Disciplinary Communication Improvement Grant Final Report:

Development of Disciplinary Communication teaching resources for MCD Biology courses

The goals of this proposal were to design and build teaching resources that:

- 1. Help DC course faculty to
 - a. Scaffold student's work during the quarter
 - b. Articulate discipline specific writing practices to students
- 2. Communicate expectations and standards in writing instruction to faculty to insure consistent high quality writing instruction across MCD Biology's majors and writing intensive course offerings.
- 3. Deliver these resources via a website accessible to faculty.

Results of funded activities:

This project began with email conversations and extensive interviews with faculty who are regularly engaged in writing instruction in our department. These interviews revealed that:

- 1. There is widespread ignorance of the DC requirement and departmental commitments to writing instruction. In some cases, this leads to significant variability in the instructor's goals and writing tasks assigned in different offerings of the same class.
- 2. That faculty are frustrated with students' writing abilities, with the amount of time available for writing instruction, and in some cases, with their knowledge in teaching fundamentals of writing (grammar, paragraph structure, *etc.*).
- 3. A number of faculty have independently initiated efforts to improve student writing, and these efforts may be easily profitably adopted in other courses.
- 4. There are opportunities for more vertical integration of the writing curriculum in MCD Biology.

In response to the observations described above, I developed a course website (http://writinginmed.sites.ucsc.edu/) that seeks to:

- 1. Describe the department's obligations and commitments to teach writing to our undergraduate students.
- 2. Provide a brief description of the main courses where writing instruction occurs in our curriculum.
- 3. Provide examples of model curricula and writing assignments in many of the MCD Biology courses with significant writing instruction.
- 4. Serve as a clearinghouse for writing resources for instructors. These resources including writing specific materials produced outside of UC Santa Cruz as well as links to technologies that may be useful in writing instruction.

This website will be a resource for insuring a uniform, high quality of writing instruction across our curriculum.

One concern that became apparent during my interviews of writing instructors is that students often cannot provide effective peer review of their classmates' writing. Working with Heather Shearer, I developed a new peer review assignment for Biol189/W. This assignment takes advantage of new tools recently released by turnitin.com, and instructions to students for doing this online peer review are included in the website described above. I implemented this activity in the summer offering of Biol189/W and received positive feedback from students. However, due to injuries I sustained in an accident, I was not able to perform a more formal assessment of this activity at that time. This assessment will be performed in the future.

During interviews with MCD Biology faculty and lecturers who teach writing, it became clear that we have an opportunity to more clearly and explicitly vertically integrate writing instruction into the MCD curriculum. We have begun to discuss generating a common set of writing standards and assigning a single writing text that students could refer to throughout their time at UCSC. We are also working to develop a new introductory biology laboratory, which will include writing instruction. If this course is approved, every student in our majors will take a defined sequence of three courses that guide them through an increasingly sophisticated series of writing assignments. In my role as chair of our departmental curriculum committee, I am in a position to influence and foster an ongoing process of reform and improvement of our writing curriculum.

Finally, a key to the activities described above were the frequent conversations, feedback and critique of writing instruction provided by Heather Shearer, Chair of the Writing Program. Heather helped connect our efforts to best practices in writing instruction and provided many ideas for improving writing assignments.

Submitted by Grant Hartzog Professor MCD Biology