To the Academic Senate, Santa Cruz Division:

The Committee on Preparatory Education (CPE) met eight times during the academic year to deal with specific issues related to its charge. Its charge involves “any issue regarding undergraduate preparatory and remedial education and its administration. It supervises the Analytical Writing Placement Exam and Mathematics placement examinations. In consultation with the Writing Program, it proposes the means by which students may satisfy the University Entry Level Writing Requirement and it oversees Entry Level Writing Requirement instruction. In consultation with the Committee on Educational Policy, it maintains a continuing study of preparatory and remedial programs at Santa Cruz. It performs such other functions concerning preparatory and remedial education as may be assigned to it by the Academic Senate or by the Santa Cruz Division.”

We would put it this way: our committee focuses on the least privileged students at UCSC, students who face challenges such as being the first in their families to attend college, using English as a second language, and attending underfunded K-12 schools. These students often need preparatory courses such as Writing 20 and 21, Math 2, 3, and 4, and Applied Mathematics and Statistics 2, 3 and 5. Despite the unquestionable need for these courses, they are vulnerable. In the case of Writing courses, the Writing Program is not a department and has few tenured faculty. In the past more Math courses were available; instead of Math 2 and 3, three courses (Math 1, 2A and B) were offered. One possibility that has occurred to CPE members is that it might be desirable for these courses to be administered not by individual departments but under some other agency, such as (for example) the Vice Provost and Dean Undergraduate Education. However, the disturbing trend noticed in the 2008-09 CPE annual report continue: “Low-income, first generation university students perform academically less well than more privileged students when enrolled in the same classes. . . . The ELWR Core courses do not appear to be educating students equitably.”

The question CPE asks UCSC is this: Does UC/UCSC have a responsibility to try to equalize the education that students had before coming to a UC campus, in order to create equal chances for all UC students to meet their educational and personal goals? We assume that the response is “yes,” but we suggest that more explicit attention and proposed solutions need to be given to this issue. For example, other UC campuses have programs and staff for students whose first language is other than English; UCSC has no such program or staff, although UCSC ELWR Coordinator Sarah Parmeter, a member of CPE, serves on the UCOPE, English as a Second Language Committee.

The work of CPE is challenging because it is governed by complex regulations and depends on complex statistics. Fortunately the latter are provided by the excellent Learning Support Services unit, which keeps very careful and useful records, but both challenges make it desirable to have continuity in committee membership, which is often, as this year, not the case. Fortunately, we were supported by outstanding Academic Senate staff member
Roxanne Monnet, without whose knowledge and perspicacity we could not have done our job. The work and thoughts of the Committee during the 2009-10 year are summarized below.

**Examples of preparatory courses' vulnerability.**

1. The year began with VPDUE Bill Ladusaw informing us that over the summer it was proposed that UCSC discontinue offering Math 2 for budgetary reasons. Math 2 is not required for any degree program at UCSC, yet hundreds of students need the course as preparation for Math 3. Faculty urged that Math 2 be offered in 2009-10, and it was. Over the course of the year, in fact, things improved. A “stretch” course version of Math 2 was proposed. VPDUE offered financial support, and the course will be considered by the Committee on Educational Policy. Problems remain, however; it is not clear, for example, that Math 2 is a satisfactory preparation for Math 3.

2. VPDUE Ladusaw also suggested dropping Writing 21, suggesting that those students who do not satisfy the English Language Writing Requirement (ELWR) after taking Writing 20 should take a course outside UCSC, either online or at a community college. CPE, helpfully informed by ELWR Coordinator Sarah-Hope Parmeter, pointed out that Santa Cruz Regulation 10.5.2 specifies that students must enroll in a UCSC course to satisfy the requirement. ELWR satisfaction rates have improved in recent years, and Coordinator Parmeter recommends that all instructors with writing in their large lower-division courses take a small writing sample early in the course to identify outliers and contact LSS. For further details see the CPE meeting minutes of 12/7/2009.

**Learning Support Services.** CPE devoted two meetings to detailed discussions with LSS Director Holly Cordova, who briefed us on ongoing trends of academic progress for the students served by her program. For EOP students these trends continue to be disturbing, as the CPE 2008-09 annual report noted: these students come to UCSC less prepared than non-EOP students and remain so as they continue through their UCSC education. Director Cordova is worried by reports from faculty that students do not know how to write, no matter how they have scored on ELWR or performed in Composition 1 or 2.

**Modified Supplemental Instruction.** This is a LSS program which supplements regular courses with extra section meetings for needy students. Students involved in Modified Supplemental Instruction pass with a higher grade than non-MSI in 75 percent of the cases. At the end of the academic year, CPE sent a letter intended to promote use of Modified Supplemental Instruction (MSI) in appropriate courses; the letter was cosigned by LSS Director Holly Cordova. The letter went to college provosts and department chairs, with a request that it be shared with all instructors.

**Limiting student attempts at placement exams.** In 2008-09, CPE agreed that students should be limited to three attempts at the Math placement exam. This year’s CPE approved
the Mathematics Department’s request that students be limited to two attempts to pass this exam.

**Preparatory courses as pre-major requirements.** A number of UCSC departments are “gated,” that is, they require that students complete a preparatory course before being able to enroll in the major. Passing Math 3, for example, is a “gate” for about 55 percent of the majors. If access to those majors is to be equitable for all students it is important that students be given all possible support in passing “gate” courses. In some cases the official “gate” may not be the only or best possible option. CPE would like to follow up with the Psychology Department, for example, regarding Math course options for their students. It may be that some of the new general education courses that satisfy either the Mathematics and Formal Reasoning requirement or the Statistical Reasoning requirement would fill the need for what the department is hoping to achieve with their current Math requirement. How often Math 4 will be offered next year and how large the class will be appears uncertain. LSS Coordinator Cordova expressed interest in increasing partnerships between LSS and gated majors, and CPE strongly supports this partnership.

**UC Commission on the Future.** CPE discussed the recommendations of this commission which pertain to its charge. The recommendation that students attain their degrees in three years and the proposal to increase on-line instruction concern the committee, particularly the second. While effective on-line instruction can be an important component of learning, fully on-line versions of preparatory courses such as Math 2 are likely to decrease the success of the least-prepared students. We expressed our reservations to Academic Senate Chair Kletzer.

**Recommendations for CPE 2010-11.**

- Recommend to Psychology that they rethink having Math 3 as a preparatory requirement. Encourage them to consider new GE courses.
- Work with Learning Support Services to foster use of Modified Supplemental Instruction.
- Consider how best to ensure that students who enter underprepared for University level academic work are supported. A student survey might increase understanding of the issues for students.
- Consider needs associated with the terminal math requirements (degrees for which one Math course is required). Social Sciences might be encouraged to collaborate with the Physical and Biological Sciences Division and the School of Engineering to determine how the math needs for Social Sciences Majors will be met. See whether Math 4 can accommodate more students.

Respectfully submitted,

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