

April 21, 2003

MEMORANDUM

TO: Karl Kim
Vice Chancellor for Academic Affairs

VIA: C. Barry Raleigh
Dean, School of Ocean and Earth Science and Technology

FROM: Paul Wessel
Department of Geology and Geophysics

SUBJECT: Program Review Progress Report

As requested, the Department of Geology and Geophysics is providing you with a progress report one year after the Council on Program Reviews discussion of our program. In addition to a general summary of Findings, there were four specific recommendations given by the Council; these are given below with our responses immediately following each recommendation.

1. *The Council recommends that the Department do more to prepare their undergraduates for graduate study. Once the department has determined the objectives of its undergraduate programs, the department needs to put in place an advising system which provides realistic expectations for admission to graduate levels at the University of Hawaii at Manoa.*

Response: Our department offers a broad and rigorous program that enables students to pursue graduate study, we inform our students about the benefits of pursuing graduate degrees, we provide numerous opportunities for students to become involved in undergraduate research projects, and we actively encourage students to become involved. Capable, motivated students who pursue these opportunities invariably are well-prepared for graduate school. The responsibility of taking advantage of these opportunities, however, ultimately lies with the students. Feedback from faculty in general and our undergraduate advisers in particular suggest, contrary to your findings, that students *are* being told about the rigors of our graduate programs. A key difficulty that we see is that many of our students arrive here without any consideration that they might want to prepare themselves for graduate study while obtaining their undergraduate degrees. The interest that many of our undergraduates develop in attending graduate school at UH reflects the awareness they acquire

here that graduate school is desirable, and that we have an excellent department. It is a fact that most of our undergraduates are not well-prepared in mathematics and basic science when they enroll at UH Manoa, and they suffer because of it. We encourage our students to strengthen their mathematics and basic science backgrounds here, but not all our students have the interest or ability to pursue the most rigorous options available. The Council suggests that it is the Department's responsibility to ensure adequate preparation, but much of the critical preparation takes place outside of our department (e.g., in high school or the community colleges) - it is not immediately obvious to us how to substantially improve students' preparation outside of our department. Be that as it may, even if our undergraduates were prepared as well on average as candidates from elsewhere, that is not enough to guarantee admission to our graduate program. We receive far more applications for our graduate program than we can admit. Our graduate program is nationally recognized, and the overwhelming majority of our graduate students are supported by research assistantships (not teaching assistantships) that are distributed on a competitive basis: our own undergraduates must compete with the best when they apply for graduate school here. Nevertheless, we do admit our undergraduates to our graduate program when the combination of research interests and research funds permit; all three of the research assistants presently working on their Master Degrees either with me or the associate chair obtained their undergraduate degrees from our department.

- 2. The Department needs continued attention to increasing faculty diversity and a written plan to accomplish this important task.*

Response: Our plan has always been to run well-publicized international advertisement campaigns and hire the most qualified candidates. As Chair I gave specific instructions to each search committee that they consider diversity when reviewing candidates. During our 2001-2002 hiring to replace departing or retiring faculty, we filled a total of five tenure-track positions; of these, two were female (one has a joint appointment with the Department of Oceanography) and one of the males is an American of Japanese ancestry. Our recent hires demonstrate that the Department takes the diversity issue seriously.

- 3. The Dean and the Department need to develop a clear understanding of the utilization of positions and funds to determine whether teaching assistantships deserve a higher priority in the allocation of resources.*

Response: We sought to develop this clear understanding during our exit interview last spring as we asked both Drs. Kim and Garrod to explain to us how

the University allocates teaching assistantships (TAs) among the colleges. They were unable to do so, and as far as we have been able to find out the current TA allocations were determined when SOEST was created, and apparently there has been no reassessment since then. Despite the growth in the programs offered by SOEST, no new resources for TAs have been provided by the University, and budget cuts have prevented any redress within SOEST. The last two COPR reviews of the GG Department have both pointed out the need for more TAs, and the Department requested funds from the VCAA Office for three more TA positions approximately one year ago; to date we have not received any response to our request.

4. *The Council recommends that the Department implement a regular process of assessing the quality of their degrees and student learning outcomes. The Department should address progress on their assessment program in the one-year report following this review.*

Response: The department has implemented an assessment program. There have been no significant changes or updates to our assessment program since our response to your request of October 3, 2002 for information on the status of our efforts to assess undergraduate learning in the Department of Geology and Geophysics. Being an ongoing process, we expect to modify our assessment methods following our initial experience.