Reinvention Conference on Undergraduate Research Nov. 14, 2002 Janet H. Clarke Melville Library Brown Bag Report

A Comprehensive Approach: Creating a Continuum of Academic Experiences

Stanford University was presented as a case study of a comprehensive approach to undergraduate research, which included the library as an integral component.

The University saw a need for thinking of undergraduate research as a developmental process, not one product. While there were identifiable beginning and advanced levels of research, the intermediate level of research was missing from the undergraduate curriculum. This intermediate level would involve working with faculty to develop independent projects, which would in turn allow them to develop relationships with faculty. In addition, students are able to create peer communities with others who are doing research at this level. This intermediate level is designed to stretch students beyond their comfort level in research.

The Office of Vice Provost for Undergraduate Education (VPUE) was recently created, whose main job was advocacy for undergraduate research and to create and coordinate partnerships among previously competing or overlapping areas. The VPUE partners with and facilitates these groups: Program in Writing and Rhetoric, Introduction to the Humanities, Freshman/Sophomore Program, Undergraduate Advising Center, CELT, and Undergraduate Research Program.

The Writing curriculum and Freshman/Sophomore Program were given as examples. All students are required to take the Writing curriculum, which has been defined into three different levels: Level 1: Writing, Argument, Library Research Skills (must be taken in the first year); Level 2: Oral presentation skills (*may* be taken in the 2nd year—this level is new as of 2001); Level 3: Writing in the major.

The Freshman/Sophomore Program is designed to build the foundations for these research relationships between students and faculty. So, these courses are more about relationships almost more than about a particular subject. There is an online application process to this voluntary program that about 40-75 percent of students are taking. Sophomore mentoring program is one important component of the success of this program.

Breakout Session for Challenges in Implementing Undergraduate Research and Scholarship

A Comprehensive Approach: Creating a Continuum of Academic Experiences

1. What are the philosophical and practical challenges to creating connections between and among the various components of undergraduate education in support of research? How might these be addressed?

- We need to define what we mean by "research." We need to unpackage that. What would it look like? For example, not all students in the undergraduate programs are going to continue on to graduate programs. Many state universities, for example, have students who only want certain skills and a degree that will help them get a job out of college. So we need to recognize the different research skills and needs of our students based on their goals.
- ➤ In the Humanities and Social Sciences, the research process is different than in the lab Sciences. For example, there needs to be more focus on the research process, not on the product, more focus on making the research process transparent. This gap on the focus of research (product in Humanities and Social Sciences vs. process in lab Sciences) might be lessened with a greater focus on undergraduate research across disciplines.
- ➤ Some members of the discussion thought that structural differences exist between the Humanities and Social Sciences vs. lab Sciences, though others warned that we might be creating a false dichotomy. Nevertheless, research is a more natural component of undergraduate education in the lab Sciences, whereas in the Humanities and Social Sciences, research is more often done individually and independently (there are no formal lab structures). Thus, faculty buy-in was noted as a potential problem in the Humanities and Social Sciences. Whereas faculty research projects can be well-developed in the lab Sciences (where undergraduate students can research a small segment), this type of structure is not as well-established in the non-sciences. In fact, faculty in the non-sciences might very well see undergraduate research as an overload to their current job responsibilities.
- 2. In what ways is general education at a research university aligned or at odds with the research mission? How do undergraduate requirements reinforce or contradict the integration of research into undergraduate education?

Didn't have time for this question.

- 3. What are some best practices that have been successful in encouraging the formation of mentoring relationships and the cultivation of a spirit of inquiry, prerequisites for undergraduate research?
 - ➤ Use General Education program as a vehicle for implementing undergraduate research. In other words, use existing programs rather than create new or additional burdens/programs on faculty. This might make it more acceptable and feasible since faculty already feel they have a full load.