

Administrative Response
Geology, & General Science SAC Discipline Review

Prepared by Craig Kolins
On behalf of Your Deans of Instruction
25 October 2010

The Physical Science, Geology, General Science SAC Discipline Review was presented on June 4th, 2010. We thank you for your efforts to create, maintain, improve, and expand the high quality courses the SAC offers throughout the District. Your presentation was well organized.

This Administrative Response will address: A) items of note B) work still to be completed, and C) an administrative response to the SAC's recommendations.

Items of Note:

- We applaud the SACs effort to provide an avenue into science courses for non-science students/majors.
- Through field-based learning, the SAC has made science education relevant to students.
- The SAC partners with four-year colleges and universities by placing students in undergraduate research programs (UCORE), IDES, and Baccalaureate to Bridges.
- The SAC is assessing student learning through the administration of the "Student Attitudes About Earth Science Survey (SAESS), an on-line 10 minute survey containing 35 Likert scale statements relating to a variety of categories including real world connections and quantitative understanding." We encourage the SAC to continue to assess student learning and how the information can be used to improve instruction.
- A district-wide assessment of Critical Thinking was conducted that led to a change to a new inquiry-based text for G 201 and G202.
- Finally, the SAC is to be commended for assessing "the level of student learning and critical thinking for all sections of GS106 and G202 during Winter 2010 as part of a college-wide assessment of critical thinking." The SAC received a positive response from the Learning Assessment Council regarding this assessment and indicated that "this is an ideal project" that could be a model for other SACs to consider.

Work Still to be Completed:

You devoted a significant portion of your discipline review to course outcomes and mapping them to PCC's Core Outcomes. The G& GS SAC has done more with assessment than most SACs, including submitting (and including it in your program review) an excellent first run at assessing the designated Course Outcome of Critical Thinking. We applaud you for your accomplishment in this area. This is remarkable given that there are only two full-time faculty within the SAC that offers GGS classes across the district. As you know, assessment has been identified as a focus area for the College and the April 2010 Interim Accreditation Report notes that PCC must document: "*progress in demonstrating, through regular and systemic assessment, that students who complete their programs have achieved the intended learning outcomes of degrees and certificates. Further, the college must begin to demonstrate, in a regular and systemic fashion, how the assessment of student learning leads to improvement of teaching and learning.*"

All SACs have been asked to consider how the outcomes of assessments have led to course and program changes. All SACs must document learning assessment-driven changes in your curriculum. How have assessments of student learning informed your process to continuously improve your courses? Continued conversations with CTE SACs that have required G&GS courses in their certificate and degree programs and discussions with other Science SACs about how to better prepare students in preceding science courses—will help you describe how the assessment of student outcomes will allow you to continuously improve student learning.

We are confident that the SAC does, in fact, approach its discipline with this spirit of continuous improvement. Your discipline review refers to discussions and reflection among faculty and students, including thoughts on activities to undertake in the future. This kind of discussion is integral to continued improvement of your course offerings. It is vital that the SAC document and provide evidence of how assessment and related improvement occurs within all Physical Science, Geology and General Science courses.

Administrative Response to the SAC's Recommendations

PSGGS SAC recommendations

Increase Full Time Faculty: The PSGGS SAC recommends hiring four new full-time faculty, ideally at the following campuses with the following strengths:

- 1) Rock Creek: meteorology
- 2) Sylvania: oceanography
- 3) Cascade: geology
- 4) Southeast: distance learning

Response: Why these specific disciplines at these specific campuses? Additional PSGGS instructor positions will be considered along with other requests for full-time instructors, academic professionals and classified staff as we prepare the next biennial budget. Make recommendations to your respective campus division dean. We realize that successful split appointments depend largely on the instructor's ability to split their teaching load between two campuses. We have had great success in having a split Biology position between Sylvania Campus and the SE Center and in addition SY and SE have hired a permanent Biology lab tech support position that is split between these two locations.

Additional Facilities and Equipment: The PSGGS SAC recommends building an additional lab room at Sylvania and building and stocking new lab rooms at Cascade and Southeast. The PSGGS SAC also recommends the establishment of a district wide network of web accessible weather stations; this would provide GS109 students across the district with a common learning experience and symbolically link the PSGGS discipline across the campuses.

Response: Please work with your campus division deans at Sylvania, Cascade and Southeast as they develop plans for their respective bond projects. The DOIs expressed a commitment to support a district-wide effort to help develop the web accessible weather stations for all GS 109 students with a common learning experience. Please submit a budget proposal to your SAC Administrator, Dr. Margie Fyfield who will work with the other Campus Division Deans and DOIs to identify funding options.

Additional Lab Tech Support: The PSGGS SAC recommends the hiring of lab tech support with an Earth science background to support our discipline at both Sylvania and Rock Creek. One possibility is to hire part time lab techs that also teach as part-time instructors with in the PSGGS SAC.

Response: *Please consult with Drs. Dieterich Steinmetz and Margie Fyfield about this recommendation.*

Institutionalize Field Based Learning: The PSGGS SAC recommends that field based learning become more fully incorporated into our curriculum. This could be done at a variety of levels; more support for individual instructors who take their classes on field trips, the teaching of more sections of G200, the incorporation of field based learning outcome in to the CCOGS of all G & GS courses.

Response: *Incorporating field-based learning outcomes into the CCOGs of all G&GS courses will require the SAC to work with the Curriculum Office. We suggest you work with Sally Earll to see what this will entail.*

Improve Student Access to Research Experience: The PSGGS SAC recommends the creation of G and GS independent study courses to give students additional opportunities to pursue research while still attending PCC.

Response: *An Independent Study (IS) courses is being offered in Biology*
<http://www.pcc.edu/ccog/default.cfm?fa=ccog&subject=BI&course=298>

One challenge will be for your respective Campus Division Deans to determine how Faculty who teach IS courses are compensated and how it will be calculated toward an instructor's teaching/workload.

Update and Revise Course Descriptions and CCOGs: The PSGGS SAC recommends that the course descriptions for lab courses be amended to clearly indicate that these courses include lab credit. The PSGGS SAC recommends that as the CCOGs are being revised to meet the new state wide outcomes for general education that they also be modified to incorporate field based learning outcomes.

Response: *The DOIs encourage you to work with Curriculum Committee and Curriculum Office to modify your course descriptions to include lab credit. Incorporating field-based learning outcomes into your courses will need to be brought to the Curriculum Committee.*

Change the name of the SAC: Referring to our SAC as the Physical Science, Geology and General Science SAC is a mouthful, is inaccurate and leads to confusion. The SAC recommends a name change to the Geology and General Science SAC which is less of a mouthful, more accurate and less likely to cause confusion.

Response: *The DOIs support changing the name of the SAC to Geology & General Science (GGS) . It is our understanding the SAC is now listed in the Program Review section under GGS.*

Closing

We want to thank the Geology & General Science SAC (GGS) for sharing the results of your program review with us. We look forward to supporting your on-going work on continuous program improvement.

Your Deans of Instruction:

Scott Huff, Cascade Campus

Julie Kopet, Interim DOI, Southeast Center & Extended Learning Campus

Birgitte Ryslunge, Rock Creek Campus

Jeff Triplett, Sylvania Campus