GEAC MEETING
Sept. 1, 2015

Call to order at 11 am.
Present: Members: Chair Bill Eadie, Vice-Chair Mary Ann Creadon, Elizabeth Adams, Joseph Bielanski (virtual), Terri Eden (virtual), Susan Gubernat, David Hood, Catherine Nelson, Ken O'Donnell, Barry Pasternak, Denise Noldon, John Stanskas, Mark Van Selst, Pam Walker, Sean Walker, Mark Wheeler. Guests: Denise Fleming, Steven Filling, Debra David, Karon Klipple Chris Thorn, Emily Magruder, Katie Hern, Myra Snell, Stephen Branz, Kate Stevenson, Kathy Kaiser, John Tarjan, Pam Burdman.

Approval of agenda for meeting of 9/1 and Review of Minutes of 5/12/15 and 2014-15 Report

- Agenda approved
- Review of minutes of 5/12/15 with a discussion regarding whether or not the committee keeps "notes" or "minutes." After discussing the history of the committee's use of "notes" as an indication of the committee's charge as a non-ASCSU committee that does not produce actionable items, committee concluded that they should be called "minutes" because they are always up for approval at the following meeting and are posted.

Introduction of Committee Members/Review of Committee Charge

- Chair Eadie had the members and guests introduce themselves.
- Ken O'Donnell, Chancellor's Office Liaison to GEAC, reviewed the GEAC charge, reminding the committee that the system-wide GE package of CSU is fairly unique and serves us well. Much of what the committee is concerned with is transferability, which is governed by Article 5 of EO 1100, and it is the EO that created the committee. Also important is that the charge for membership required majority membership of the ASCSU, but GEAC is not a committee of the ASCSU.
- Some discussion about language in EO that needs to be updated or cleaned up; for instance, clarify unit number requirements, given that Area E is sometimes upper division and sometimes lower division.
- Chair Eadie, after a question about returning to the review of the year-end report, said the committee would not review the report at this meeting, given the full agenda.

Liberal Learning Partnerships

- Debra David reported that the Give Students a Compass initiative is nearly done. A bound report was provided to the committee, entitled *Giving California Students a Compass*. That report features the most

promising initiatives and projects from the Compass initiative. Ken O'Donnell remarked that CCs would benefit from using the report to find ideas and guides for curriculum that the CSU would find acceptable for articulation. Debra David said the most significant follow-up project from the initiative is the Faculty Collaboratives Project, which supports faculty development in both the CCs and the CSU to understand what is happening with current kinds of proficiency initiatives. On the previous weekend she hosted the five state liaisons in a meeting about threshold concepts, and on what we mean by equity in the curriculum—supporting a diverse curriculum, and also in general starting where the student is at in order to help them succeed in college. She said that our relationship to the Interstate Passport Project has changed. We are moving towards an advisory rather than an active role in this project.

- Susan Gubernat said that a brief look at the report suggests there are significant recommendations in it, and we should put the report and its recommendations on the next agenda. Chair Eadie agreed and made note of it.
- Debra David said that she was willing to come to campuses to talk about the report.

COMMUNITY COLLEGE PILOT BACCALAUREATE DEGREES

- Pam Walker, new member and CCC Vice Chancellor of Academic Affairs, reminded committee that the CC baccalaureate legislative bill had a date certain by which it was supposed to start, and that the CCs did the work they had to do to get the 15 pilots started. At the moment one of the questions they are working on is: what is open access, really? The lower division 60 units are open access, but what now about upper division? Who are the most appropriate students to complete a baccalaureate program at the CCs? They are using the state of Washington as a partial model. At the November CC Academic plenary (Nov. 6, 7, 8) the senate should be ready to vote on what counts as upper division GE. They have agreed that the number of required units will be 6. This has been a fast turnaround because of the legislative charge. The programs will begin in Fall 16.
- John Stanskas said the Academic Senate of the CC understands that the definition of upper division GE should be created by the faculty as a whole, and not just by a committee. He also said, in response to a question about WASC accreditation, that their own accreditor, the ACCJC, has been given approval to accredit the programs, and they say upper division GE should be required.
- Ken O'Donnell pointed out that relevant to GEAC is the question of open access and transferability of those upper division courses and units to the CSU. If students transfer to a CSU, and have those courses or units, will the CSU recognize them?

- Steven Filling asked what the status is of the programs the CSU objected to. He had heard that conversations about those objections will take place in October or November, but the timeline for finalizing the pilot programs, in early November, makes it sound like the conversations are either not going to happen or will be moot. Pam Walker said she would ask Chancellor Harris about those conversations, and Steven Filling asked for that inquiry to Chancellor Harris to happen very quickly.
- John Stanskas explained that the 6 units must be split between two different disciplines and cannot be in the discipline of the bac degree. Barry Pasternak asked if a student does GE over the summer at a CSU, will the CC accept those for their degree, and John Stanskas responded that he was sure they would follow the same process they do now for articulation.

CSU INSTITUTE FOR TEACHING AND LEARNING

- Emily Magruder gave an overview of what ITL does, and said the large projects are the CSU Symposium on Teaching and Learning, done with the Faculty Development Council, which this summer had 325 attendees, and the summer Teacher/Scholar Institute, last done in 2013, and upcoming again next summer. Also, ITL awards grants for faculty learning communities on campuses. Five of those funded this past year had to do with GE. They also produce and disseminate webinars, and look to develop partnerships for various initiatives in technology. She is working on the website and developing a newsletter. Currently she is working on ideas and issues of assessment, trying to figure out how ITL can help campuses with this. Finally, she wants to form a steering committee for the upcoming Summer Institute.

STATWAY CURRICULUM AND TRANSFERABLE GE MATH PILOT REPORT

- Chair Eadie introduced all guests who were present for this agenda item. Ken O'Donnell first described the charge of the committee formed 6 years ago when the CCs developed 5 pilots for a determinate amount of time to use Statway and determine evidence of its success. The expiration of the pilot was last year, and it was continued for one more year. It is now expiring again. He reminded the committee that this report of data is from CC students.
- Karon Klipple from Carnegie provided slides describing the high percentage of developmental math students, a description of Statway as a single pathway teaching college-level statistics with

what she said was a "little bit" of additional mathematics. The cohort of students stay together for a year, and the program uses collaborative learning and includes faculty support.

- Chris Thorn from Carnegie described the measurement system and the results that showed success for the college level statistics course, as compared to traditional developmental math course success.

Discussion of Above Presentation

Concerns

- Worry about the rigor of Statway compared to that of traditional developmental math;
- Worry about the tracking that happens if underrepresented students get designated as non-STEM;
- Would like a single exit metric, like the ELM, rather than two different metrics of success in statistics, and success in traditional math.

Responses to Concerns

- Success rate for students who took later courses in math or intensive quantitative reasoning at CCs equal to those who did traditional math;
- A qualitative result, anecdotal, that some students, who otherwise would not, get "jazzed" by STEM and math after they succeed in Statway courses.

- Stephen Branz then described the use of Statway and its results at San Jose State University. He concentrated on the results of how students did in upper division statistics or research methods courses that have a B4 prerequisite. These were all non-STEM majors in two different cohorts: those who did traditional math, and Statway. They excluded lower level English remedial students as determined by the EPT. He emphasized the result that the Statway cohort, after completing the upper division courses, had a GPA of 3.3, while those who had done developmental math had a GPA of 2.5. In answer to a question, he said that Business was excluded from this research because Business Calculus needs algebra knowledge in the discipline.

- Chair Eadie then asked for comments from the four CSU faculty who had been on the committee GEAC had previously appointed to assess these data.
- **John Tarjan**: clear that Statway students are more engaged and do better, but do not do as much algebra as traditional math. Question is: what role should algebra play in the college degree?

- **Kathy Kaiser**: developmental math problem and loss of students because of it is a national problem. The ethnic and gender data showing Statway success is overwhelming. This success also addresses an emotional, psychological and social problem. Also, we have no other course that requires an exit exam. SJSU showed that these students were later successful in their discipline's quantitative reasoning courses (upper division disciplinary statistical courses). This should satisfy rather than an exit exam.
- **Mark Van Selst**: There will always be some problems with the data. Statway satisfies Psychology with its needs for quantitative reasoning, but it clearly does not have intermediate algebra. Do we change our admissions criteria?
- **Catherine Nelson:** troubled by sample size of 11 in the SJSU data.

Discussion of Comments from Committee Representatives Concerns

- May have been unproblematic for UC to approve Statway, because they take fewer, and different, students (top 7%);
- We might be bifurcating quantitative reasoning standards—do we want to do that?
- Because Statway has no baseline for prerequisites or competency, if we accept it, then we bypass EO 1100;
- Worry that success of Statway is due to the use of cohorts, or other resources and supports, and/or to work done at the same time on the social environment of the students, support not given to traditional math students;
- Worry about constant pressure in higher education to push students through no matter what.

Responses to Concerns

- Math Council wants ELM to be the bar, but did statisticians agree with that proposal?
- Think about the cost of 100,000 potential degree holders who had to drop out of school because they couldn't get through prerequisites for college-level math.

- Ken O'Donnell asked: if he writes a letter recommending either bifurcated or alternative paths to GE quantitative reasoning, could we also say this is a permanent solution, because we need to allow the CCs to get out of the pilot phase with Statway. Also said that he could use in the letter the phrase "statistics pathways" to Area B4 approval similar to Statway and CAP stats to be more inclusive of other innovations being worked on.

TRANSFERABLE GE MATH, COMMON CORE, ACCELERATION

- Katie Hern, initiative leader of the California Acceleration Project, said that 26 community colleges are now working on CAP in programs much like Statway, but without changing the prerequisite course. She responded to Math Council resolution objections by noting that students' odds of completing Statway was 4.5 times better than in traditional math, and this was true in CAP stats, too. Gathered data from three colleges to find out how students were doing in other quantitatively demanding courses across the curriculum and they were performing very well. The Math Council resolution also asked what kind of citizens would be produced with Statway. CAP believes that students are meeting appropriated quantitative reasoning skills for students with Statway. AB 770 provides money for evidence-based resources for CCs to develop transferable courses. With all of this in place, we should not block students in the arts, humanities and social sciences from succeeding and graduating.

Discussion of CAP Presentation
Concerns

- How much damage to statistics programs or Statway would be done if they included the ELM competencies in the curriculum;
- If Statway continues, we need to see more valid measures than what was offered today because of the different rigor of the curricula and the self-selection of the students;
- We should not outsource our first generation, underrepresented students to a certain track;
- Worry about a "watered-down" degree in an effort to come up with a cheap solution to the problem;
- Worry that if students do Statway, they will not be able to think with numbers;
- Worry that Statway is a subscription curriculum by Carnegie that must be paid for;
- Worry again about the sample size from SJSU experiment not being valid—total of 11 students.

Responses to Concerns

- If ELM competencies are added to Statway curriculum it will destroy the integrity of the curriculum;

- Rather than saying there are two tracks, in revising standards we could say that there are many important aspects of quantitative reasoning;
- Carnegie, in order to recover costs of developing Statway, charges $25,000 per school for the package, but the price may vary depending on the package the school buys;
- Community college member asks what the purpose of the bar or baseline is (whether ELM or intermediate algebra) since the baselines are undermined by the data showing Statway students succeed in upper division or advanced quantitative based courses;

- Final comments: if we decide to continue the pilot we will need to immediately form a committee to deal with EO 1100 language and clarify it;

- If we do bifurcated pathways, the advising piece will be all-important;

- Can we write a letter saying we moved to continue the pilot through the period of AB 770?

- Ken says he can write that letter, but we should open the experiment to other statistics paths.

DISCUSSION AND DECISION: STATWAY PILOT PROGRAM

- Agree to extend the pilot, and we welcome other CCs to join the pilot and continue this for three years, and form a committee to refine the language on GE quantitative reasoning in the CSU.
- We should not confine the committee to GEAC; we need to have the Math Council represented.
- We should open the pilot to all the CCs so we can get more data.
- Mark Wheeler proposed the wording of the motion:

    1. "The Statway pilot as currently conceived be extended for three years of funding provided by AB 770";
    2. "Invitation be made to other community college districts to submit proposals to GEAC regarding curricular innovations in statistical pathways";

3. “During the three years’ period CSU GEAC convene a subcommittee (to include disciplinary experts) to make a decision about how the CSU wants to understand quantitative reasoning in the context of GE and transfer, and whether or not we want a bar.”

- Pam Walker said she wondered what the upcoming year would look like in terms of someone working on this innovation and development, and the CSU ultimately saying no.
- Stephen Branz asked if we could clarify what data we needed.

The meeting was adjourned at 4:15 pm.