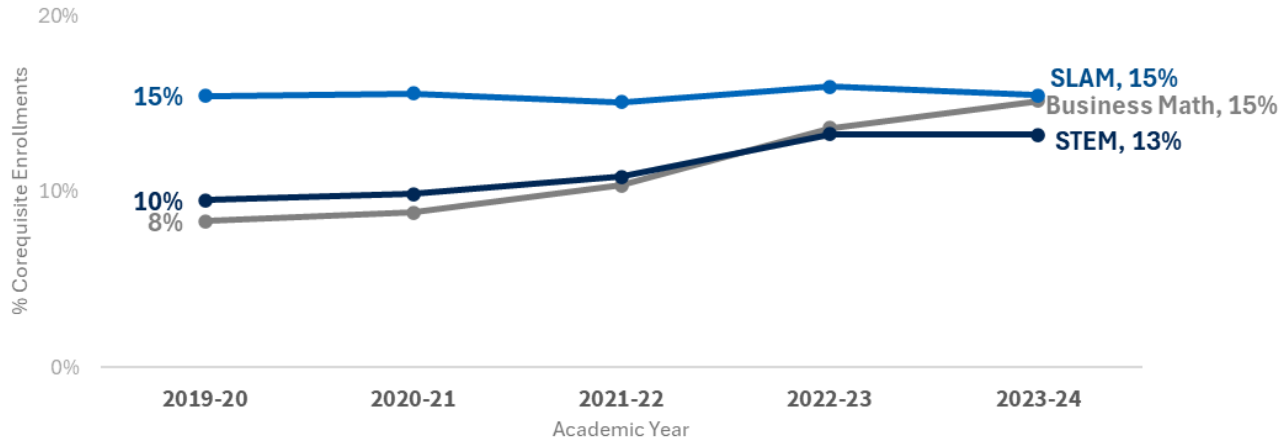
SLAM: Intended for non-STEM and non-business majors. Includes courses such as statistics or liberal arts math.

STEM math: Intended for students majoring in chemistry, computer science, engineering, geology, math, physics, and biology; includes college algebra, trigonometry, and STEM Calculus 1 courses.

Business math: Intended for business administration majors; includes finite math or any math course with "business" in the title or description.

Figure 7. The proportion of corequisite-supported enrollments has remained steady in SLAM and increased slightly for STEM and business math since AB 705 implementation.

Percent of corequisite-supported enrollments by math pathway and academic year



Note: Students enrolled in corequisite-supported courses out of all transfer-level math enrollments across 115 colleges, by math pathway.

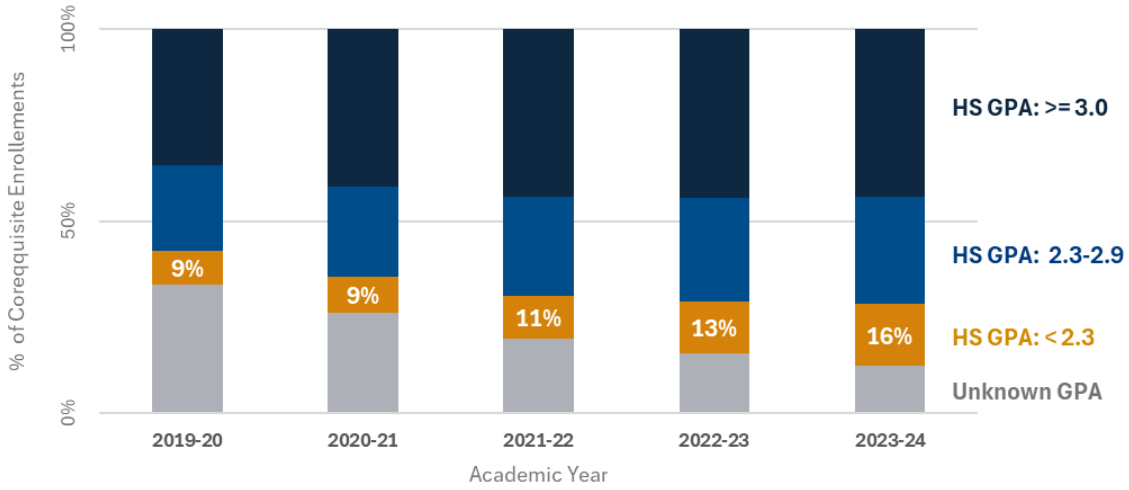
Enrollment data show that corequisite-supported math courses are more likely to serve the intended group—students with a low placement profile—especially in the STEM and business math pathways. As previously discussed, students' high school performance dictates their math placement, and guidelines vary by math pathway. While SLAM placement is based on high school GPA alone, STEM and business math also consider students' high school math coursework in the placement process.[21]

Since AB 705 implementation, SLAM courses with corequisite support have been largely populated by students with the highest high school GPA, although the proportion of students with a low placement profile has increased over time (Figure 8). On the other hand, students in the low placement group comprise the majority of enrollments in corequisite-supported courses in the STEM and business math pathways (Figures 9 and 10).

[21] See statewide default placement rules in Appendix B.

Figure 8. Students with a low placement profile represented the smallest share of corequisite-supported SLAM enrollments.

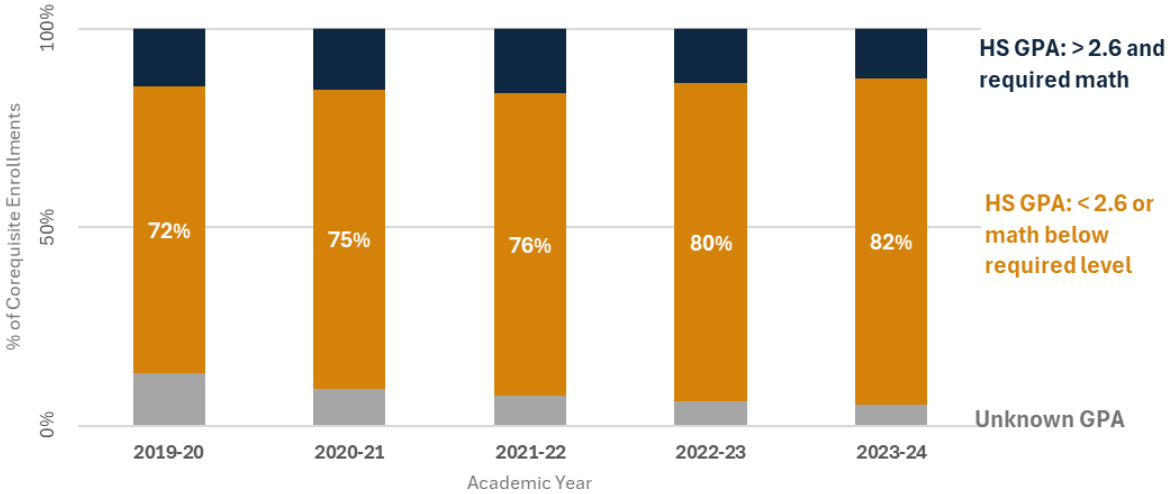
SLAM – Percent of corequisite-supported enrollments by HS GPA placement band and academic year



Notes: Percentages rounded to the nearest whole number. Students enrolled in transfer-level SLAM courses with corequisite support in each academic year since 2019–20 by HS GPA placement band, based on statewide SLAM default placement rules. See additional detail in Appendix D.

Figure 9. Students with a low placement profile comprised the majority of corequisite-supported STEM math enrollments.

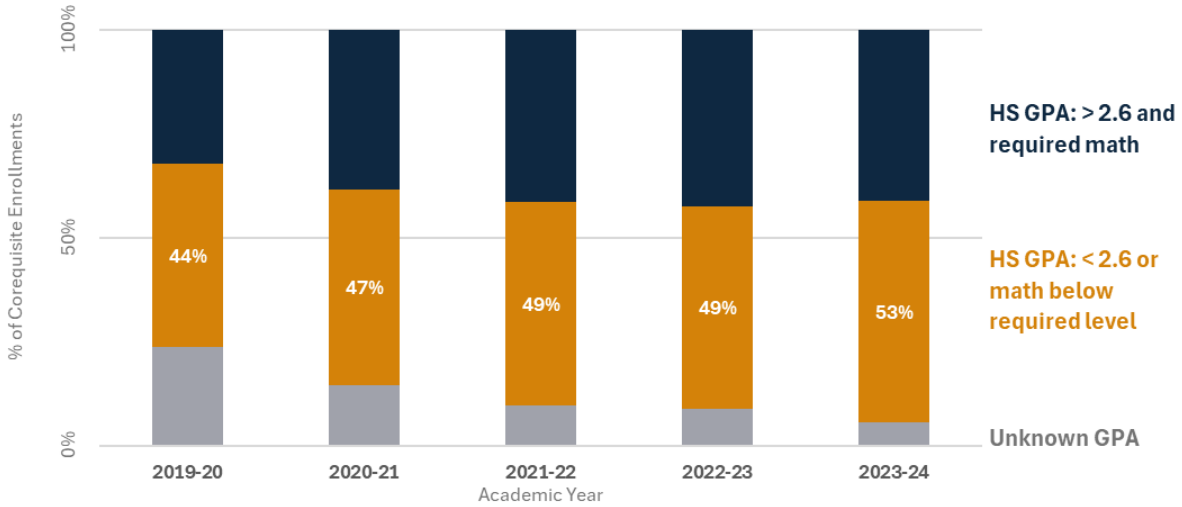
STEM math – Percent of corequisite-supported enrollments by HS GPA placement band and academic year



Notes: Percentages rounded to the nearest whole number. Students enrolled in transfer-level STEM math courses with corequisite support in each academic year since 2019–20 by high school performance band, based on statewide STEM Calculus Pathway default placement rules. High school trigonometry, precalculus, or calculus with a grade of C or better was required for higher placement. See additional detail in Appendix D.

Figure 10. Students with a low placement profile made up the majority of corequisite-supported business math enrollments.

Business math – Percent of corequisite-supported enrollments by HS GPA placement band and academic year



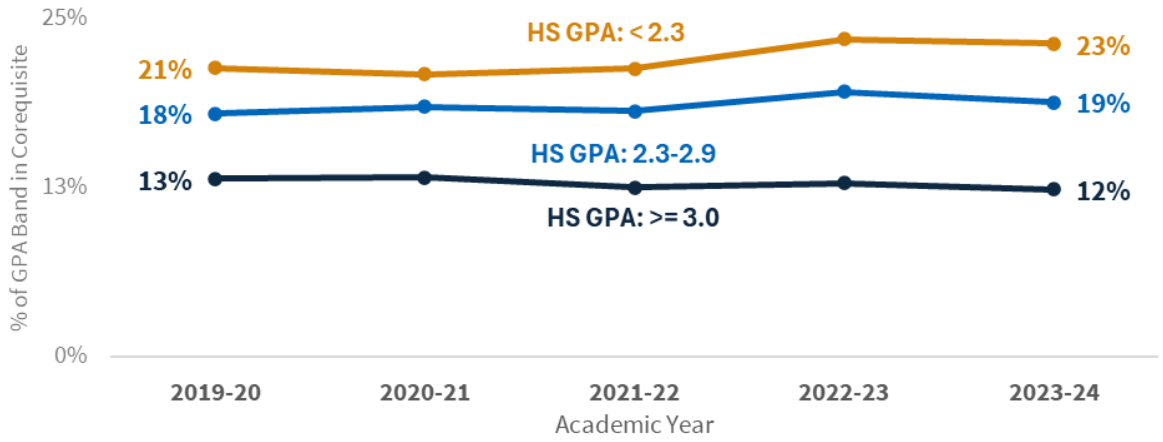
Notes: Percentages rounded to the nearest whole number. Students enrolled in transfer-level business math courses with corequisite support in each academic year since 2019–20 by high school performance, based on statewide Applied Calculus/Business Calculus/Finite Math default placement rules. High school Algebra 2 or Integrated Math 3 (IM3) with a grade C or better was required for higher placement. See additional detail in Appendix D.

Students with a low placement profile are more likely to enroll in corequisite-supported math courses than their higher-placement-profile peers, yet participation is low across all math pathways. While this student group is more likely to take corequisite courses than those with the higher placement profile, less than one-quarter of the low-placement-profile students receive this support across all pathways.

SLAM: Although SLAM students with a low placement profile more frequently enroll in corequisite-supported courses than their counterparts in other mathematics pathways, fewer than 25% receive corequisite support (Figure 11). And while SLAM students with the highest placement profile make up the largest share of corequisite-supported enrollments, still less than 20% of that group take these courses.

Figure 11. Less than 25% of low-placement-profile students enrolled in corequisite-supported SLAM courses.

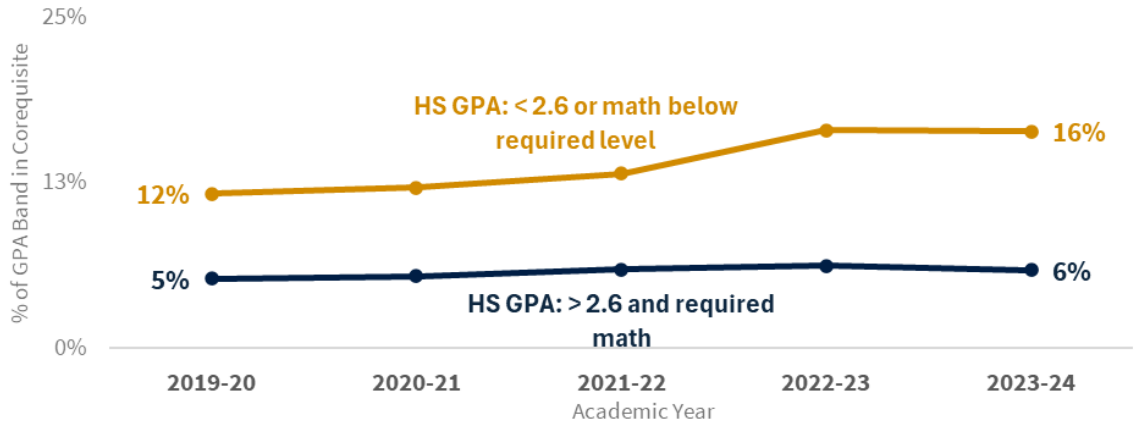
SLAM – Percent within each HS GPA placement band enrolled in corequisite-supported courses by academic year



STEM math: While corequisite-supported courses are largely populated by STEM math students with a low placement profile, only a fraction enroll in these courses in the first place (Figure 12). The proportion of STEM math students in the low high school performance band taking corequisite-supported courses has increased slightly since AB 705 implementation. Yet just 16% received this assistance in 2023–24, the lowest rate for students in the low-placement-profile group across all math pathways.

Figure 12. STEM math students with a low placement profile have had the lowest participation rates in corequisite-supported courses across all math pathways.

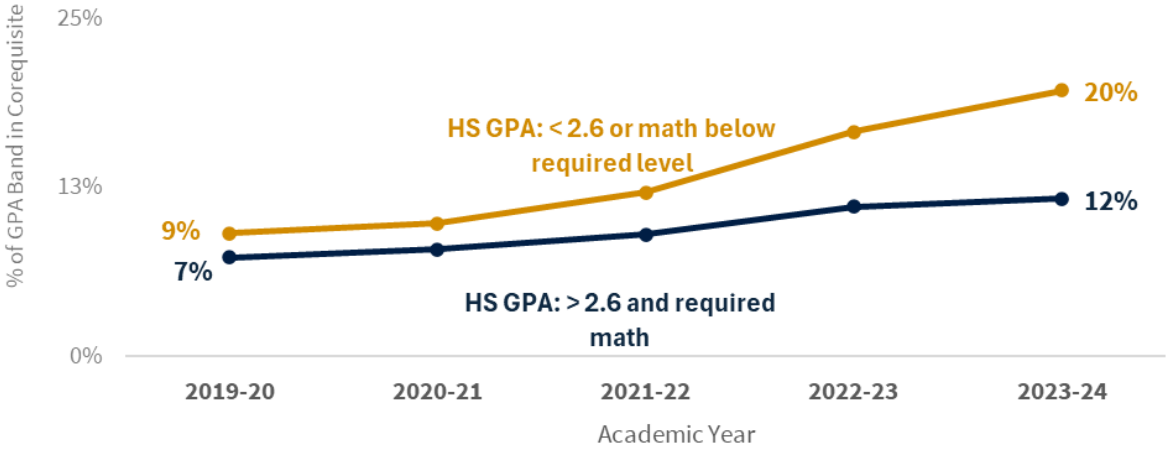
STEM math – Percent within each HS GPA placement band enrolled in corequisite-supported courses by academic year



Business math: The percentage of low-placement-profile students taking corequisite-supported business math courses has grown over time, more than doubling from 9% in 2019–20 to 20% in 2023–24 (Figure 13). However, participation rates remain relatively modest for this student group. The proportion of high-performing students enrolled in corequisite-supported courses has also increased over time from 7% in 2019–20 to 12% in 2023–24; yet the vast majority take standalone sections.

Figure 13. Students with a low placement profile increasingly enrolled in corequisite-supported business math courses, yet rates remain low at 20%.

Business math – Percent within each HS GPA placement band enrolled in corequisite-supported course by academic year

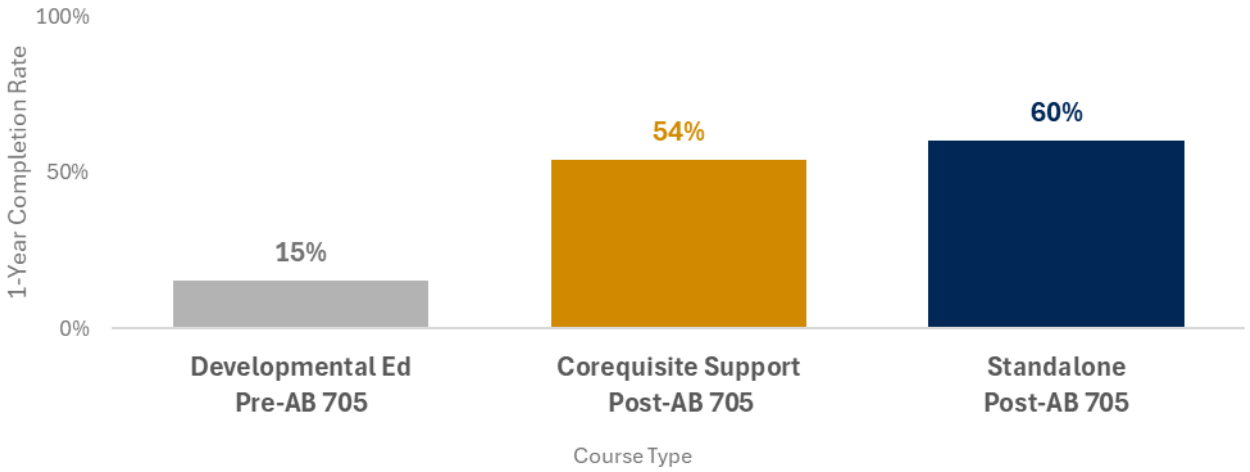


MATH COREQUISITE SUPPORT IMPACT

To determine how different curricular approaches impact low-placement-profile students' completion of transfer-level math within one year, we compared those who started in developmental education pre-AB 705 to those who began in a corequisite-supported or standalone course post-AB 705. Again, we looked at completion of transfer-level coursework within one year of starting in the sequence (all math pathways combined) for students with a low placement profile and compared their starting course type (i.e., developmental education, corequisite supported, standalone).[22] Overall, we found that **students with a low placement profile who start in transfer-level math courses with corequisite support have significantly higher completion than those who begin in developmental education (Figure 14).**

Figure 14. Students with a low placement profile starting in corequisite-supported math courses outperformed those who began in developmental education (all math pathways combined).

One-year math completion (%) for students with a low placement profile by starting course type



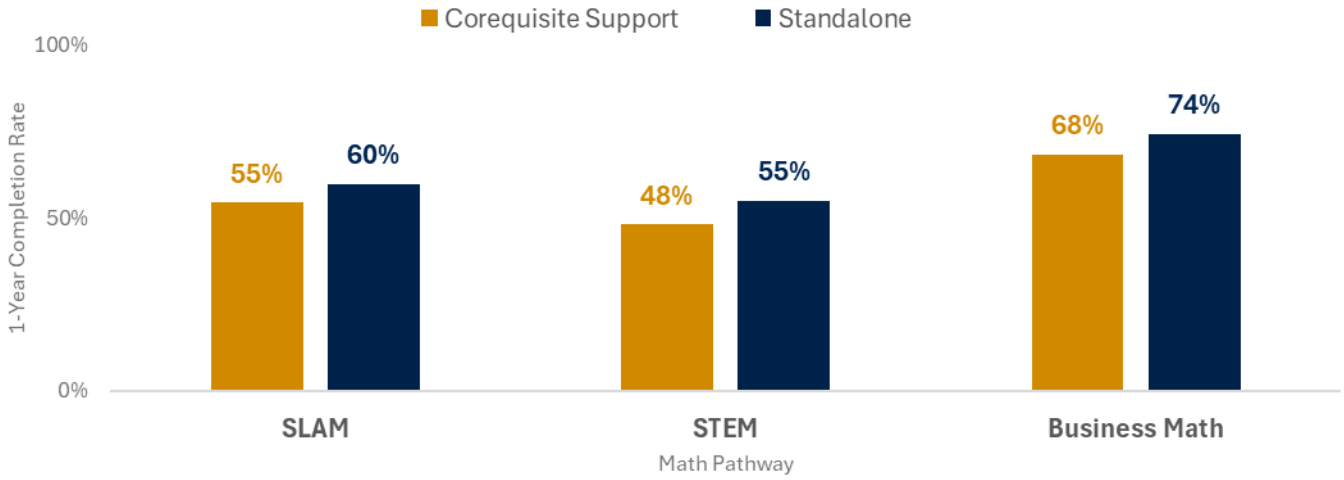
Notes: Cohort: Focus on colleges that have offered students the option of transfer-level math with corequisite support since 2019. Developmental Ed = Students with a degree, transfer, or unknown education goal whose first math enrollment was one level below transfer between fall 2012 and spring 2017. Corequisite Support = Students whose first math enrollment was in a transfer-level course with corequisite support between fall 2019 and spring 2023. Standalone = Students whose first math enrollment was in a standalone transfer-level course between fall 2019 and spring 2023. The outcome is the completion of any transfer-level math course within one year of starting the sequence.

Similar to English completion rates, **we saw that students with a low placement profile currently have the highest outcomes in standalone courses regardless of math pathway.** When narrowing the comparison groups to students in transfer-level math with and without corequisite support since AB 705 implementation, students with a low placement profile had the highest one-year completion in standalone courses across all math pathways (Figure 15).

[22] See Appendix E for one-year completion rates for any transfer-level course within the math pathway associated with student's program of study (e.g., sociology majors in the SLAM pathway, engineering majors represented in STEM pathway, business administration majors in business math pathway, etc.) by starting course type and HS GPA placement band.

Figure 15. Corequisite-supported math courses yielded lower completion rates for students with a low placement profile than standalone courses.

One-year completion (%) for students with a low placement profile by math pathway and starting course type



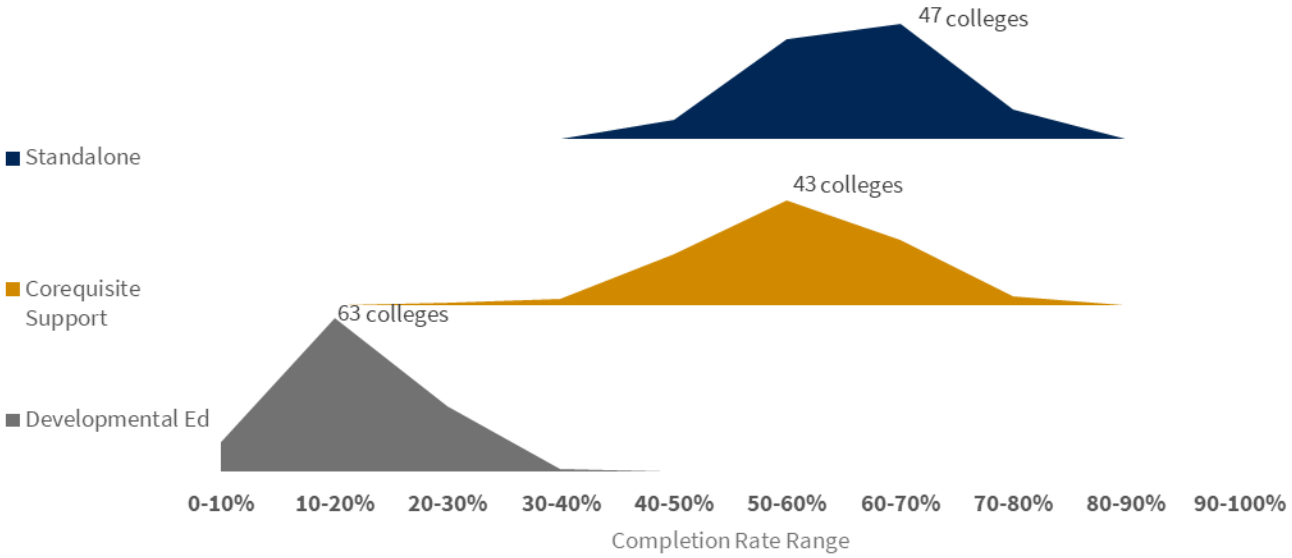
Notes: Cohort: Focus on colleges that have offered students the option of transfer-level math with corequisite support since 2019. Students whose first math enrollment was in a transfer-level SLAM, STEM, or business math course with or without corequisite support between fall 2019 and spring 2023. The outcome is the completion of the respective transfer-level math course within one year of starting the sequence.

Again, we see that **math completion rates for students with a low placement profile vary considerably across California's community colleges, both pre- and post-AB 705 implementation** (Figure 16). The greatest number of colleges (47) had completion rates in standalone sections in the 60–70% range. For corequisite-supported sections, most colleges (43) had completion rates in the 50–60% range. For developmental education courses, the largest number of colleges (63) clustered primarily around the considerably lower completion range of 10–20%.

At the same time, the completion range is wider for corequisite-supported versus standalone courses (a 47- versus 37-percentage-point range respectively) (see Appendix D). This finding may indicate much more variation in how these courses are being implemented, again raising questions about how colleges experiencing greater success with this approach are structuring and implementing their corequisite-supported math offerings.

Figure 16. Math completion rates for students with a low placement profile varied across the system, both pre- and post-AB 705 implementation.

Distribution of colleges within each math completion range for students with a low placement profile by starting course type



Conclusion

Most California community colleges have offered corequisite support courses for transfer-level English and math since the beginning of AB 705 implementation in fall 2019. However, across the board**, student participation in corequisites remains highly limited**. Moreover, colleges variably engage students with a low placement profile—the intended population—with this support, even though AB 1705 clarified that corequisites can be required for this student group.[23] **Students with higher placement profiles are disproportionately represented in English and Statistics and Liberal Arts Math (SLAM) corequisites**. Conversely, **Science, Technology, Engineering, and Math (STEM) and business math support courses are more likely to serve students with a low placement profile,** based on their high school GPA, and in some cases, high school course-taking.

This research indicates that, at present, the impact of corequisite support is mixed. **Low-placement-profile students who start in transfer-level courses with corequisite support achieve significantly higher completion than those who begin in developmental education**, underscoring the benefits of AB 705 implementation and further reinforcing current reform efforts facilitated by AB 1705. In English, these students perform similarly in corequisite-supported and standalone courses, while in math, standalone offerings yield the best completion rates. That said, results vary considerably across California's community colleges, with some institutions posting higher completion in corequisite-supported courses for low-placement-profile students.

Combined, these findings highlight **opportunities for colleges to reconsider how they deliver corequisite support**. Potential areas of action include:

[23] Find additional information in the *FAQ for STEM Calculus Pathway Placement and Initial Enrollment*.

- Proactively directing low-placement-profile students to corequisite-supported courses;
- Restricting enrollment in these sections to those with a low placement profile identified in the statewide default placement rules; and/or
- Learning from colleges with higher completion in corequisite-supported offerings for the intended population.

While there is emerging evidence on effective practices (MMAP, 2024; Complete College America, 2021; Bahr et al., 2022), focusing on the structural approaches and classroom strategies of high-performing colleges could guide further progress.

Moreover, this research focuses strictly on the implementation and effect of corequisite-supported offerings and excludes an examination of enhanced transfer-level English and math courses. Unlike the corequisite model, where students enroll in a support course alongside their main discipline course, enhanced courses engage students in a single, higher-unit version of transfer-level English or math (California Acceleration Project, 2024). This approach eliminates student registration, instructor assignment, grading, and scheduling issues presented by corequisites, and potentially improves curricular alignment (MMAP, 2024). **Assessing adoption of enhanced courses across California's community colleges and better understanding their impact offers another horizon for future research**.

Taken together, these insights suggest that ensuring students with a low placement profile receive the support they need to succeed in transfer-level English and math—an essential educational milestone—will depend on **refining existing corequisite models, further understanding the impact of different implementation approaches, and more fully exploring the promise of enhanced courses.**

References

Bahr, P. R., Cepa, K., McKay, H., Douglas, D., & Michael, S. (2022). *Do the details of corequisite supports matter?* [Executive Summary]. Strong Start to Finish and the Education Commission of the States. https://strongstart.org/resource/do-the-details-of-corequisite-supports-matter/

Boatman, A. (2012). *Evaluating institutional efforts to streamline postsecondary remediation: The causal effects of the Tennessee developmental course redesign initiative on early student academic success* (Working Paper). National Center for Postsecondary Research. https://files.eric.ed.gov/fulltext/ED533916.pdf

Cho, S. W., Kopko, E., Jenkins, D., & Jaggars, S. S. (2012). *New evidence of success for community college remedial English students: Tracking the outcomes of students in the Accelerated Learning Program (ALP)* (CCRC Working Paper No. 53). Community College Research Center, Teachers College, Columbia University. https://ccrc.tc.columbia.edu/publications/ccbc-alp-student-outcomes-follow-up.html

Complete College America. (2021). *No room for doubt: Moving corequisite support from idea to imperative.* https://completecollege.org/wp-content/uploads/2025/08/CCA_NoRoomForDoubt_CorequisiteSupport.pdf

Cuellar Mejia, M, Rodriguez, O., Johnson, H. (2020). *A new era of student access at California's community colleges.* Public Policy Institute of California. https://www.ppic.org/wp-content/uploads/a-new-era-of-student-access-at-californias-community-colleges-november-2020.pdf

Cuellar Mejia, M., Perez, C. A., Jacobson, S., Garcia, F., Rodriguez, O. (2023). *Tracking progress in community college access and success.* Public Policy Institute of California. https://www.ppic.org/publication/tracking-progress-in-community-college-access-and-success/

Jenkins, D., Speroni, C., Belfield, C., Jaggars, S. S., & Edgecombe, N. (2010). *A model for accelerating academic success of community college remedial English students: Is the Accelerated Learning Program (ALP) effective and affordable?* (CCRC Working Paper No. 21). Community College Research Center, Teachers College, Columbia University. https://ccrc.tc.columbia.edu/publications/accelerating-academic-success-remedial-english.html

Logue, A. W., Watanabe-Rose, M., & Douglas, D. (2016). Should students assessed as needing remedial mathematics take college-level quantitative courses instead? A randomized controlled Trial. *Educational Evaluation and Policy Analysis*, *38*(3), 578-598. https://doi.org/10.3102/0162373716649056

Logue, A. W., Douglas, D., & Watanabe-Rose, M. (2019). Corequisite mathematics remediation: Results over time and in different contexts. *Educational Evaluation and Policy Analysis*, *41*(3), 294-315. https://doi.org/10.3102/0162373719848777

Multiple Measures Assessment Project. (2024). *Considerations for strengthening concurrent support courses in English and math.* The RP Group. https://rpgroup.org/Portals/0/Documents/Projects/MultipleMeasures/AB1705/ConsiderationsForStrengtheningConcurrentSupportCourses_October2024.pdf?ver=2024-12-20-072423-433

Ran, F. X., & Lin, Y. (2022). *The effects of corequisite remediation: Evidence from a statewide reform in Tennessee.* Educational Evaluation and Policy Analysis, 44(3), 458-484. https://doi.org/10.3102/01623737211070836

Appendix A

Table A1. Non-Mathematics Taxonomy of Programs (TOP) Codes

Analyses included courses with the TOP codes 1701.00 (Mathematics) and 1702.00 (Mathematics Skills) as well as specific non-math department courses that meet math transfer requirements (e.g., PSYCH 258 - Behavioral Science Statistics) in other TOP code areas, which were identified in partnership with the Academic Senate for the California Community Colleges. See table.

TOP Code	Description
0103.00	Plant Science
0401.00	Anatomy and Physiology
0430.00	Microbiology
0499.00	Other Biological Sciences Specify
0501.00	Business
0504.00	Banking & Finance
0505.00	Business Administration
0506.00	Business Management
0599.00	Other Business and Management
0506.00	Business Management
0701.00	Information Technology General
0702.00	Computer Information Systems
0706.00	Computer Science
0707.10	Computer Programming
0707.30	Computer Systems Analysis
0801.00	Education General
0901.00	Engineering, General (requires Calculus)
1506.00	Speech Communication
1509.00	Philosophy
1799.00	Other Math
2001.00	Psychology
2003.00	Behavioral Science
2099.00	Other Psychology
2201.00	Social Sciences
2204.00	Economics and
2207.00	Political Science
2208.00	Sociology
4930.85	ESL Reading

Appendix B

STATEWIDE DEFAULT PLACEMENT RULES

English

HS GPA Placement Band	AB 1705-Compliant Placement
HS GPA ≥ 2.6	Transfer-Level English Composition No additional concurrent support recommended or required.
HS GPA = 1.9 - 2.59	Transfer-Level English Composition Low-unit (2 or fewer units) concurrent support is recommended but not required.
HS GPA < 1.9 (Low Placement Profile)	Transfer-Level English Composition Low-unit (2 or fewer units) concurrent support is strongly recommended or can be required.

Statistics/Liberal Arts Math (SLAM)

HS GPA Placement Band	AB 1705-Compliant Placement
HS GPA ≥ 3.0	Transfer-Level Statistics/Liberal Arts Mathematics No additional concurrent support recommended or required.
HS GPA = 2.3 - 2.9	Transfer-Level Statistics/Liberal Arts Mathematics Low-unit (2 or fewer units) concurrent support is recommended but not required.
HS GPA < 2.3 (Low Placement Profile)	Transfer-Level Statistics/Liberal Arts Mathematics Low-unit (2 or fewer units) concurrent support is strongly recommended or can be required.

Science, Technology, Engineering, and Math (STEM) Math

HS GPA Placement Band	AB 1705-Compliant Placement
HS GPA > 2.6 AND Passed HS Trigonometry, Precalculus, or Calculus with a grade of C or better	STEM Calculus 1 Low-unit (2 or fewer units) support may be recommended but not required.
HS GPA ≤ 2.6 OR Did not pass HS Trigonometry, Precalculus, or Calculus with a grade of C or better (Low Placement Profile)	STEM Calculus 1 Low-unit (2 or fewer units) support strongly recommended and may be required.

Business Math

HS GPA Placement Band	AB 1705-Compliant Placement
HS GPA > 2.6 AND Passed HS Algebra 2 or Integrated Math 3 (IM3) with a grade of C or better	Applied Calculus/Business Calculus/Finite Math Low unit (2 or fewer units) concurrent support may be recommended but not required.
HS GPA ≤ 2.6 OR Did not pass HS Algebra 2 or IM3 with a grade of C or better (Low Placement Profile)	Applied Calculus/Business Calculus/Finite Math Low unit (2 or fewer units) concurrent support is strongly recommended and can be required.

Appendix C

ENGLISH DATA TABLES

Table C1. All Transfer-Level English Enrollments by HS GPA Placement Band Based on Statewide Default Rules, 2019–20 to 2023–24

HS GPA Placement Band	N	%
HS GPA < 1.9	27,095	2%
HS GPA = 1.9-2.59	204,296	17%
HS GPA >= 2.6	718,696	60%
Unknown GPA	244,506	20%

Table C2. Transfer-Level English Enrollments by HS GPA Placement Band for Standalone and Corequisite-Supported Courses

HS GPA Placement Band	Main Section Enrollments		Corequisite-Supported Section Enrollments	
Academic Year	**N**	**%**	**N**	**%**
HS GPA < 1.9				
2019–20	6,908	2%	1,705	3%
2020–21	6,238	2%	1,551	4%
2021–22	6,084	2%	1,585	4%
2022–23	8,318	2%	2,250	6%
2023–24	10,401	3%	2,873	7%
HS GPA = 1.9 - 2.59				
2019–20	69,646	15%	14,059	26%
2020–21	61,095	16%	11,544	27%
2021–22	55,542	17%	11,099	30%
2022–23	60,185	18%	11,886	30%
2023–24	65,508	19%	12,724	32%
HS GPA >= 2.6				
2019–20	248,351	54%	22,307	42%
2020–21	234,488	61%	19,361	46%
2021–22	220,886	66%	17,700	48%
2022–23	228,974	68%	18,855	48%
2023–24	233,463	67%	17,907	45%
Unknown GPA				
2019–20	134,223	29%	15,582	29%
2020–21	83,518	22%	9,645	23%
2021–22	51,454	15%	6,599	18%
2022–23	41,367	12%	6,294	16%
2023–24	38,911	11%	6,041	15%

Table C3. Percent of Students Within Each HS GPA Placement Band Enrolled in Corequisite-Supported English

Year	HS GPA: <1.9	HS GPA: 1.9-2.59	HS GPA: >= 2.6	Unknown GPA
2019–20	20%	17%	8%	10%
2020–21	20%	16%	8%	10%
2021–22	21%	17%	7%	11%
2022–23	21%	16%	8%	13%
2023–24	22%	16%	7%	13%

Table C4. One-Year English Completion for Low-Placement-Profile Students by Starting Course Type and HS GPA Placement

Starting Course Type	Completion Count	Total Enrollments	Completion Rate
Developmental Ed – Pre-AB 705			
HS GPA < 1.9	148	769	19%
HS GPA = 1.9-2.59	2,431	10,276	24%
HS GPA >= 2.6	11,034	32,693	34%
Unknown GPA	38,737	97,109	40%
Total	**52,350**	**140,847**	**37%**
Corequisite Support – Post-AB 705			
HS GPA < 1.9	1,886	4,790	39%
HS GPA = 1.9-2.59	13,498	27,391	49%
HS GPA >= 2.6	26,647	41,916	64%
Unknown GPA	13,739	19,550	70%
Total	**55,770**	**93,647**	**60%**
Standalone – Post-AB 705			
HS GPA < 1.9	3,478	8,537	41%
HS GPA = 1.9-2.59	31,822	66,136	48%
HS GPA >= 2.6	217,241	314,546	69%
Unknown GPA	50,616	67,187	75%
Total	**303,157**	**456,406**	**66%**

Table C5. One-Year English Completion Variability for Low-Placement-Profile Students by Starting Course Type Across California Community Colleges

Starting Course Type	Minimum	25th Quartile	Median	75th Quartile	Maximum
Developmental Ed – Pre-AB 705	7%	19%	24%	28%	47%
Corequisite Support – Post-AB 705	25%	44%	49%	55%	100%
Standalone – Post-AB 705	31%	44%	50%	54%	70%

Notes: Cohort: Focus on colleges that have offered students the option of transfer-level English with corequisite support since 2019, with at least 10 enrollments per course type. Developmental Ed = Students with a degree, transfer, or unknown education goal whose first English enrollment was one level below transfer between fall 2012 and spring 2017. Corequisite Support = Students whose first English enrollment was in a transfer-level course with corequisite support between fall 2019 and spring 2023. Standalone = Students whose first English enrollment was in a standalone transfer-level course between fall 2019 and spring 2023.

Appendix D

MATH DATA TABLES

Table D1. All Transfer-Level Math Enrollments by Math Pathway and HS GPA Placement Band Based on Statewide Default Rules, 2019–20 to 2023–24

HS GPA Placement Band	N	%
SLAM		
HS GPA < 2.3 (Low Placement Profile)	100,957	8%
HS GPA 2.3-2.9	239,252	20%
HS GPA >= 3.0	594,038	49%
Unknown GPA	287,336	24%
STEM Math		
HS GPA < 2.6 or no HS Trigonometry, Precalculus, or Calculus (Low Placement Profile)	884,160	72%
HS GPA > 2.6 and HS Trigonometry, Precalculus, or Calculus	218,864	18%
Unknown GPA	118,559	10%
Business Math		
HS GPA < 2.6 or no HS Algebra 2 or IM3 (Low Placement Profile)	611,909	50%
HS GPA > 2.6 and HS Algebra 2 or IM3	491,115	40%
Unknown GPA	118,559	10%

Table D2. SLAM Enrollments by HS GPA Placement Band for Standalone and Corequisite-Supported Courses

SLAM Enrollments	Main Section Enrollments		Corequisite Section Enrollments	
HS GPA Placement Band	**N**	**%**	**N**	**%**
HS GPA: < 2.3 (Low Placement Profile)				
2019–20	11,397	6%	3,089	9%
2020–21	11,064	7%	2,919	9%
2021–22	10,025	7%	2,714	11%
2022–23	11,455	8%	3,514	13%
2023–24	14,092	10%	4,239	16%
HS GPA: 2.3-2.9				
2019–20	35,901	18%	7,876	22%
2020–21	32,411	19%	7,353	24%
2021–22	28,265	21%	6,268	26%
2022–23	29,011	21%	7,074	27%
2023–24	31,787	22%	7,386	28%
HS GPA: >= 3.0				
2019–20	83,362	43%	12,618	36%
2020–21	83,229	49%	12,734	41%
2021–22	74,156	54%	10,621	44%
2022–23	77,777	57%	11,458	44%
2023–24	82,095	57%	11,635	44%
Unknown GPA				
2019–20	63,561	33%	11,956	34%
2020–21	41,794	25%	8,138	26%
2021–22	24,379	18%	4,757	20%
2022–23	18,668	14%	4,050	16%
2023–24	16,523	11%	3,299	12%
Total				
2019–20	194,221	100%	35,539	100%
2020–21	168,498	100%	31,144	100%
2021–22	136,825	100%	24,360	100%
2022–23	136,911	100%	26,096	100%
2023–24	144,497	100%	26,559	100%

Table D3. STEM Math Enrollments by HS GPA Placement Band for Standalone and Corequisite-Supported Courses

STEM Math Enrollments	Main Section Enrollments		Corequisite Section Enrollments	
HS GPA Placement Band	**N**	**%**	**N**	**%**
HS GPA ≤ 2.6 or no HS Trigonometry, Precalculus, or Calculus with grade of C or better (Low Placement Profile)				
2019–20	100,080	58%	13,245	72%
2020–21	90,185	60%	12,503	75%
2021–22	72,742	61%	11,061	76%
2022–23	76,981	62%	15,216	80%
2023–24	84,206	64%	16,553	82%
HS GPA > 2.6 and HS Trigonometry, Precalculus, or Calculus with grade of C or better				
2019–20	47,234	27%	2,630	14%
2020–21	44,239	29%	2,544	15%
2021–22	36,996	31%	2,340	16%
2022–23	39,112	32%	2,613	14%
2023–24	39,523	30%	2,495	12%
Unknown GPA				
2019–20	26,446	15%	2,398	13%
2020–21	16,708	11%	1,518	9%
2021–22	9,449	8%	1,088	8%
2022–23	7,926	6%	1,172	6%
2023–24	8,061	6%	1,051	5%
Total				
2019–20	173,760	100%	18,273	100%
2020–21	151,132	100%	16,565	100%
2021–22	119,187	100%	14,489	100%
2022–23	124,019	100%	19,001	100%
2023–24	131,790	100%	20,099	100%

Table D4. Business Math Enrollments by HS GPA Placement Band for Standalone and Corequisite-Supported Courses

Business Math Enrollments	Main Section Enrollments		Corequisite Section Enrollments	
HS GPA Placement Band	**N**	**%**	**N**	**%**
HS GPA ≤ 2.6 or no HS Algebra 2 or IM3 with grade of C or better (Low Placement Profile)				
2019–20	8,753	40%	883	44%
2020–21	8,282	42%	906	47%
2021–22	6,377	41%	885	49%
2022–23	6,074	38%	1,214	49%
2023–24	6,779	39%	1,666	53%
HS GPA > 2.6 and HS Algebra 2 or IM3 with grade of C or better				
2019–20	8,122	37%	644	32%
2020–21	8,573	43%	740	38%
2021–22	7,574	48%	753	42%
2022–23	8,470	54%	1,060	42%
2023–24	9,701	56%	1,285	41%
Unknown GPA				
2019–20	5,166	23%	472	24%
2020–21	3,083	15%	280	15%
2021–22	1,718	11%	174	10%
2022–23	1,287	8%	223	9%
2023–24	975	6%	173	6%
Total				
2019–20	22,041	100%	1,999	100%
2020–21	19,938	100%	1,926	100%
2021–22	15,669	100%	1,812	100%
2022–23	15,831	100%	2,497	100%
2023–24	17,455	100%	3,124	100%

Table D5. Percent of Students Within Each HS GPA Placement Band Enrolled in Corequisite-Supported SLAM

Year	HS GPA <1.9 (Low Placement Profile)	HS GPA = 1.9-2.59	HS GPA >= 2.6	Unknown GPA
2019–20	21%	18%	13%	16%
2020–21	21%	18%	13%	16%
2021–22	21%	18%	13%	16%
2022–23	24%	20%	13%	18%
2023–24	23%	19%	12%	17%

Table D6. Percent of Students Within Each HS GPA Placement Band Enrolled in Corequisite-Supported STEM Math

Year	HS GPA <2.6 or No Required HS Math (Low Placement Profile)	HS GPA >2.6 and Required HS Math	Unknown HS GPA
2019–20	12%	5%	8%
2020–21	12%	5%	8%
2021–22	13%	6%	10%
2022–23	17%	6%	13%
2023–24	16%	6%	12%

Table D7. Percent of Students Within Each HS GPA Placement Band Enrolled in Corequisite-Supported Business Math

Year	HS GPA <2.6 or No Required HS Math (Low Placement Profile)	HS GPA >2.6 and Required HS Math	Unknown GPA
2019–20	9%	7%	8%
2020–21	10%	8%	8%
2021–22	12%	9%	9%
2022–23	17%	11%	15%
2023–24	20%	12%	15%

Table D8. One-Year Math Completion for Low-Placement-Profile Students by Starting Course Type and Math Pathway

Starting Course Type	Completion Count	Total Enrollments	Completion Rate
Developmental Ed – Pre-AB 705			
Developmental Ed	5,703	37,056	15%
Corequisite – Post-AB 705			
Business Math	1,843	2,606	71%
Developmental Ed	19	32	59%
SLAM	26,659	48,465	55%
STEM Math	13,611	26,991	50%
Total	42,132	78,094	54%
Standalone – Post-AB 705			
Business Math	6,742	8,781	77%
Developmental Ed	2,120	3,339	63%
SLAM	121,826	201,506	60%
STEM Math	49,840	86,827	57%
Total	180,528	300,453	60%

Table D9. One-Year Math Completion Variability for Low-Placement-Profile Students by Starting Course Type Across California Community Colleges

Starting Course Type	Minimum	25th Quartile	Median	75th Quartile	Maximum
Developmental Ed – Pre-AB 705	6%	12%	15%	20%	35%
Corequisite – Post-AB 705	29%	50%	56%	62%	76%
Standalone – Post-AB 705	42%	57%	61%	67%	79%

Appendix E

ONE-YEAR COMPLETION RATES FOR TRANSFER-LEVEL COURSES IN THE MATH PATHWAY (SLAM, STEM, BUSINESS MATH) REQUIRED FOR MAJOR

Data in the tables below show one-year completion rates for any transfer-level course within the math pathway associated with students' program of study (e.g., sociology majors in the SLAM pathway, engineering majors represented in STEM pathway, business administration majors in business math pathway) by starting course type (i.e., developmental education, corequisite supported, standalone) and HS GPA placement band.

Table E1. SLAM – One-Year Completion by Starting Course Type and HS GPA Placement Band

Starting Course Type	Completion Count	Total Enrollments	Completion Rate
Developmental Ed – Pre-AB 705			
HS GPA < 2.3	944	18,325	5%
HS GPA 2.3-2.9	3,338	44,451	8%
HS GPA >= 3.0	8,970	79,390	11%
Unknown GPA	20,971	155,352	13%
Total	34,223	297,518	12%
Corequisite – Post-AB 705			
HS GPA < 2.3	2,698	9,980	27%
HS GPA 2.3-2.9	7,532	21,893	34%
HS GPA >= 3.0	16,260	34,481	47%
Unknown GPA	7,489	14,928	50%
Total	33,979	81,282	42%
Standalone – Post-AB 705			
HS GPA < 2.3	8,302	26,988	31%
HS GPA 2.3-2.9	30,652	84,817	36%
HS GPA >= 3.0	146,533	305,586	48%
Unknown GPA	107,896	234,725	46%
Total	293,383	652,116	45%

Table E2. STEM Math – One-Year Completion by Starting Course Type and HS GPA Placement Band

Starting Course Type	Completion Count	Total Enrollments	Completion Rate
Developmental Ed – Pre-AB 705			
HS GPA < 2.6 or no required HS math	5,630	32,361	17%
HS GPA > 2.6 and required HS math	1,373	5,472	25%
Unknown GPA	4,595	19,527	24%
Total	11,598	57,360	20%
Corequisite – Post-AB 705			
HS GPA < 2.6 or no required HS math	6,258	15,571	40%
HS GPA > 2.6 and required HS math	1,534	3,011	51%
Unknown GPA	922	1,841	50%
Total	8,714	20,423	43%
Standalone – Post-AB 705			
HS GPA < 2.6 or no required HS math	39,578	83,013	48%
HS GPA > 2.6 and required HS math	35,393	59,402	60%
Unknown GPA	31,163	47,976	65%
Total	106,134	190,391	56%

Table E3. Business Math – One-Year Completion by Starting Course Type and HS GPA Placement Band

Starting Course Type	Completion Count	Total Enrollments	Completion Rate
Developmental Ed – Pre-AB 705			
HS GPA < 2.6 or no required HS math	428	13,118	3%
HS GPA > 2.6 and required HS math	197	6,885	3%
Unknown GPA	717	12,860	6%
Total	1,342	32,863	4%
Corequisite – Post-AB 705			
HS GPA < 2.6 or no required HS math	699	5,916	12%
HS GPA > 2.6 and required HS math	609	4,395	14%
Unknown GPA	156	1,304	12%
Total	1,464	11,615	13%
Standalone – Post-AB 705			
HS GPA < 2.6 or no required HS math	4,451	26,478	17%
HS GPA > 2.6 and required HS math	6,666	36,496	18%
Unknown GPA	5,182	23,576	22%
Total	16,299	86,550	19%

Multiple Measures Assessment Project

The RP Group launched MMAP in 2014 to support the advancement of developmental education reform in the California Community Colleges. MMAP now supports the California Community Colleges Chancellor's Office with the implementation of AB 705 and AB 1705, which seek to improve equitable placement into, and completion of transfer-level English and math courses required for a student's program of study.

Project Team

Loris Fagioli

Lauren Ilano

Kevin Hsu

Kelley Karandjeff

Mallory Newell

Ola Sabawi

Daisy Segovia

Learn more at www.rpgroup.org/mmap.