



INTERSEGMENTAL COMMITTEE OF ACADEMIC SENATES

October 3, 2013

Assemblymember Susan Bonilla
Room 4140, State Capital
Sacramento, CA 94249-2014

RE: Select Committee on Increasing the Integration of Science, Technology,
Engineering and Math Education in California, Hearing, October 4, 2013

Dear Assemblymember Bonilla:

The Intersegmental Committee of Academic Senates (ICAS) brings together the faculty leadership of the three public higher education segments to collaborate on initiatives that involve the three segments.

ICAS and its member Senates have recently undertaken several projects to increase STEM access. As higher education faculty we are supportive of California's move to the Common Core State Standards, which in mathematics call for significantly greater integration of topics needed for success in STEM courses. The projects listed below reflect our desire that the Common Core State Standards be successfully implemented and that K-12 students be properly prepared for success in postsecondary education in California.

1. ICAS has created and maintains a [Statement of Competencies in Mathematics Expected of Entering College Students](http://icas-ca.org/Websites/icasca/images/ICAS-Statement-Math-Competencies-2013.pdf) that delineates the skills required to succeed in college-level mathematics courses in all three segments. It was updated in March 2013 to align with the Common Core Mathematics Standards. It is online at: <http://icas-ca.org/Websites/icasca/images/ICAS-Statement-Math-Competencies-2013.pdf>
2. The high school a-g course requirements in mathematics and English required of all entering CSU and UC freshmen have been restructured to align with the Common Core Standards in Mathematics and English. More details are online at: <http://www.ucop.edu/aguide/a-g-requirements/>
3. CSU offers Early Assessment Program (EAP) professional development workshops for K-12 teachers. The workshops reflect the Common Core English/Language Arts and Mathematics Standards. Information about them is at: http://www.calstate.edu/eap/support_hs_teachers.shtml

4. The UC Board of Admissions and Relations with Schools has issued two Statements that explain how the Common Core State Standards support preparation for College Mathematics. These are (a) Statement on Basic Math for All Admitted UC Students (7/13); and (b) Statement on High School Mathematics Curriculum Development under the Common Core State Standards. Both are available at: <http://senate.universityofcalifornia.edu/committees/boars/reports.html>

5. The Academic Senate for California Community Colleges has adopted two positions related to STEM: 1) in support of CCSS, and 2) that standards for college and career readiness for high school students should be the same: <http://asccc.org/resolutions/endorse-common-core-state-standards-mathematics-and-english>

<http://asccc.org/resolutions/college-and-career-readiness>

6. ICAS recently addressed the combination of upper and lower division general education courses for STEM majors by modifying the Intersegmental General Education Transfer Curriculum (IGETC) to include a specific option for STEM majors called IGETC for STEM.

7. CSU has developed robust partnerships with the California Department of Education, the Commission on Teacher Credentialing, and K-12 school districts to advance implementation of the Common Core. One result was a recent award from the Center leading the national effort to prepare special and regular education teachers and building administrators to address the Common Core with special needs students. See: <http://cedar.education.ufl.edu/>

8. The University of California runs Curriculum Integration Institutes to help secondary educators develop Career Technical Education Courses that meet a-g requirements, particularly in the STEM disciplines. More information is at: <http://ucci.ucop.edu>

9. CSU plays a major leadership role in California in preparing new teachers to integrate academics and career technical education through Linked Learning. In partnership with the James Irvine Foundation, it has created teacher preparation models for Linked Learning Pathways and California Partnership Academies, over half of which are in STEM disciplines: <http://coe.sdsu.edu/ste/info/linkedlearning.php>

10. CSU's Assistant Vice Chancellor for Academic Affairs, Beverly Young, is the Higher Education Representative on the Smarter Balanced Assessment Consortium Executive Committee. In this role, she is a key liaison for higher education with the new Common Core assessments that California has adopted. See:

<http://www.smarterbalanced.org/about/executive-committee/>

11. Although just adopted in September by the State Board of Education, the Next Generation Science Standards (NGSS) have also received substantial attention by the segments. For example, CSU, in partnership with the S.D. Bechtel, Jr. Foundation, is developing models for preparing K-6 teachers for success in NGSS implementation:

http://teachingcommons.cdl.edu/CSUNGSScommunity/campus_grants/

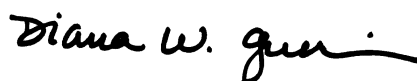
12. In February 2012, the ASCCC held a conference for STEM faculty in San Diego, tapping into the resources through UCSD. More such conferences must be held to support STEM faculty across the state.

We hope these resources will be useful as you consider the recommendations of the California STEM Taskforce Report. If ICAS can be helpful to you in any way, please do not hesitate to contact us.

Sincerely,



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Academic Senate, CCC



Diana Guerin
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