



September 18, 2019

TO: Trustees of the California State University

FROM: E. Toby Boyd, President  
California Teachers Association

RE: Committee on Education Policy Information #5  
Proposal to Modify First-Year Admission Requirements  
for the CSU

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On behalf of the 310,000 members of the California Teachers Association, I write to voice our opposition to the CSU proposal to require an additional year of mathematics/quantitative reasoning for incoming students.

This proposal was reviewed by public school educators who are on the CTA State Council Committees for Curriculum and Instruction and Civil Rights in Education.

We encourage the Board of Trustees to consider the many aspects of this proposal and its impact on students and PK-12 partners.

Access to a broad course of study:

CTA has a fundamental belief that every student attending a public school in California is entitled to equal access to all education opportunities. We supported and will continue to support the Local Control Funding Formula (LCFF) which is designed to provide more resources to our neediest students.

Through the Local Control and Accountability Plans (LCAP) and the California dashboard, local school districts are held accountable for removing barriers that prevent access to a broad course of study for all students (**State Priority 7**), including higher level mathematics. The state’s intent for requiring a broad course of study is to ensure that all students take and complete courses that are considered to be academically and culturally essential—i.e., the courses that teach students the foundational knowledge and skills they will need in college, careers, and adult life. Depending on the support structures (staffing and resources) for the academic program in a particular school, the broad course of study may be different for some students. For example, some schools offer distinct academic programs in parallel with their regular academic programs—such as International Baccalaureate or theme-based academies, among many other possible options. Currently, not all students have access to higher level coursework. This is due to a variety of issues including teacher recruitment and shortages in the STEM areas and the inflexibility in course scheduling.

Teacher shortage: This proposal does not contemplate the role and responsibility of the CSU to address the math teacher pipeline. The teacher supply issue that California is experiencing extends through almost all disciplines. The supply problem is most acute in math and science. According to a 2016 report in the Los Angeles Times, 75% of California's school districts reported challenges in filling teaching positions, especially in science and math.

In the 2014-15 school year, a total of 1,119 math credentials were issued, down 8.4 percent from the 1,221 in the previous school year. For that same year, there were 1,347 science credentials issued, down 6 percent from the 1,434 issued the year before. Over the next decade California is expecting a shortfall of 33,000 mathematics teachers. Fewer students are studying math in college today and most of these math majors enter more lucrative fields after college.

Adding an additional math requirement adds complexity to a circular problem. Given the existing shortage of qualified teachers of mathematics, many schools are left with substitute teachers who often have little or no training in teaching math or teachers with emergency teaching licenses and little practical knowledge of math education. CTA is not surprised that student surveys continue to show a growing number of students do not enjoy the experience of learning math because they are not being taught math by an effective teacher who is knowledgeable and passionate about the subject. This situation leads to a feeling of inadequacy about learning math which turns most students off altogether. Fewer students are then inspired to study and teach the subject.

Furthermore, the CSU proposal would have a significant impact on California's public-school students, especially African American, Latino and low-income students.

A recently published study by RTI International Mathematics *Coursetaking and California State University Eligibility: Follow up to the University Eligibility Study for the Public High School Class of 2015* Elisabeth Hensley, Xianglei Chen, Yijua Hong, Taylor Campbell, August 2019, found that if an additional year of math or science were required of the Class of 2015, the CSU eligibility rates for Latino, African American and low socioeconomic status students would decrease.

Please see following table:

**Table 2. Eligibility rates for 2015 high school graduates based on actual subject area “c” requirements, subject area “c” requirements plus an additional year of mathematics, and subject area “c” requirements plus and additional year of mathematics or science**

	Actual eligibility rate of 2015 high school graduates	Eligibility rate if an additional year of mathematics were required	Eligibility rate if an additional year of mathematics or science were required
<b>All graduates</b>	40.8	33.7	35.0
<b>Gender</b>			
Male	35.3	30.0	31.1
Female	46.6	37.6	39.1
<b>Race/ethnicity</b>			
Latino <sup>a</sup>	32.0	24.5	26.0
Asian American <sup>b</sup>	63.6	58.9	59.6
White	40.0	32.1	33.7
African American	30.5	21.7	23.7
American Indian	37.2	27.6	30.3
<b>Socioeconomic status</b>			
Socioeconomically disadvantaged	34.0	26.8	28.2
Not socioeconomically disadvantaged	52.3	45.1	46.1
<b>Region<sup>c</sup></b>			
1—North and Sacramento Valley	31.1	25.1	25.5
2—San Francisco Bay Area	53.9	48.4	49.2
3—Sierra and Central/San Joaquin Valleys	34.6	27.3	28.3
4—Central Coast	40.9	34.5	34.9
5—Inland Empire	38.1	32.0	32.9
6—Los Angeles and Orange Counties	41.2	32.3	34.3
7—Southern Border	45.5	40.6	41.8

<sup>a</sup> Latino ethnicity is identified independently of race.

<sup>b</sup> Asian American included Pacific Islander and Filipino American for historical comparison with previous eligibility studies.

There is wide variation in the eligibility rates among subcategories of Asian American graduates, but for the purposes of this study the disaggregated Asian American data could not be further analyzed with adequate reliability.

<sup>c</sup> See Figure 1 for the counties included in each region.

CTA believes that the CSU proposal would only compound the disparity that exists in the access to higher level courses and a broad course of study, as well as erode the progress that we have made in preparing students and supporting greater college access. We are concerned that the CSU Board of Trustees has not completed a comprehensive study to evaluate the impact of this proposal on college access.

CTA encourages the CSU Board of Trustees to delay this proposal and conduct a formal study to evaluate the impact on enrollment of African American, Latino and low-income students and to work collaboratively with your PreK-12 partners.

Thank you.