New Analyses Shed Light on Equity Pitfalls of Cal State's Potential New Admissions Policy

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When California State University faculty first proposed requiring applicants to complete a math or quantitative reasoning course in their senior year of high school, they specifically recommended that the system "investigate the impact these requirements may have on the success of all students, particularly those from historically underserved populations."

Three and a half years later, the CSU system appears to be moving forward with the idea of requiring an additional quantitative reasoning course — but without first satisfying the faculty's recommendation to study its potential impact. Though CSU officials have asserted that the proposed change will not negatively impact access to CSU for Latinx, African American, and low-income students, they've produced no evidence to that effect. In fact, Chancellor's Office staff have responded to requests for data analysis by asserting that such requests need to be "reasonable."

First of all, analyzing available evidence about possible disparate impact before making policy decisions is not just reasonable — it's responsible. Secondly, the idea that such analyses are somehow not feasible is refuted by two new studies whose findings don't support the CSU's claims that admissions policies are the way to improve access to rigorous quantitative reasoning

courses. Rather, they suggest there is far more work to do at the high school level to achieve that outcome.

The first study, an analysis of CSU eligibility released yesterday found that the proposed change could reduce CSU eligibility overall, but that the most dramatic effects would fall on Latinx and African American students. A follow-up to the University Eligibility Study released by Governor Jerry Brown in 2017, the new study was produced by RTI International, which also conducted the 2017 study.

RTI researchers utilized student-level data for the Class of 2015 provided by the California Department of Education, the same data that was used in the original study. They found that, if the new requirements (including an additional year of area "c" math or area "d" science) had applied to the Class of 2015, overall eligibility rates would have been 14 percent lower. Only 35 percent of high school graduates would have been eligible instead of the actual rate of 41 percent. (Doing the math: 40.8 minus 35 equals 5.8, and 5.8 divided 40.8 equals 14 percent.) But rates for Latinx and African American students would plummet more dramatically: by 19 percent and 22 percent, respectively.

How changes to eligibility policies would affect eligibility rates if the changes were implemented for the high school graduating class of 2015

	Actual 2015 eligibility rate	Eligibility rate with additional math	Eligibility rate with additional math or science	Difference
Latinx	32	24.5	26	—19%
Asian American	63.6	58.9	59.6	—6%
White	40	32.1	33.7	—16%
African American	30.5	21.7	23.7	—22%
All	40.8	33.7	35	—14%

Source: RTI International, 2019

It also found that eligibility rates for low-income students would drop to 28 percent vs. 46 percent for other students. Of course, the study doesn't account for any future changes in high school offerings or students' course-taking decisions that could be stimulated by CSU's proposal. CSU officials argue that the proposal will actually motivate schools to offer more quantitative reasoning courses, thus ensuring that more African American and Latinx students take them. But the report does clearly show how extensively course enrollments would need to change for that prediction to come true.

Opening up new opportunities at such a scale has rarely, if ever been accomplished, and history tells us who will be left out. It is not clear what problem this high-stakes experiment is intended to address — other than the fact that "too many" students meet current eligibility requirements, under the constraints of the Master Plan. Wouldn't it be better to celebrate eligibility, and support capacity-building within high schools and the CSU?

Another study being released this week by Policy Analysis for California Education (PACE), using more recent CDE data, sheds additional light on math course-taking among California seniors. The original faculty proposal was to require students to take math or quantitative reasoning in their senior year. Now CSU officials say the new course could be taken at any point. Nevertheless, the PACE study's focus on the senior year is quite relevant: Most students would need to meet this requirement as seniors, since they are already taking math courses in the first three years of high school.

Analyzing data for the classes of 2016, 2017, and 2018, researchers at UC Davis found that more than 300 of the state's traditional public high schools had no seniors enrolled in advanced math classes (courses beyond Algebra 2, currently the third of the three courses required for admission). More than six percent of all students attend schools where not a single twelfth grader took an advanced math class. The report also found that African American, Latinx and low-income students were far less likely to be enrolled in advanced math courses, even among those students who are admitted to CSU (using data provided by the CSU system). According to an earlier study by PPIC, the solution to these gaps rests with high school policies and practices — including graduation requirements, placement policies, and advising practices — not university admissions.

The CSU proposal would also allow students to meet the requirement with science courses or with other quantitative reasoning courses. The PACE study did not look at these additional courses. But, RTI's findings suggest that adding science classes increases eligibility only slightly. Neither study analyzed the additional quantitative reasoning classes, because the available transcript data doesn't identify them. Nor has CSU produced a comprehensive list of them.

CSU officials have made mention of a waiver scheme for students who don't have access to the newly-required courses. If the policy is approved, any waiver system should not place the burden on students to know about and seek a waiver (or on schools that are already struggling to support students in accessing college).

Many questions remain about how students enroll in math and quantitative reasoning courses and how those patterns may change in the future. But, given the findings of these two studies, it seems "reasonable" to expect CSU officials to provide a better explanation for what problem the current proposal aims to solve, and how it would hold students harmless in terms of access to CSU.