

# Public Comment to the State Board Education

## SBE meeting 7/12–7/13, Item #11 on the Mathematics Framework

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The most recent draft, as well as previous drafts, of the California Math Framework (CMF) state that the purpose of the CMF is “*to support implementation of the California Common Core State Standards for Mathematics (CA CCSSM)*”. Though the MIC pathway has been eliminated in this most recent draft, the CMF draft still continues to advocate for high school data science courses as alternatives to Algebra II or Math III (discussion of “Yesenia”, Ch. 8, lines 793-794), contrary to the standards for college readiness as defined the CA CCSSM, our official state standards for K-12 mathematics. To quote the [CA CCSSM](#) (pg. 58): “*The higher mathematics standards specify the mathematics that **all** students should study in order to be college and career ready*”. The model pathways defining what “higher mathematics standards” are meant is at the top of the same page, i.e. either the traditional pathway (Algebra I, Geometry, Algebra II), or the integrated pathway (Math I/II/III). Our state’s standards are clear, and the purpose of the CMF, in its own language, is to support implementation of those standards. Any student wishing to go to college, to be college ready, should acquire the competencies provided by completion of one of those pathways, including “Yesenia” from Ch. 8, lines 793-794, the aspiring political scientist.

The concept of a high school data science course is amorphous, with no standards, and with each data science course having different learning goals than any other. For example, the author of the most popular high school data science course in our state, UCLA’s “Introduction to Data Science” (IDS), has stated that his course contains “[just a dash of mathematical thinking](#)”, and indeed IDS’ [own materials](#) confirm that it does not cover any non-statistics standards from Algebra II.

The current CMF draft currently justifies its treatment of data science as third year mathematics by pointing at recent updates to Area C policy by the University of California (Ch. 8, pgs 34-35) allowing high school data science courses to be taken in place of Algebra II. However, in March 2023 the California State systemwide committee on Academic Preparation and Education Programs approved a [formal resolution](#) expressing frustration with the University of California system for approving high school data science courses that do not meet state standards. An [article](#) published just yesterday in the Chronicle of Higher Education by Stephanie Lee shows that at the UC, entire departments, and in some cases even Academic Senate leadership for entire UC campuses, have penned letters urging the UC to reverse this policy, which is also binding for the Cal State system. Thus, it is in my opinion highly likely that the UC will in the near future reverse this policy, making the CMF recommendations on high school data science out of sync with all of the state’s public universities almost immediately.

I thus urge the State Board of Education to either remove all mentions of high school data science, or to postpone a vote on the issue until after the University of California makes a final determination as to whether it will keep its current high school data science policy as is.