

THE CSU'S QUANTITATIVE REASONING PROPOSAL: FUZZY REASONING THAT THREATENS ACCESS

OVERVIEW

The California State University (CSU) Office of the Chancellor has introduced a proposal that would add a 16th course to the current 'a-g' sequence, the set of courses required for admission to the CSU and University of California (UC) systems. Currently, California high schoolers must complete the a-g course sequence with a 'C' or better to be eligible to apply to a CSU or UC. The additional course proposed by the CSU must be within a broad umbrella of Quantitative Reasoning (QR), which includes classes such as calculus, biology, personal finance, statistics and others. The CSU strongly recommends that this additional QR course be taken during a student's senior year of high school, although it is not required.

The CSU is proposing a change to language in Title 5 of the California Code of Regulations, which outlines their admissions requirements. If approved by the CSU Board of Trustees (BOT), the additional QR requirement would go into effect in the Fall of 2026; current 7th graders would need to fulfill the 16-course sequence to be eligible for the CSU. In recent BOT meetings, the CSU has indicated it will "work with the California Department of Education" to offer waivers to applicants from high schools that are unable to offer additional QR courses. The protocol and data sharing agreements related to this waiver have not been defined, nor does the policy language contain resource allocations for such an agreement.

The CSU has indicated that this proposal is intended to increase students' retention and completion rates. They have also indicated that there is an increasing workforce demand for STEM majors, hence the focus on QR courses. The BOT will vote on this proposal at their regular meeting on November 19-20, 2019.

THE CSU PROPOSAL WILL HARM CALIFORNIA'S STUDENTS

The Campaign for College Opportunity, 60 community-based and civil rights organizations, school districts representing over one million California students, and major labor unions and associations are opposed to the CSU QR proposal. While there is certainly a need to increase the CSU's graduation rates--overall and within STEM majors--there is scant evidence that this policy will precipitate such a change. Furthermore, the change will have a negative impact on underrepresented and low-income groups of students.

The following concerns have been reflected within the advocacy community, the Los Angeles Times Editorial Board, numerous CSU Trustees and public higher education leaders:

- There is **no causal evidence** that taking an additional QR course in high school is connected to college retention or completion.
- There are **broad systemic challenges within the K-12** system in supporting students on the path to college and career readiness. Only half of California's 2017-18 graduates completed the current 15-course sequence.
- More than 60 percent of Black and Latinx graduates were ineligible for CSUs in 2017-18. Adding another requirement will **disproportionately impact Black and Latinx students** and students from lower-income regions in the state who do not have the proper supports nor opportunities to access these courses.
- **The Chancellor's Office has designed this policy in a vacuum** without meaningful dialogue or planning with the UC, CDE or other stakeholders. The current partnerships with CDE described in the proposal are not formal policy, and the change would create two applicant paths for students who apply to the UC and CSU systems.

- Many **K-12 leaders see this policy as an unfunded mandate** that requires substantial investments and structural changes, when per pupil funding for California’s students ranks 44th in the nation.

LACK OF EVIDENCE

What Difference Will an Additional Year Really Make?

Given that the majority of entering students are already completing a fourth year of quantitative reasoning, yet CSU graduation rates remain low, we are not confident that this policy change would yield the outcomes the CSU is aiming for. Currently, the CSU and UC systems require that all incoming freshman take three years of math and two years of science. The state-mandated requirements for California high school graduation include a semester of economics. These requirements total five-and-a-half years of course work that already employ quantitative reasoning elements. According to the CSU’s August 19, 2019 board documents, 91 percent of all incoming first year students in 2018 had already taken a sixth year of math and science. Despite these students taking this additional year, and an average of 21 a-g courses, retention and completion rates remain low across the CSU system: the most recent six-year graduation rate was 61.2 percent for Fall of 2012 entrants, and the four-year graduation rate for Fall 2014 entrants was 25.5 percent.

Research shows that Black, Latinx and low-income students are less likely to have access to advanced math courses in high school. Students who do take and succeed in advanced math courses are more likely to come from privileged backgrounds. Although many students do not need additional math for their future professions, many students who have the resources to be competitive take these courses, knowing that admissions standards often use math to filter out applicants. Taking these courses are not the cause of student’s post-secondary success. It is a correlational assumption that course taking patterns in high school are the strongest indicator of a student’s likelihood of persistence and graduation.

Where is the CSU Drawing its Data From?

The Chancellor’s Office employs student outcomes data and external reports to support its case, but the data points they present do not support the requirement they are proposing. See the table below for a summary of the mismatch between cited data points and the actual policy language under discussion.

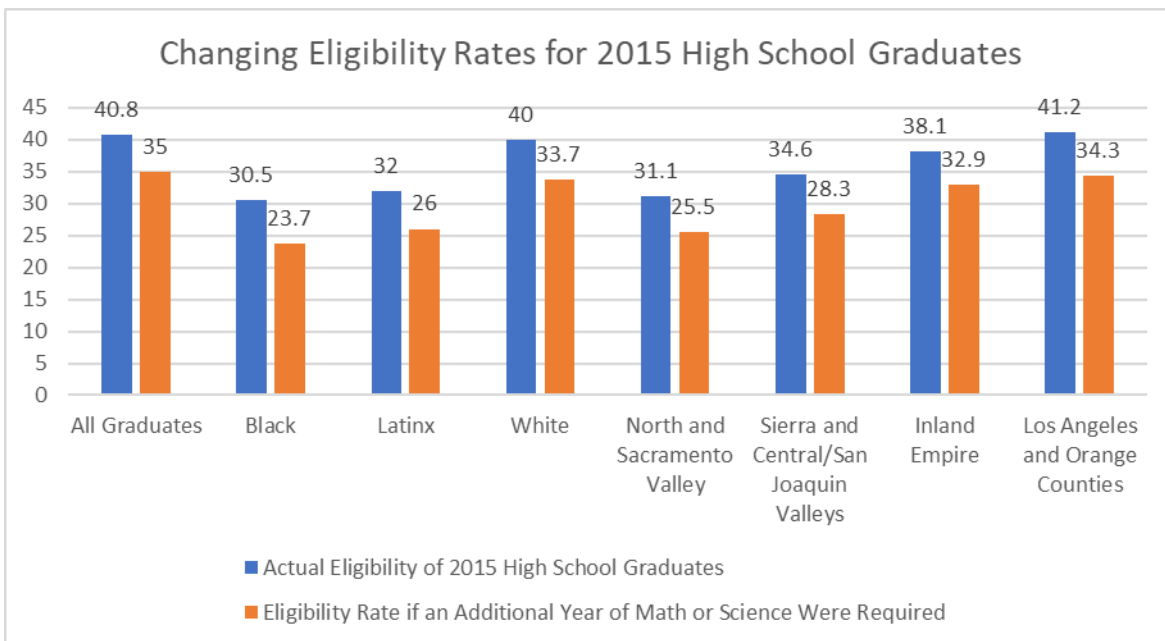
CSU Cited Research	CSU Proposal Language
Additional math or science courses in high school improved CSU students’ success	The proposal requires a math, science or QR elective course
Four years of math improves postsecondary success	Proposal does not require 4 years of math
Math in a student’s senior year improves success	Proposal does not call for math in senior year
QR in undergraduate curriculum improves success	Proposal is for QR in high school, not undergrad

K-12 CAPACITY AND DISPARATE IMPACTS

Compounding Inequities in an Already Inequitable System

In the 2017-18 school year, only half of California’s high school graduates completed the current 15-course ‘a-g’ requirements. In recent years, there has been a growing movement to align school districts’ graduation requirements with UC and CSU eligibility requirements. These efforts have been met with mixed results, and many school districts and labor unions are cautious to implement such changes given the required investments in teacher training, counselors, English Learner supports, early interventions, parent engagement and more across the K-12 pipeline. Even Governor Newsom recently vetoed a bill (AB 28) about STEM seals of approval, citing a shortage of math and science teachers to teach these courses. Adding another requirement to an already uneven and inequitable education landscape only compounds inequities experienced by Black, Latinx and low-income students.

Because the CSU did not conduct a study on the proposal’s impact, the Campaign for College Opportunity, Education Trust-West and Just Equations commissioned a study from RTI International, the firm that conducted California’s last eligibility study. This report uses data from the Class of 2015 and demonstrates that all students will be negatively affected by the change to varying degrees. Note that the table below models the change in eligibility rates with an additional year of math or science; presently, the broad category of QR is challenging to analyze in this way and was therefore not included in the model.



Long Beach Unified as the Exception, Not the Rule

Long Beach Unified implemented a fourth year of math as a graduation requirement over the course of seven years, with strong partnerships with local CSUs and community colleges, \$7 million in philanthropic support, administrative and educator buy in, and sustained leadership. Most other school districts in the state do not have this “perfect storm” of system’s change drivers. As with many other implementation efforts, school districts will struggle to fund, scale and sustain changes to their curriculum and graduation requirements.

ONGOING CONCERNS FROM STAKEHOLDERS

California’s Leading Civil Rights, Faculty and Teacher Unions and Equity Champions Remain Opposed

Since the first iterations of the proposal were brought forward in the spring of 2019, the number of education and community-based non-profits, civil rights organizations, service providers and K-12 districts has grown. Many of these equity-focused organizations have been engaged in conversations about increasing rigor, access and opportunity for their stakeholders for decades. At present, over 60 organizations, six school district boards and superintendents and three state-wide labor groups including the California Teachers and Faculty Associations have opposed the QR proposal and repeatedly asked Trustees to vote NO on the change.

Many CSU Trustees Are Raising Serious Concerns About the Proposal

The controversy and confusion surrounding the CSU’s proposal should give decision makers pause. Many Trustees and statewide leaders, including Ex-Oficio member and Lieutenant Governor Eleni Kounalakis, have continued to voice concerns about the proposal’s validity and impact. With so many unaddressed concerns and a lack of consensus across the board of trustees, the policy should be voted down.

MOVING FORWARD

Conduct a Rigorous, Independent Analysis of Policy Impact

Throughout the development of this proposal, Trustees, community-based organizations and K-12 leaders have asked the Chancellor's Office to commission an independent analysis of the impact of an additional year of QR. These requests have been met with resistance and an explanation that not all policy decisions can be made with such reassurances that students will not be harmed. While the September 24-25 board documents outline a data sharing agreement and study with the CDE regarding course-taking trends is a step in the right direction, it is limited in scope, internally driven, and will not be completed until after the Board votes on the change.

As a comparison, the UC system is considering adding an additional year of science to their admissions requirements. The Public Policy Institute of California (PPIC) is conducting a study of the proposal's impact for their students and campuses. While that study is underway, no policy language has been written. The CSU formally published policy language at their September 24 Board of Trustees meeting and will vote on the proposal on November 19 or 20, with general plans to conduct a cursory analysis at an unknown future date.

Leverage the Governor's Postsecondary Council to Determine a College Readiness Vision and Appropriate Investments

Governor Newsom recently created a postsecondary council that includes leaders from the CSU, UC, Community College and K-12 systems. This is a productive place to have meaningful dialogue around altering admissions requirements and developing a shared vision for college readiness indicators for the 21st century workforce. Given the increasing demand that employees have a post-secondary credential or degree, college readiness and completion initiatives are more important than ever.

It is imperative that these discussions include budget allocations from the legislature. Looking at bills that aimed to align high school graduation and college eligibility requirements, appropriations had estimated costs between \$60 and \$80 million. Other bills that would require single courses as graduation requirements (such as ethnic studies or financial literacy) have ranged from the high hundreds of thousands to the low millions. Given the range of college readiness across our state, the legislature would also have to ensure that any funds would be distributed equitably to the schools and districts that need the most support.