

Creating and Sustaining a Culture of Undergraduate Research: A Psychology Department's Report on Success

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Southern Utah University (SUU) is a regional, comprehensive university of approximately 7,000 full and part time students. SUU offers a limited number of master's degrees, but this number is slowly increasing. Located in an area of rural Utah which is predominantly low-middle SES, the University services many first generation students. Many of our students are non-traditional (e.g. married with children and returning students).

The psychology department at SUU has grown steadily over the years to approximately 220 declared majors, taught by eight full time faculty and one advisor who also has a part time teaching load. The majority of our faculty involve themselves heavily in university service: faculty senate, curriculum committees, leave, rank, and tenure committees, human and animal research ethics committees, and the Undergraduate Research Program to name but a few. Despite most of our faculty having a 4/4 teaching load, we all mentor students in undergraduate research projects. Except for some modest funds, which we sometimes receive from the Provost's Faculty Development Grant Program and SUU's Undergraduate Research and Scholarship Program (UGRASP), rarely do we have any outside funds to support our research.

In 1998, our faculty began attending the annual meetings of the Rocky Mountain Psychological Association (RMPA). For several years, we have been accompanied by 20-50 of our students, many of whom present their research at the convention. Although our student-faculty collaborations only occasionally result in peer-reviewed journal publications, the list of regional, national, and international presentations is impressive. We have a reputation at SUU and within the region as a department that places strong emphasis on undergraduate research as a valuable and necessary learning experience for

our students and ourselves. How did this culture and tradition of undergraduate research evolve?

Prior to 1998, our department did not have a strong culture of undergraduate research or research in general. The faculty who did actively participate in research often did so in isolation or through collaboration with colleagues. Although we supported students who wanted to do research, our focus was on quality teaching and service to the institution. We also had not yet considered undergraduate research as a pedagogical tool. As new psychology faculty, some from R1 institutions, with research interests were hired, we began to witness an attitudinal change toward undergraduate research and education in general. Building on a strong foundation of support and encouragement from senior faculty, the value of undergraduate research as a pedagogical tool began to take shape. A turning point occurred when we added new research courses to the curriculum. One such course was the senior thesis capstone course, Senior Project – Independent Research (IR). Much like senior theses courses at other universities, IR requires students to come up with a research question, review the literature, design an experiment/study to answer the question, secure IRB approval, collect and analyze the data, and submit an APA style thesis. Two problems were immediately apparent to us after the first year.

First, we became aware that enrollment would have to be restricted to a manageable number. One course instructor was responsible for teaching and supervising all the students' projects, a difficult task if all students were afforded the time and advice required for successful completion of their projects. Second, only a minority of students were able to complete all the course requirements in a single semester.

We attempted to rectify these problems by capping enrollment at 15 and by soliciting help

from psychology faculty. Faculty began serving as supervisors (mentors) for some of the students. These changes helped, but the problem of having students finish on time persisted. With some trepidation, we decided to adopt a two course, six credit sequence: IR1 (fall semester) and IR2 (fall/spring semester). In IR1, students attend weekly seminars on topics designed to facilitate the development of their research question, review the literature, design their study, submit an IRB proposal, and write an APA style introduction for what will become, for most students, the introduction to their senior thesis. Every attempt is made to tailor the seminars to the students' individual research projects and reduce the amount of "busy work" students are required to complete outside of class. Once a student has a solid research proposal, he/she secures a psychology faculty advisor. The advisor and student cooperate on the project, and the final submission to the IRB is the result of their combined efforts.

In IR2, students (supervised by their advisors) collect and analyze their data, and complete the APA style empirical research report they began in IR1. Beginning in IR1, students and their mentors share the expectation that students will formally present their research off campus. However, their final grade in the course is not dependent on whether students achieve this expectation.

Implementing IR1 and IR2 has contributed to the culture of undergraduate research, a tradition that continues to evolve. Although only 7-10 students complete IR2 each year, most of them present their projects at professional meetings, and some also present their work at SUU's annual, campus-wide, student-faculty scholarship day. The psychology department also holds its own annual undergraduate research symposium at which these students present, along with students registered in the three introductory methods courses offered by the department.

There are additional reasons for the success of undergraduate research in psychology at SUU. First, the students who complete the IR1 and IR2 sequence tend to develop a strong sense of team spirit. We have tried to create an inviting atmosphere in the reception area of the main office, where students from IR1 and IR2 often discuss their progress or sometimes the lack of progress. These discussions frequently involve other students who happen to be there. Second, the attitudes among our faculty have no doubt played a critical role. Although not all of us

engage in undergraduate research to the same extent, all of us believe in its value. We share these attitudes with our students in both formal and informal contexts. Several lectures of PSY 2010 (Models, Methods, and Professional Issues), a course required of all our majors, revolve around the value of undergraduate research and opportunities for engaging in it. We require all our majors to complete at least two introductory methods courses, each of which requires the completion of a research project. Several of our content courses, such as Environmental Psychology, also afford students the opportunity for research. Third, we have tried to reinforce the value we place on research through extrinsic rewards. We confer four awards of \$100 each on students at our annual symposium, and the department recognizes one student each year as Research Scholar of the Year at the campus wide end of year awards and recognition ceremony. Fourth, our department has a designated undergraduate research liaison (URL). The URL's official responsibilities are to facilitate and promote undergraduate research within the department by (a) answering students' questions and concerns about research, (b) creating and maintaining a webpage on undergraduate research for our department, and (c) serving as a bridge between the department and the central, campus-wide program for undergraduate research and scholarship. Finally, our department sponsors both a chapter of Psi Chi and a psychology club. Students who participate in these organizations promote a culture of undergraduate research. Most of the money they raise each year goes toward funding students' travel to RMPA. They also sponsor an annual graduate school panel attended by many students, freshmen through seniors. Faculty on the panel stress the importance of undergraduate research as a requisite for graduate school admission.

Despite our success, we continue to struggle with various obstacles. Chief among these obstacles is the time required to supervise research projects. An advisor will easily invest 3-5 hrs per week per student. Thus, supervising three students often entails a weekly commitment of 15 hrs/week throughout the year. Our department recognizes the value and extent of this contribution. We keep track of the number of students each faculty supervises, and each semester we give one faculty a three credit course reduction. We do not have a formula on which to base our decision of entitlement. In the past, the decision was mutually agreed upon by

faculty at one of our frequent department meetings where a sense of fairness prevailed. This arrangement, of course, could become a problem. And, as the number of faculty grows, we will no doubt have to allot more than one, three credit reduction per semester. Otherwise, each of us could be waiting five or more years for our turn. The psychology department also weighs highly student-faculty research for leave, rank, and tenure considerations.

A second related problem is the struggle to gain recognition for our work from central administration. The uphill battle is not as steep as it has been. Last year, SUU created a centralized program for undergraduate research and scholarship (UGRASP). Currently, I serve as the program's director, and two of our faculty are on the UGRASP advisory board. This program supports undergraduate research, both students and mentors, financially and otherwise. As the program grows and a culture of undergraduate research continues to spread across campus, we are confident that additional resources and rewards will avail themselves. For example, with the encouragement of UGRASP, there is now an

annual award for the Undergraduate Research and Scholarship Mentor of the Year. This award is from the faculty senate and paid for by the Provost's Office.

The third problem centers around the students themselves. Despite our best efforts, many students fail to appreciate the value of undergraduate research. IR1 and IR2 have a reputation for being labor intensive, and students resist taking these courses. Among students who recognize the value of these courses, intrinsic and extrinsic pressures to finish their degree quickly and often take precedence. Overcoming these resistances requires creativity and determination.

Each fall, our department "escapes" to an off-campus location for a retreat. Despite an emphasis on "eat", these retreats have been highly productive. At the retreat, we discuss philosophical and global issues and problems often resolve. No doubt, undergraduate research will be on this year's agenda again. Creating this culture took time. Efforts to maintain it are no less demanding.