

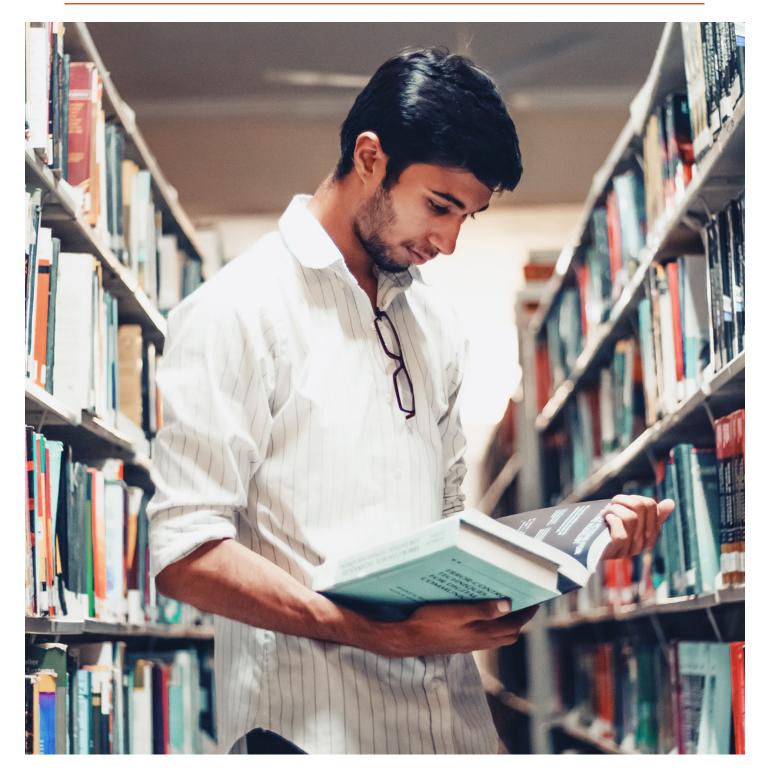
## **GETTING THERE:**

Are California Community Colleges Maximizing Student Completion of Transfer-Level Math and English?

A regional progress report on implementation of AB 705







## **ACKNOWLEDGEMENTS**

The Campaign for College Opportunity commissioned the California Acceleration Project (CAP) to conduct this analysis. The primary author for CAP is Katie Hern of Skyline College.

The data collection and analysis were supported by CAP researchers Leslie Henson, Butte College; Hal Huntsman, Antelope Valley College; Kathy Kubo, College of the Canyons; Tammi Marshall, Cuyamaca College; Summer Serpas, Irvine Valley College; and Myra Snell, Los Medanos College.

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## **EXECUTIVE SUMMARY**

A new law, Assembly Bill 705 (Irwin), is driving dramatic changes in how California Community Colleges place students into English and math courses. Beginning in fall 2019, AB 705 requires the colleges to use students' high school grades as the primary means of placement; restricts colleges from denying students access to transferable, college-level courses; and gives students the right to begin in courses where they have the best chance of completing the English and math requirements for a bachelor's degree.

This report—a collaboration of the Campaign for College Opportunity and the California Acceleration Project—analyzes early AB 705 implementation efforts at 47 community colleges in the Central Valley, the Inland Empire, and greater Los Angeles. We examine fall course schedules and websites to identify bright spots and problems in implementation, with particular focus on the extent to which college course offerings are aligned with the AB 705 standard of "maximizing" student completion of transfer-level math and English courses.

#### We find that AB 705 has catalyzed substantial changes across community colleges:

- Colleges have approximately doubled the proportion of transfer-level classes they offer. Across the three focus
  regions, transfer-level classes increased from 45 percent to 88 percent of introductory English sections in the
  fall course schedules, and transfer-level classes increased from 33 percent to 71 percent of introductory math
  sections.
- There has been dramatic growth in the number of colleges offering corequisite remediation—that is, curricular models in which students receive additional support while enrolled in transferable, college-level classes. Across the 47 colleges studied, the number offering these models increased from 10 colleges to 39 in English composition, from five colleges to 33 in statistics, and from zero to 30 in science, technology, engineering, and math (STEM) courses.
- Most colleges are allowing all students to enroll directly in transferable, college-level courses, in compliance with the law, although we do find some exceptions.

Despite this progress, we identify several areas of weak implementation that will need further attention from the colleges, the California Community Colleges Chancellor's Office (Chancellor's Office), and possibly the legislature:

- At many colleges, remedial courses continue to constitute a large proportion of course offerings, especially in math. Only seven out of 47 colleges meet the strong implementation benchmark for offering fewer than 10 percent pre-transfer courses in both English and math. At 21 of the 47 colleges studied, below-transfer math sections continue to constitute over 30 percent of introductory sections in the course schedule.
- Colleges are not providing enough sections of transfer-level statistics and quantitative reasoning, the math most students need for their degrees. Instead, course schedules are weighted toward pre-transfer and transfer-level classes for students in calculus-based STEM programs. STEM-related course sections represent 51 percent of the introductory math offerings across the three regions.
- In a close analysis of the websites of 11 weak implementer colleges—that is, colleges with a substantial share of remedial courses in their schedules—we find that none of the colleges provide data on how enrolling in a below-transfer class would reduce students' likelihood of completing their English and math requirements. Without this, students are unable to make an informed choice and to protect their right to begin in courses where they have the best chance of completing transfer-level English and math.

With regard to AB 705, the California Community College system is getting there. The 47 colleges in this study have made substantial progress in addressing the long-standing problem of low and inequitable completion among students placed into remediation; however, student completion gains will be depressed if implementation problems are not addressed. We are particularly concerned about the equity implications of uneven implementation across the state, as students' zip codes continue to determine their access to powerful reforms.



## INTRODUCTION

For years, California Community Colleges have required more than 75 percent of incoming students to take remedial math and/or English classes based on their performance on standardized tests. Remedial classes were intended to help students be more successful in college, but they can take up to two years to complete, with students spending time and money repeating material covered in K-12, though not earning units toward a degree. A decade of research has made clear that, regardless of their original intent, remedial classes make students less likely to complete college.

Thanks to a new law, Assembly Bill 705 (Irwin), this system is undergoing a much-needed overhaul. AB 705 requires colleges to stop relying upon standardized tests and instead use students' high school grades as the primary means of student placement in English and math, as these grades have been shown to be far more reliable indicators of how students will perform in college.<sup>2</sup> The state law, which goes into effect this fall, also restricts colleges from requiring students to enroll in remedial courses that will delay their progress to degree, and it gives students the right to enroll in courses where they have the best chance of completing the English and math requirements for a bachelor's degree. Though not the focus of this report, AB 705 also includes separate requirements for students in English as a Second Language (ESL) programs, with a fall 2020 deadline for implementation.

At colleges that have already made the changes required by AB 705, student completion of transfer-level math and English has increased substantially.<sup>3</sup> Yet, realizing the full potential of the law will require faithful implementation across the system's many community colleges.

Getting There examines the changes underway in three regions of California—the Central Valley, the Inland Empire, and greater Los Angeles. These regions were selected because they include more than one-third of the existing California Community Colleges (47 out of 115) and 44 percent of student enrollment systemwide. The colleges represent a range of institutional sizes (small, medium, large) and settings (urban, suburban, rural), with student populations that are economically, racially, and ethnically diverse.

The report analyzes fall 2019 course schedules from these regions to get an early window into how colleges are responding to the legislation. It also examines the websites of a subset of colleges to analyze the messages students are receiving about placement when a substantial number of remedial sections remain on the schedule. Primary data collection occurred during May and June 2019, soon after the fall course schedules were made public.

#### **Key questions:**

- What changes have colleges made to their English and math course schedules since AB 705 was signed in fall 2017? Are colleges now offering primarily transferable, college-level courses, or are they continuing to offer traditional remedial classes?
- How are colleges communicating with students about placement policies and about their right to enroll in transferlevel courses?

While additional research will be needed to examine the entire California Community College system, this report sheds light on early implementation trends for use in ongoing advocacy and improvement efforts.

# ENSURING THAT ALL STUDENTS HAVE THE BEST CHANCE AT COMPLETION

In the past, California Community Colleges had wide discretion to determine which students could enroll directly in transferable college-level courses and which had to begin in remedial prerequisites. In principle, colleges were required to consider multiple measures to assess student readiness; in practice, however, most relied almost exclusively on standardized placement tests with weak predictive validity, and colleges could set whatever "readiness" bar they wanted and exclude students from transferable courses if they were below this line.



Under this system, more than 75 percent of students were denied access to transferable English and/or math classes, and there were widespread racial inequities. Black and Latinx students were much more likely to be excluded from transferable English and math and required to take multiple levels of remedial classes more frequently than White students. A 2010 study showed that more than half of the Black and Latinx students classified as "unprepared" in math began in the lowest levels of the sequence, taking three or more remedial classes before they could enroll in a transferable gateway course. Fewer than six percent of students starting at these levels would go on to complete a transferable math course in three years.

AB 705 sets new statewide parameters for placing students into English and math coursework. First, it gives students the right to enroll in transfer-level courses, unless colleges can demonstrate that the students are "highly unlikely" to succeed there, shifting

the burden from students proving they are "ready" to colleges proving they are not.

The second parameter represents an even greater paradigm shift. According to the law, "A community college district or college shall maximize the probability that a student will enter and complete transfer-level coursework in English and mathematics within a one-year time frame." Initially, some interpreted this to mean that colleges could still require remedial courses, as long as students could complete transfer-level requirements within a year. But the Chancellor's Office clarified that community colleges must examine either local or statewide data on students' high school grades and place them into courses that give them the best chance of completing a transfer-level course within a year.<sup>6</sup>

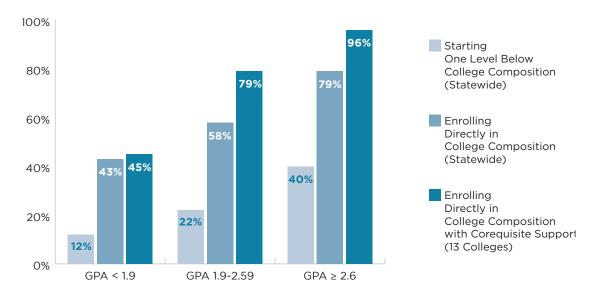
To provide guidance to the system's 115 community colleges, the Chancellor's Office enlisted researchers from the Multiple Measures Assessment Project (MMAP) to analyze a statewide dataset of high school and community college transcripts against the AB 705 standard of maximizing student completion. The analyses included controls for differences between students enrolling in transfer-level and pre-transfer courses, such as higher test scores and grades. Students enrolling in separate curricula for English language learners were not part of the analysis.

The statewide MMAP research established that all students are two to three times more likely to complete transfer-level English and math courses when they begin directly in a transferable, college-level course than in a stand-alone remedial course one level below transfer level. For example, students with a high school GPA of 2.3 have a 58 percent likelihood of success if they enroll directly in college composition, but only a 22 percent likelihood of completing the course in a year if they took a remedial class first. Maximizing student completion, therefore, requires these students to begin in transfer-level English composition.

These findings held true for all racial/ethnic groups, students with disabilities, low-income students, and non-native English speakers who attended high school in the United States. Even students with GPAs below 1.9—the lowest 10 percent of the statewide dataset—are still over three times more likely to complete college English in a year if they enroll in it directly than if they begin in a remedial course (43 percent vs. 12 percent). Further, when students enroll directly in a transfer-level course with additional concurrent support ("corequisite remediation"), they are even more likely to complete it than if they begin in a remedial class one level below the transferable course.

#### Figure 1. Completion of Transferable English Composition

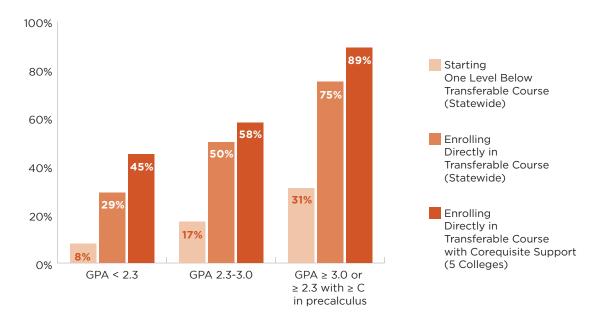
Students with a low GPA are three and a half times more likely to complete transfer-level English when they are placed directly into transfer-level coursework (12% vs 43%).



Source: Analysis by the Multiple Measures Assessment Project, Statewide Data from 2007-2014, Corequisite Data from F2016-F2018 (N=4,332)

## Figure 2. Completion of Transferable Statistics

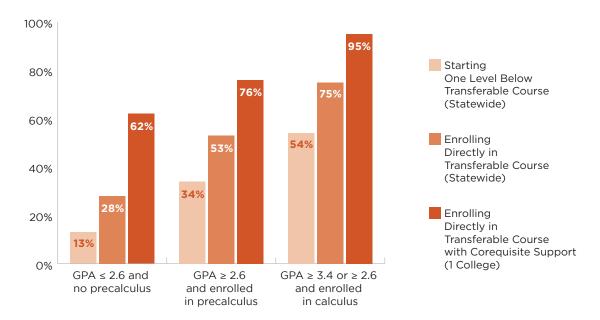
Students with low GPAs who are placed directly into transfer-level courses are three times more likely to complete transfer-level statistics than their peers who are placed one level below transfer level (29% vs 8%), and students receiving corequisite support in a transfer-level course are five times more likely to complete transferable statistics than their peers placed one level below transfer level (45% vs 8%).



Source: Analysis by the Multiple Measures Assessment Project, Statewide Data from 2007-2014, Corequisite Data from F2016-F2018 (N=1,888)

#### Figure 3. Completion of Transferable STEM Math

When placed into transfer-level courses with corequisite support, almost two-thirds (62%) of students with low GPAs and no prior precalculus courses complete transferable STEM math. When placed one level below transfer level, just one sixth (13%) complete transferable STEM math.



Source: Analysis by the Multiple Measures Assessment Project, Statewide Data from 2007-2014, Corequisite Data from Pre-Calc & Business Calc F2016-F2018 (N=241)

Based on this research, the Chancellor's Office developed a set of default rules for placing students into English and math courses. The rules state that all students should be placed directly into transfer-level English and math, and they encourage colleges to provide additional concurrent/corequisite support for students with lower high school grades (e.g., a GPA below 2.6 for English). If colleges do not want to use these statewide rules, they can examine local data and develop their own placement rules, and the MMAP team has provided professional development and code to help colleges conduct local analyses. However, the colleges must still honor the right of students to enroll in transfer-level courses and meet the AB 705 criterion of maximizing students' chances of completing transfer-level coursework.





## DATA AND METHODS

For each of the 47 colleges in these regions, we identified introductory level courses ("transfer-level courses") that students take to complete their general education requirements in English composition and math/quantitative reasoning in order to transfer to a four-year institution. Completion of these early gatekeeper requirements in a student's first academic year in college has been associated with substantially higher rates of degree completion. Most students have typically been required to take one or more remedial prerequisites before enrolling in them. 10

To understand the response by colleges to AB 705, we sought to understand which courses colleges were providing to incoming students and, specifically, the proportion of transferable and non-transferable sections being offered. For each college, we counted the number of sections of introductory transfer-level courses in the schedule, as well as the number of sections of non-transferable remedial courses. The counts were then used to calculate the percentage of introductory sections being offered at the transfer level. For example, a college with 80 sections of freshman composition and 20 sections of remedial reading and writing is described as having 80 percent transfer-level offerings in English.

In English, introductory transfer-level courses included the first semester of college composition, as well as English as a Second Language (ESL) courses that meet the composition requirement. We included both traditional transfer-level sections and sections with additional concurrent support (corequisite/enhanced models). We did not include the second semester of freshman composition or English courses not related to the composition requirement (e.g., literature or creative writing). At the remedial level, we counted reading and writing courses below the level of freshman composition, including both credit and non-credit models offered within English, reading, and other related departments (e.g., basic skills departments). In the remedial counts, we did not include courses in ESL, corequisite courses attached to transfer-level sections, or support courses offered in tutoring and learning centers.

In math, introductory level courses include transferable courses for students in math-intensive STEM majors—college algebra, precalculus, trigonometry, applied calculus, and finite math. Again, we counted both standard sections and sections with additional concurrent support (corequisite/enhanced models). For students in non-math-intensive majors, transferable courses included math for elementary educators, liberal arts math, and statistics offered in the math department and in other disciplines (e.g., psychology, economics, business). Below-transfer courses include the traditional sequence of standalone remedial courses (from arithmetic to intermediate algebra), pre-statistics, the first semester of the Statway statistics program, and specialized math courses for students in career and technical programs. Both credit and noncredit classes were included. Most courses were offered in the math department, but we also counted sections in other related areas, such as separate basic skills departments. The remedial counts did not include corequisite courses attached to transfer-level sections or support courses offered in tutoring and learning centers.

We counted sections, not seats or course enrollments. This is worth noting for colleges offering a particular model of computerized instruction in pre-transfer-level math. In a few cases, we noted that colleges had scheduled multiple sections of different courses at the same time, in the same room, with the same instructor. For example, 30 students in a single classroom might be working side by side on a self-paced review of different levels of math, with some of them enrolled in a section focused on arithmetic, others enrolled in pre-algebra, and others in elementary algebra. In our early analysis, we tried collapsing these overlapping sections in our counts, but this did not substantially change the findings. The colleges offering these models were in the weak implementer category, regardless of how the sections were treated, with fewer than 70 percent of introductory course offerings at the transfer level. Ultimately, for consistency in data collection, we treated these few colleges the same as all others and counted each section offered.

Data collection occurred primarily during May and early June 2019, with additional spot-checking in early July. Findings, therefore, do not reflect subsequent class cancellations and additions to the schedule. While these changes may have shifted some course offerings, the initial published schedule provides a glimpse at how colleges were preparing for their first term of AB 705 implementation.

For a pre-AB 705 comparison, we collected the above data from the colleges' fall 2017 course schedules whenever they were available online or by request. These data were collected from 43 of the 47 colleges in math and 45 of the 47 colleges in English. Most of the missing 2017 data were from small colleges and would, therefore, not have substantially influenced the overall findings. Throughout the report, all 47 colleges were examined, unless an explicit comparison was being made between 2017 and 2019; in those cases, colleges were included only if both years' schedules were available.



### **Table 1. Colleges Included in the Study**

The colleges included in this study represent over one-third of California Community Colleges, and roughly 44 percent of system enrollments.

Antelope Valley College of the Canyons of the Desert Cerritos Mountain Citrus
of the Desert Cerritos
Mountain Citrus
Hills Compton
Valley East LA
Jacinto El Camino
Glendale
rde LA City
le LA Harbor
nardino Valley LA Mission
/alley LA Pierce
LA Southwest
LA Trade-Tech
LA Valley
Long Beach City
Mt. San Antonio
Pasadena City
Rio Hondo
Santa Monica
West LA
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### STRONG IMPLEMENTATION OF AB 705

Despite the research showing all students have higher completion of transfer-level English and math when they begin directly in these courses, many colleges continue to offer traditional remedial classes.

A common interpretation of AB 705 is that, even if colleges can no longer require students to take these classes, they can continue to offer them. Compliance is defined as simply allowing students access to transfer-level courses. However, this approach ignores the core standard of AB 705—that is, that students should begin with the courses that give them the best chance of completing their English and math requirements.

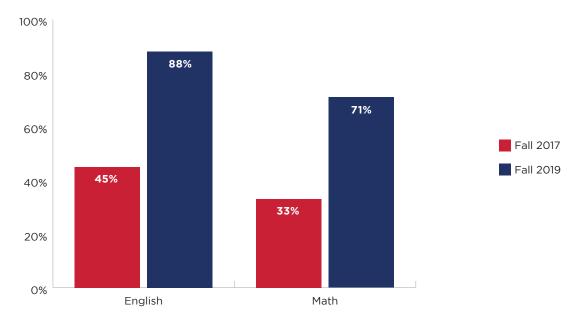
Since research has not been able to identify students for whom taking a below-transfer class produces higher completion, the surest way to maximize student completion is to eliminate these classes and offer 100 percent transfer-level courses. For this report, colleges are classified as strong implementers if they offer at least 90 percent of their introductory English and math offerings at the transfer level, with fewer than 10 percent at the pre-transfer level (not including ESL courses). This more conservative benchmark allows for atypical circumstances under which colleges might provide a below-transfer course within AB 705 criteria, such as for students in career and technical associate degree programs with specialized math requirements that cannot be met with a transfer-level course. It also leaves room for limited offerings of intermediate algebra for students who did not complete Algebra 2 in high school, but who want to pursue a math-intensive major. This group is estimated to represent roughly five percent of all California Community College students.<sup>11</sup>

#### **OVERALL PROGRESS**

AB 705 has produced substantial changes in course offerings in the three regions studied. In 2017, the majority of introductory level course sections in English and math were non-transferable, remedial courses. As Figure 4 shows, in 2019, the proportion of transfer-level course sections has approximately doubled in both disciplines. Across the three regions, course offerings in English are close to the 90 percent benchmark for strong implementation, with 88 percent of English sections at the transfer level. Implementation in math is less strong, but it is still a substantial improvement over pre-AB 705 data, with transfer-level sections increasing from 33 percent to 71 percent of introductory level offerings.

Figure 4. Percentage of Introductory Sections that are Transfer Level

Transfer-level sections have doubled as a percentage of introductory course offerings since the Fall of 2017.



Source: Individual College Course Schedules



## STRONG IMPLEMENTERS IN MATH AND ENGLISH

In the three regions studied, only seven of 47 colleges are strong implementers in both math and English, with 90 to 100 percent of introductory sections at the transfer level and fewer than 10 percent in below-transfer remedial courses.

## Table 2. Strong Implementers in Math and English

Transfer-level sections account for more than 90% of introductory course offerings at seven colleges across the regions.

College	% Transfer- Level Math	% Transfer- Level English
Pasadena City	100%	100%
Porterville	100%	100%
Reedley	98%	98%
West Hills - Lemoore	96%	100%
College of the Sequoias	93%	100%
Victor Valley	91%	95%
Citrus	90%	97%

Source: Individual College Course Schedules

#### STRONG IMPLEMENTERS IN ENGLISH

At an additional 13 colleges, 90 to 100 percent of introductory sections are at the transfer level in English, but not in math. None of the colleges studied is a strong implementer in just math.

#### Table 3. Strong Implementers in English Only

Transfer-level English courses account for 90% of introductory course-sections at 13 colleges.

College	% Transfer-Level English
College of the Canyons	100%
Clovis	100%
Columbia	100%
LA Valley	100%
West Hills - Coalinga	100%
Bakersfield	97%
Barstow	96%
Mt. San Jacinto	96%
Merced	95%
San Joaquin Delta	95%
Santa Monica	94%
LA Mission	93%
Riverside	92%

Source: Individual College Course Schedules



#### THE DANGER OF MAINTAINING REMEDIAL CLASSES AS AN OPTION

In her book, *The College Fear Factor*, Rebecca Cox notes that, in every community college she has studied across the country, student anxiety has been high, and math and English "evoked by far the biggest anxiety for the vast majority of students."<sup>12</sup>

This becomes a problem when colleges continue to offer remedial classes as an option. When students' anxiety is reinforced by faculty, counselors, guided placement instruments, and the course schedule itself, many students will choose to enroll in a remedial class out of fear. In the process, they will unwittingly undermine their own long-term goals.

Colleges have already seen this happen as they broaden access to transfer-level courses. For example, when College of the Canyons first implemented multiple measures placement in 2016, they gave students the choice of enrolling in college statistics or remedial algebra. More than three-quarters of students chose remedial algebra, even if they didn't need it for their majors. The result? Just 13 percent of students who chose a remedial class completed transfer-level math in a year, compared to 66 percent of students who enrolled directly in the transfer-level course.<sup>13</sup>

Keeping remedial courses in the schedule is also likely to exacerbate racial and economic inequities. Historically, students of color have been disproportionately classified as "remedial," and continuing to offer these classes opens the door to implicit bias, as certain students are steered to take them, while other students are perceived as "college material." Another concern is that, because economically privileged students are more likely to be confident in their abilities (warranted or not), the deck will be unfairly stacked against those who self-select into remedial courses.<sup>14</sup>

Perhaps this is most worrisome: At colleges still offering a large proportion of remedial classes, students are not able to protect their AB 705 right to begin in the class where they have the best chance of completing transferable English and math requirements. As documented later in the report, none of the colleges examined for this study shared information with students about how choosing a remedial class would impact their likelihood of completion and, therefore, their likelihood of earning a degree and transferring. They failed to inform students, for example, that if their GPA is between 1.9 and 2.6, they have a 58 percent chance of succeeding in college English, if they enroll directly, but only a 22 percent chance of completing the course in a year, if they take a remedial course.<sup>15</sup>

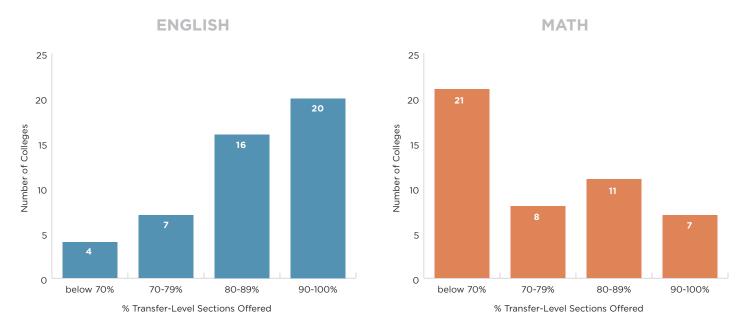
Finally, when colleges devote their limited public resources to remedial courses, there often aren't enough seats in transfer-level classes for the students legally entitled to enroll in them. The choice to continue providing substantial numbers of remedial sections will also mean a loss of funding under the new Student-Centered Funding Formula, a California Community Colleges resource allocation model that rewards colleges when students complete transfer-level courses in their first year. More remedial offerings mean lower student completion on this metric.

### **UNEVEN IMPLEMENTATION ACROSS COLLEGES**

As noted earlier, many colleges continue to offer a substantial number of sections of remedial classes. This is especially true in math. We found only seven colleges (out of 47 in the sample) where transfer-level sections account for more than 90 percent of the introductory math course offerings. At nearly half of the colleges in the sample, fewer than 70 percent of math sections are transfer-level (21 of 47 colleges).

Figure 5. AB 705 by Strength of Implementation

Implementation is much more uneven in math.



Source: Individual College Course Schedules

In English, remedial reading courses are a key driver of below-transfer course offerings, constituting the majority of remedial classes in some colleges' schedules.

In math, colleges are continuing to offer a substantial number of remedial algebra courses that prepare students for mathintensive majors. At most colleges, the number of sections offered far exceeds student need. Under the AB 705 standard of maximizing student completion, most students should proceed directly into a transferable statistics or liberal arts math course appropriate for their majors, including students seeking a terminal associate's degree. Students interested in mathintensive STEM majors should enroll directly in a transfer-level math course if they completed Algebra 2 in high school. Only STEM-directed students who have not completed this prerequisite should be considered for intermediate algebra, one level below transferable math. As noted earlier, this group is estimated to represent only five percent of California Community College students. Finally, a small percentage of students should take below-transfer courses if their career and technical education programs have specialized requirements that can't be met with a transfer-level course.

The Central Valley has the strongest implementation of the three regions analyzed, with the highest proportion of colleges offering 90 to 100 percent of its introductory math and English sections at the transfer level. Across the 14 Central Valley community colleges, 93 percent of introductory English sections and 79 percent of introductory math sections are at the transfer level.



# STRONG REGIONAL MOBILIZATION How did the Central Valley mobilize such strong implementation of AB 705?



In 2016, under the leadership of Merced College President Emeritus Benjamin Duran, the Central Valley Higher Education Consortium (CVHEC) began a concerted effort to remove the barriers to college completion in the region. Their ambition was reflected in the regional summit, "All means All in the Central Valley - Clearing the road to the finish line."

The region's college and university presidents and chancellors—who comprise the CVHEC board—came to understand that transforming placement and remediation was critical to their larger effort. They set goals for implementing corequisite models and enlisted partners like Complete College America, the Charles A. Dana Center, and the California Acceleration Project to lead summits and workshops for Central Valley faculty and administrators. By the time AB 705 came along, the region was primed for action.

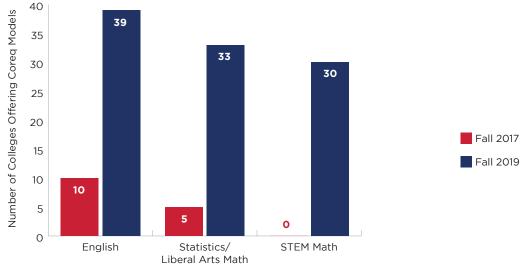
"More and more colleges in the Central Valley are realizing the importance of AB 705," says Duran. "They're recognizing that, because of these changes, children of doctors and children of farmworkers could all have the same shot at succeeding at a community college or CSU."

# LARGE INCREASE IN THE USE OF COREQUISITE REMEDIATION

As an alternative to traditional remedial classes, AB 705 steers colleges to provide concurrent support while students are enrolled in transfer-level classes—an approach known nationally as corequisite remediation.<sup>16</sup> For example, instead of enrolling in remedial math, students entering community college with lower high school grades might take college statistics or precalculus with two additional units attached. This would provide these students with more class time to review foundational math concepts and with skills needed at the higher level.

Figure 6. Colleges Offering Corequisite Remediation at Transfer Level

The number of colleges offering corequisite remediation has grown considerably since the fall of 2017, but still fewer than two-thirds of colleges in these regions offer such courses in STEM math classes.



47 Colleges in Central Valley, Inland Empire, and Los Angeles Regions

Source: Individual College Course Schedules

As can be seen in Figure 6, above, in the three focus regions studied, 83 percent of the colleges offered a corequisite support model of college composition (39 out of 47 colleges), 70 percent offered a corequisite support model of college statistics (33 out of 47 colleges), and 64 percent offered corequisite support for transfer-level business and STEM math classes (30 out of 47 colleges).

While the growth of corequisite models is encouraging, uneven implementation remains a concern. Corequisite models enable students to enroll in the classes that give them the best chance of completing transferable English and math, while also receiving support to be successful in them. At colleges not offering these models, traditional remedial classes remain the primary option for students who are nervous about meeting the demands of a transfer-level course. This option, however, carries the hidden consequence of reducing their likelihood of completion.





### **COREQUISITE/CONCURRENT SUPPORT MODELS**

While traditional remediation delays students' educational progress by requiring them to take classes that don't count toward a bachelor's degree, corequisite remediation enables students to enroll directly in a transferable, college-level gateway course and to receive additional support to be successful there. In corequisite models, the level of rigor is unchanged—students must meet the same learning outcomes as in a traditional college-level class, but they have more time and support in class to reach those outcomes.

California Community Colleges have a lot of flexibility in how they design corequisite/concurrent support (e.g., lecture/lab units, credit/noncredit options, required/recommended support); however, AB 705 guides colleges to "minimize the impact on student financial aid and unit requirements for the degree by exploring embedded support and low or noncredit support options."

Several common models are described below.

#### **Linked Corequisite Courses**

Students enroll in two linked classes—a standard transfer-level course and a support course designed to help them with the transfer-level assignments. Both classes are typically taught by the same teacher. At some colleges, students are required to enroll in the extra support course based on their high school grades; at other colleges, students can choose whether to enroll in the standard or extra-support model. In California, one of the first colleges to implement this model for English was San Diego Mesa College, where the three-unit English composition course is linked to a two-unit support course. Cuyamaca College was one of the first to implement this model in math, with two-unit corequisites linked to designated sections of statistics, business calculus, and precalculus.

#### **Enhanced Courses**

In this model, students do not register for two linked courses; instead, they receive additional support by enrolling in a higher-unit version of the transfer-level course. At some colleges, students are required to enroll in an enhanced course based on their high school grades; at other colleges, students can choose whether to enroll in the standard or enhanced model. By streamlining registration, this model solves some of the technical challenges that colleges have faced with linked corequisite classes. Skyline College was one of the first community colleges in California to offer an enhanced version of college composition. Students take either a standard three-unit class or a five-unit enhanced version.<sup>19</sup>

#### **Accelerated Learning Program (ALP) Models**

Also called a commingled model, this is a specific type of linked corequisite model in which the transfer-level course includes a mix of students—those who are taking the regular class without support and those who enroll in the linked support class. The corequisite support class is typically taught by the same instructor immediately before or after the main class, and class size is often small. Based on the ALP program at the Community College of Baltimore County, this model was first implemented in California by English department faculty at Sacramento City College<sup>20</sup> and MiraCosta College.

#### **Other Concurrent Support**

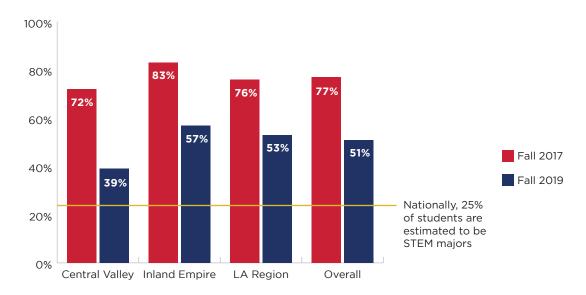
Colleges are also providing support to students through tutoring provided at learning centers, embedded tutors in the classroom, workshops, counseling, and other wrap-around supports. These supports may be combined with the curricular models described above. Because they are generally not visible in the course schedule, these supports have not been included in the tallies of corequisite models.

# MATH OFFERINGS NOT ALIGNED WITH STUDENTS' GOALS

Another area of concern in the fall course schedules is that colleges are not providing enough sections of transfer-level statistics and quantitative reasoning, the math most students need for their degrees. Instead, course offerings are weighted toward pre-transfer and transfer-level classes for students pursuing calculus-based STEM programs. While national research estimates that just 25 percent of students are pursuing STEM majors,<sup>21</sup> STEM-related courses represent 52 percent of the fall 2019 math offerings across the three regions.

Figure 7. STEM Math Sections as a Percentage of Introductory Math Sections

Colleges continue to offer more STEM math sections than they need.



Source: Individual College Course Schedules

On the positive side, between fall 2017 and fall 2019, all three regions made improvements in aligning their course offerings with students' goals. The greatest progress occurred in the Central Valley, where STEM course sections went from 72 percent to 39 percent of introductory math offerings. However, STEM courses still represent more than half of the introductory math offerings in the Inland Empire and Los Angeles regions.

At several Central Valley colleges, a promising strategy has emerged to address the misalignment between math offerings and students' educational goals: expanding the number of sections of statistics offered by other departments (e.g., business, economics, psychology). At some colleges, other departments offer two to three times the number of statistics sections as the math department. This strategy can substantially improve a college's proportion of transfer-level offerings. At one large college, the 30 sections of statistics offered outside the math department increased the proportion of transfer-level sections from 64 percent to 80 percent.



#### "WE BELIEVE IN OUR STUDENTS."

A good example of positive AB 705 messaging comes from College of the Sequoias in the Central Valley. The college's fall schedule includes 100 percent transfer-level courses in English and 93 percent in math, making the college one of just seven in this study that are strong implementers in both disciplines.

The college produced a powerful video to inform students and the larger community about AB 705. The one-minute video begins and ends with a student excitedly saying that now she and other students will be able to register directly into transfer-level English and math courses. It also features a series of college employees speaking in easy-to-understand language about the changes they are making—using high school grades for placement, eliminating remedial courses, and creating new corequisite classes to support students in challenging transfer-level classes. Rather than stoking students' fears about taking higher level classes, the video emphasizes a belief in students, and the overall impression is of faculty and advisers taking ownership of what AB 705 means for the college:

"It means we're going to have to change how we do things. How we advise students. How we offer courses. And, of course, how we support them. But it also means we believe in our students. Now students will have greater and more equitable access to transfer-level courses."

In College of the Sequoias, we see an institution where both communications and course offerings are aligned with the AB 705 standard of maximizing student completion.

## **COLLEGE MESSAGING ABOUT AB 705**

At colleges still offering a large number of remedial sections, we wanted to understand the messages students are receiving about their right under AB 705 and its follow-up legislation, AB 1805, which requires colleges to inform students about their placement policies.

We examined the websites of 11 colleges in the Central Valley, the Inland Empire, and greater Los Angeles regions with the lowest proportions of transfer-level course sections, as well as several other colleges for additional context. For this subset of colleges, we looked at college homepages; webpages related to assessment, placement, matriculation, and counseling; math and English department webpages; and college catalogs and course schedules, with an eye toward the following questions:

- · Are colleges publicly communicating their multiple measures policies?
- · Are colleges informing students of their right to enroll in transfer-level courses?
- With so many sections of remedial courses in the schedule, how are colleges ensuring that students enroll in courses that meet the AB 705 standard of maximizing their likelihood of completing transferable English and math?

In some cases, it was difficult to observe how colleges were advising or placing students, because their websites provided limited information and/or because their placement processes occurred behind a password-protected wall on their sites and were therefore not visible to the public. Overall, however, some patterns emerged.

#### **COLLEGE MULTIPLE MEASURES POLICIES**

Are colleges publicly communicating their multiple measures policies, as required by AB 1805? For most of the 11 weak implementer colleges we examined, the answer is yes.

At some colleges, multiple measures policies are expressed in broad strokes and jargon that could be hard for students to follow:

"The assessment test for credit courses will no longer be available after February 4, 2019 ...

We recommend you speak with a counselor before registration. Counselors can provide a multiple measures review of your preparation for transfer-level courses."

Other colleges are more specific about how high school grades are used to place students into or to recommend them for various courses and support. One college provides a table outlining its placement recommendations based on students' high school GPAs, math coursework, and intended majors. For example, high-GPA students pursuing liberal arts and other non-technical majors receive this guidance:

"My high school GPA was 3.0 or higher.

Recommendation: You should take transfer-level Statistics or Math for Liberal Arts. You don't need extra support to succeed."

Mid-range GPA students pursuing STEM majors see this message:

"My high school GPA was 2.6 or higher OR I took Precalculus in high school.

Recommendation: You should take transfer-level algebra or higher-extra support is recommended to succeed."

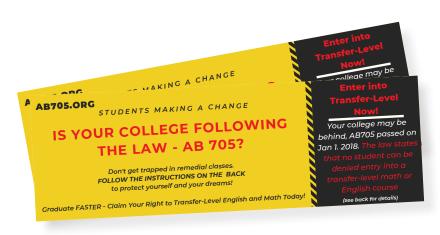
While most colleges meet at least a minimal bar for compliance, a few are communicating inaccurate information to students. At three of the 11 weak implementer colleges, the college websites still tell students that they must take English and math assessment tests, even though no standardized placement tests in English and math are currently approved by the California Community Colleges Board of Governors (Board of Governors).<sup>22</sup> Another college informed continuing students that they could only gain access to transfer-level courses if they brought in a transcript, in violation of the Title 5 regulation that colleges "must accept self-reported high school performance data" if transcripts are unavailable.<sup>23</sup>

#### STUDENTS' RIGHT TO ENROLL IN TRANSFER-LEVEL COURSES

AB 705 gives students the right to enroll directly in transfer-level courses, unless the college can demonstrate that they are highly unlikely to succeed there, and that they will have higher completion if they begin in a remedial prerequisite course. Are students being informed of this right? Here, the answer is more mixed.

Two of the 11 weak implementer colleges provide no information about the law or about students' right to enroll in transfer-level courses.

Three of the 11 appear to still be placing some students into non-transferable remedial courses in at least one discipline. None provided research showing that these placements meet the AB 705 standard of maximizing students' likelihood of completing transfer-level requirements, so students are unable to assess whether their right is being honored.



Six of the 11 weak implementer colleges do inform students of AB 705 and their right to enroll in transfer-level courses. The tone of these communications tends toward compliance—for example, cutting and pasting a description of AB 705 or including links to the statewide default placement rules—rather than positive expressions of belief in students.

In several cases where colleges inform students of their right to enroll in transfer-level courses, other parts of their websites undercut the message that students should enroll there. The website for one college in the Central Valley says this:

"You have been cleared for Transfer Level Math and English courses. However, you have the right to start at a level you feel is best suited to your ability. Remember, studies show students who go into Transfer level course work have a better chance to graduate, but it is still your right to begin where you feel it is most appropriate. Below are directions on how to conduct a self-guided placement."

Other colleges tell students that they recommend enrolling in below-transfer courses, regardless of the impact this will have on the students' likelihood of completion. One college math website recommends intermediate algebra for STEM-bound students with GPAs below 2.6, even if they completed this course and took precalculus in high school. For STEM students who did not complete Algebra 2 in high school, this math department "strongly recommends" the students enroll in a high-unit course covering high school Algebra 1 and 2. The college provides no information about how following these recommendations will impact students' likelihood of completing a transfer-level course.

Furthermore, although expressly prohibited by new Title 5 regulations,<sup>24</sup> some colleges embed "readiness tests" deep within their guided placement tools or include examples of potentially intimidating tasks students would be expected to do ("Would you describe yourself as a strong academic writer? Do you have experience writing essays that require you to analyze books and/or quote from multiple sources, and cite those sources?"). In these examples, the implication is that, if students can't already do these things, they may not belong in college composition, even though the class is supposed to *teach* students these skills.



#### NO WAY FOR STUDENTS TO PROTECT THEIR RIGHT UNDER AB 705

When remedial courses constitute fewer than 10 percent of the sections offered, it is less urgent that colleges fully and accurately communicate students' right and options under AB 705. The course schedule is already designed to maximize completion, so few students will end up in a class that makes them less likely to reach their goals.

The problem arises when students must choose whether to enroll in a transfer-level or below-transfer level course. Are colleges informing students about their likelihood of completing transferable English and math for each option?

None of the colleges examined here provided enough information for students to make an informed decision. At one college, freshman composition is described as "advanced," while remedial courses are framed as a less threatening alternative—"slower paced," for "students who want more time and support" or who "want to establish a stronger foundation in academic reading and writing" before taking college composition for a letter grade. The college informs students that, if they have a high school GPA below 1.9, their chance of succeeding in college English is only 43 percent, but it neglects to share that starting in a remedial course means their chances drop from 43 percent to 12 percent.

If colleges do not share data that show outcomes for these various options, students have no way of protecting their right to begin in the courses where they have the best chance of completing transferable courses. And with so many remedial sections still in college schedules, students will sign up for these classes without understanding the consequence: that they may learn or re-learn how to factor a polynomial but become much less likely to earn a bachelor's degree.

## **RECOMMENDATIONS FOR ACTION**

Many colleges are living in the gray area of this legislation, especially in math. They continue to offer a large proportion of remedial classes, even if they can't require students to enroll.

The volume of remedial course sections that remain in many college schedules indicates a continued belief among community college faculty and administrators that students need and benefit from these classes. This belief persists, despite years of local and statewide data showing that the likelihood of completion declines with every remedial course in a student's path. This misconception continues, even when local and statewide data fail to identify a group of students for whom starting in a remedial course produces higher completion rates. The persistence of this belief is perhaps the main reason that the changes mandated by AB 705 had to be legislated, rather than voluntarily adopted.

The continued presence of remedial course offerings poses the greatest threat to implementation of the law, will undermine the completion gains students see from AB 705, and will likely continue to feed racial and economic inequities. It will also cause colleges to lose funding under California's new funding formula. This issue, therefore, is central to our recommendations for action.

#### HOW CAMPUSES CAN IMPROVE IMPLEMENTATION

In the near term, colleges should make changes to address the implementation problems identified in this study, including by:

- shifting course schedules to offer primarily transfer-level courses in English and math, with few, if any, stand-alone remedial courses;
- aligning course offerings with the math students need for their programs of study (e.g., STEM vs. statistics/ quantitative reasoning);
- developing evidence-based corequisite support for transfer-level English, statistics, liberal arts, math, and STEM classes, if these are not already in place;
- revising college websites to ensure that students are receiving accurate, consistent, and encouraging messages about their right to enroll in transfer-level courses and about the support available to help them be successful;
- providing students with clear information about how enrolling in a transfer-level or remedial course will affect their likelihood of completing transfer-level requirements, so that they are fully informed about a remedial course's impact on their educational progress; and
- taking proactive steps to prevent students from under-placing themselves in stand-alone remedial classes, such as:
  - checking placement information for students who enrolled in remedial math each term and moving them to the transfer-level classes appropriate to their programs of study;
  - adding a "forced acknowledgement pop-up" during registration, informing students about their right to take a transferable class and about research showing that all students do better starting there; and
  - requiring students registering for remedial classes to sign a placement acknowledgement form that contains information on the lower completion rates for these courses.

#### HOW THE STATE CAN SUPPORT IMPLEMENTATION

#### **Faculty Development**

The changes required by AB 705 represent a sea change for community college English and math faculty, as they require not only changes to placement policies, but changes to instruction. Faculty need support to develop new curriculum for corequisite support models and to effectively teach within these models. Many need professional development on how to maintain the level of rigor in transfer-level courses, while also providing just-in-time remediation to help students succeed. And in math, many faculty members need support to begin teaching statistics and liberal arts math, since these are the classes most students need for their majors.

Some colleges have supported the redesign of remedial education by prioritizing developing faculty capacity, providing release time to faculty leads to develop new curricula and funding for professional development to help faculty teach within new structures.<sup>25</sup> But a key source of funding for this work—the state's Basic Skills and Student Outcomes Transformation Program—ended just as colleges were gearing up for AB 705, and no additional state funding has been earmarked to help colleges make the dramatic shifts the law requires.

In the near term, colleges should prioritize AB 705 implementation in their use of state Student Equity and Achievement Program funding. Further, the legislature should consider an additional round of dedicated funding tied to AB 705 implementation, especially to support the replacement of stand-alone remedial courses with corequisite/concurrent support models and the aligning of math course offerings with students' programs of study

#### **Systemwide Communications Plan**

Ideally, colleges should develop course schedules designed to maximize student success and to protect students' right to enroll in transfer-level courses. However, until that is the case for most colleges, communication to students about their right is necessary. And while we see many colleges attempting to communicate information about AB 705 to students, those messages can be unclear, inconsistent, or absent across institutions.

The Chancellor's Office should develop a strategic, statewide communications plan and guidelines for use by the community colleges that promote clear and consistent messages about AB 705. The plan should address:

- sample communications templates that address students' right to begin in the courses where they have the best chance of completion and that can be used to place this information on college websites and in course catalogs and registration systems;
- statewide data showing the different completion rates for students starting in transfer-level courses versus standalone remedial courses, to enable students to make fully informed choices; and
- guidelines and timelines for how colleges are expected to use these communications tools.



#### MONITORING IMPLEMENTATION

A student's ability to complete the English and math requirements needed for a certificate or degree or to transfer is foundational to realizing each of the goals outlined in the California Community Colleges' *Vision for Success*. The Board of Governors and the Chancellor's Office must, therefore, prioritize closely monitoring the colleges' implementation of AB 705.

#### **Refining Data Collection & Reporting**

Reporting and data collection are critical to monitoring faithful AB 705 implementation. However, current reporting requirements need to more explicitly measure the number of students *starting* in transfer-level courses versus those *having access* to transfer-level courses. First-course enrollment is the truest measure of a college's placement results—combining what colleges have chosen to offer (remedial vs. transferable courses) with the different elements of their placement practices (from formal policies to guidance tools to advice from faculty). This is the primary driver of student completion in transferable English and math.

In particular, the Chancellor's Office needs to make this metric more explicit in the annual reporting required of colleges and in the data that colleges are required to publicly post on their websites. This data must also be disaggregated by race/ethnicity.

#### **Encouraging Progress**

Using this revised first-course enrollment metric, the Board of Governors should identify colleges that are failing to enroll the vast majority of their students in transfer-level English and math courses. Those colleges should be required to submit a detailed plan for meeting that metric within the next calendar year.

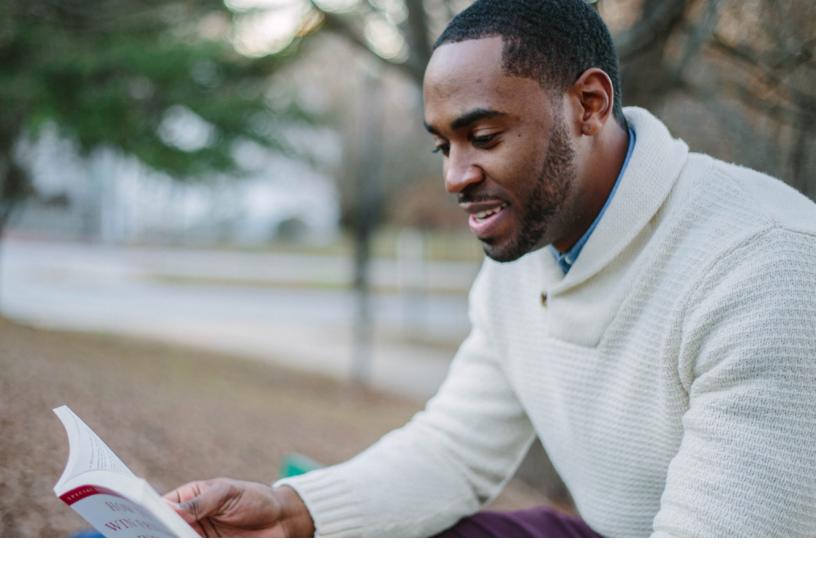
#### AREAS FOR FURTHER ATTENTION

This report identifies several opportunities for strengthening and refining AB 705 implementation in the near term. AB 705 has the potential for being a transformative policy, but only if we continue to commit the research, readjustment, and investments necessary to maximize outcomes for all students.

The following areas are not addressed in this report, but warrant further exploration:

- The quality of corequisite models: While many colleges are introducing corequisite support as an alternative to traditional remediation, these models vary among the state's community colleges. Research should be conducted to assess the effectiveness of different models, especially those with high unit requirements
- State investments in stand-alone remedial courses: At the time AB 705 passed, many believed that some students have higher completion of transferable requirements if they began in a remedial course. Since then, further research has established that this is not the case. The state should explore its continued funding of stand-alone remedial courses that do not maximize student success.
- Role of implicit bias: Improving student outcomes in transfer-level English and math must include a thoughtful
  examination of belief structures and how they are manifested in the classroom and in advising. Resources should
  be dedicated to professional learning aimed at advancing racial equity in gateway courses by examining the role
  of implicit bias.





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**Page 18** screenshot of video produced by College of the Sequoias to educate students and the college community about changes to placement under AB 705

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