FOUR YEARS OF MATH--WHAT FOR?
Silicon Valley Education Foundation hosts forum on controversial California State University proposal

Contact:
Cynthia Harvey
Communications Director, Silicon Valley Education Foundation
cynthia@svefoundation.org
(408) 790-9475

SAN JOSE, CA. - Should the California State University system require students to take four years of math in high school? Silicon Valley Education Foundation convened a panel of experts to offer their views on this controversial issue at the Santa Clara County Office of Education on Dec 9, 2019.

The forum, “Four Years of Math--What For?” featured spirited debate about whether the CSU’s proposal to require a fourth high-school year of quantitative reasoning by 2027, to be voted on in January, would move the needle in college readiness and persistence. Panelists included Michael W. Kirst, President of the California State Board of Education; Nancy Albarrán, Superintendent of San Jose Unified School District; Lisa Andrew, CEO of Silicon Valley Education Foundation; Neal Finkelstein, Director of WestEd’s Innovation Studies Program; Thomas Reisz, Manager of San Jose State University’s Academic Preparation Program; and Elisha Smith Arrillaga, Executive Director of the Education Trust - West. The panel was moderated by John Fensterwald, Editor-at-Large at EdSource.

The California State University system, the nation’s largest four-year public university system, has proposed the initiative to better equip students with the quantitative reasoning skills necessary for success in college and the changing workforce and argues that the proposal will not harm students. Critics of the initiative, including Lieutenant Governor Eleni Kounalakis, State Superintendent of Public Instruction Tony Thurmond, and some advocacy groups, have argued that the initiative would disadvantage low-income, black, and Latinx students and create confusion by exceeding the requirements of the University of California system. Panelists at the Silicon Valley Education Foundation event represented both sides of the debate.

Neal Finkelstein argued that students need the additional year of quantitative reasoning courses to combat knowledge loss—a senior who does not take math will have a gap of at least 17 months without math instruction between her junior year math class and entering college.
“If you’re not procedurally fluent and conceptually fluent in math, you lose those skills without practice all the time,” Finkelstein pointed out. “If you don’t take math as a senior in high school, you struggle mightily because of this recency challenge.” The four-year graduation rate from the CSU system is 27%, he continued, and requiring a fourth year of math would improve graduation rates: “The students who are most likely to not graduate in 4 or 6 years are the students who disproportionately struggle with math when they enter the CSU system.”

Thomas Reisz, Manager of San Jose State University’s Academic Preparation Program, pointed out that research supported the association between more math in high school and higher college completion rates, and the effect goes beyond graduation rates: “There are a number of ripple effects of having better mathematics preparation.”

Elisha Smith Arrillaga, Executive Director of Education Trust - West, agreed on the imperative but not the method: “We have a math crisis. We are failing students at math. We’re failing them in higher ed, and we’re failing them in K-12.” While well intentioned, this initiative lacks clarity, research, and depth of partnerships. She argued, “Good policy can have unintended consequences. More math is a great thing, but slowing down in order to do it with more data and in deep partnership with K-12 could really move the needle for kids across the state.”

All parties agreed on the need for deep thought and creative solutions to better prepare students for college success, and the CSU’s proposal provides the impetus for these debates. As Finkelstein summarized, “I would see this 7 years as an opportunity for lots of good discussion...around alternative path structures and course designs for students who have had a history of struggling with math and maybe haven’t seen college as part of their journey.”

Silicon Valley Education Foundation convenes forums twice a year on subjects of interest to leaders and practitioners in STEM education.

About SVEF

Silicon Valley Education Foundation (SVEF) is the largest educational nonprofit in Silicon Valley. We are guided by the belief that all students are capable of pursuing higher education and boosting their future economic mobility regardless of their background. SVEF has an established legacy of providing proven STEM programs and being profoundly committed to empowering students to graduate high school career and college ready. For more information, visit svef.com.