**Academic Senate for California Community College**

**Survey**

ASCSU QRTF Report

Purpose of Survey: address the ASCCC Fall 2016 Resolution 15.01—California State University Quantitative Reasoning Task Force Report

NOTE: Before responding to this survey, please read the Background Information and the ASCSU QRTF Report provided below.

About the respondent:

1. Name
2. College or Association
3. Role at college or association:
   1. academic senate president,
   2. discipline faculty (state discipline),
   3. other constituency (state constituency)
4. My response is based on the following:
   1. My own background and interpretation of the ASCSU Report
   2. Resolution or recommendation from my college/district academic senate
   3. Feedback from discipline faculty
   4. Feedback from other constituencies
   5. Other (explain)

About the ASCSU QRTF Report:

1. I/we support Recommendation I.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree
   6. *Comments*
2. I/we support Recommendation II.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree
   6. *Comments*
3. I/we support Recommendation III.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree
   6. *Comments*
4. I/we support Recommendation IV.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree
   6. *Comments*
5. Overall, I/we support the content and direction of the ASCSU QRTF Report.
   1. Strongly agree
   2. Agree
   3. Neutral
   4. Disagree
   5. Strongly disagree
   6. *Comments*
6. In regard to Quantitative Reasoning, what information do you feel is missing that the California State University should have in order to increase the success of California Community College students intending to transfer to CSU?

**Background Information**

Below you will find:

* ASCCC Fall 2016 Resolution 15.01
* A hyperlink to the Academic Senate of California State University Quantitative Reasoning Task Force Report
* Some Highlights of the report

Fall 2016 Resolution 15.01—California State University Quantitative Reasoning Task Force Report

Whereas, The Academic Senate of the California State University appointed a Quantitative Reasoning Task Force with broad representation from the California State University, the Academic Senate for California Community Colleges (ASCCC), the California Acceleration Project (CAP), and the University of California Office of the President to address fundamental questions regarding the prerequisite content of the California State University General Education B4 (CSU GE B4) and potential pre-requisite or co-requisite content for quantitative reasoning and mathematical competency (CSU GE B4);

Whereas, The Academic Senate of California State University Quantitative Reasoning Task Force convened in February 2016 and finalized their report in August 2016;

Whereas, The Academic Senate of California State University Quantitative Reasoning Task Force Report contains four recommendations regarding student proficiency in quantitative reasoning; and

Whereas, ASCCC has provided numerous breakout presentations and a Rostrum article to inform the body of the ASCCC about current issues surrounding quantitative reasoning requirements in California;

Resolved, That the Academic Senate for California Community Colleges urge local academic senates and curriculum committees to disseminate the Academic Senate of California State University Quantitative Reasoning Task Force Report and to respond in ways they deem appropriate; and

Resolved, That the Academic Senate for California Community Colleges consult with local senates, discipline faculty, and other appropriate constituencies to determine an appropriate response to the Academic Senate of California State University Quantitative Reasoning Task Force Report and bring that response back to the Spring 2017 Plenary Session.

[ASCUS QRTF Report](http://asccc.org/sites/default/files/CSU%20QRTF%20Recommendations%20September%202016.pdf)

**Highlights of the Report**

**Guiding Principle**: Educational Policy should balance access and opportunity to achieve equity.

**Executive summary**

In its 2015–16 term the Academic Senate of the California State University (CSU) convened a Quantitative Reasoning Task Force to review the CSU’s expectations for student proficiency in quantitative reasoning upon high school and college graduation, and to recommend changes to existing policies and practices. (See Appendix A, Academic Senate CSU Resolution 3230-15.)

The CSU’s existing standards for statewide curricula in quantitative reasoning have been in place for many years, and this suggests they may lag behind current thinking and best practices in the field. But there is also evidence indicating that these dated policies may be acting as barriers to some students, particularly those from traditionally underserved populations and in the California Community Colleges.

The work of the Task Force was guided by the principle that any educational policy enacted by the CSU must balance access and opportunity to achieve equity. That is, genuine equity lies in providing students from all backgrounds with equitable prospects not only for admission and graduation (access), but also for meaningful degrees that prepare them for high-value careers after graduation (opportunity).

The Task Force included faculty and administration representing the CSU, the University of California, the California Community Colleges, the California Department of Education, employers, and the Office of the Lieutenant Governor. Its final recommendations were prepared by a subset of the Task Force holding offices in the Academic Senate CSU, and designated “drafting members.” (See the Task Force membership given in Appendix B.)

Members of the Task Force conducted an extensive literature review, met with invited advisors, and participated in a national forum programmed by the U.S. Department of Education and hosted at the CSU Office of the Chancellor.

This report details the final recommendations of the Quantitative Reasoning Task Force, and they are summarized here.

**Recommendations**

Recommendation I: Formulate an updated quantitative reasoning definition based on CSU best practices and reflecting national standards.

Current policy relies on the phrase “intermediate algebra” as shorthand for full college preparation through high school, and defines baccalaureate-level quantitative reasoning as the math that builds on this level. The Task Force recommends updating this definition to include other kinds of quantitative reasoning.

Recommendation II: Revise CSU quantitative reasoning requirements and adopt equitable, feasible requirements that articulate with the other segments.

The Task Force found that CSU policies with respect to admission, transfer, and graduation are unduly constrained by treating foundational quantitative reasoning as necessary for success in all kinds of baccalaureate-level quantitative reasoning. Better policies would recognize that quantitative reasoning is valuable at both levels in ways that aren’t always sequential. The Task Force proposes flexible and appropriately rig- orous definitions of quantitative reasoning at the foundational and baccalaureate levels to inform separate requirements at entry and at graduation. The general expectation is that California’s current State Standards in Mathematics, which follow closely the national Common Core Standards, will improve quantitative reasoning proficiency in students entering CSU, the University of California (UC) and the California Community Colleges (CCC) system. It is the hope of the Task Force that in future most students will easily surpass the Foundational Quantitative Reasoning threshold.

Recommendation III: Ensure equitable access and opportunity to all CSU students.

The Task Force recommends policy revisions to provide equitable treatment of com- munity college transfer and native CSU students; improve access to quantitative reasoning classes relevant to a student’s major, interests and career; and raise the CSU system-wide expectation for quantitative reasoning in high school from three to four years of coursework.

In each of its recommendations, the Task Force has sought equity through a balance of access and opportunity. For example, the recommendation to raise the CSU’s system- wide expectation of quantitative reasoning in high school to four years of coursework stipulates that the fourth year of instruction could reinforce practice and application of prior learning in quantitative reasoning rather than broach new topics in math. (In operational terms this means the fourth year of high school quantitative reasoning might not be in Area c of the UC a–g curriculum of college preparatory courses.)

Recommendation IV: Create a CSU “Center for Advancement of Instruction in Quantitative Reasoning”

The Task Force appreciates the rapidly changing contexts of high school instruction, best practices in postsecondary education, and the skills in quantitative reasoning that CSU students will rely on after graduation. This report supports a recent resolution of the Academic Senate of the CSU calling for creation of a dedicated Center, whose task it would be to implement these and subsequent findings and to support much- needed development of high-quality instruction and curricula in quantitative reasoning throughout the state’s high school, community college and public university systems.

Although presented separately here, the four recommendations are interdependent. The policy proposals in Recommendation III depend on the definitions and distinctions of Recommendations I and II. The Center for Advancement of Instruction in Quantitative Reasoning (Recommendation IV) would provide a venue for the consultation and collaboration necessary for success in Recommendations I–III. Members of the Task Force expressed reservations about reducing the emphasis on algebra unless rigor could be assured in other ways. The Center, to be modeled on the CSU’s successful Center for the Advancement of Reading, would provide the sustained system-level attention to pedagogy, evidence of learning at entry for both freshmen and transfer students, and support for high schools offering 12th grade courses in quantitative reasoning.