

**Scholastic Enhancement Program
Undergraduate Research Option (SEP/URO)
Annual Report
2005-2006**



Background

The Scholastic Enhancement Program (SEP) and the Parents Office in the Division of Student Affairs began an undergraduate research option living learning community for first-year SEP students in the Fall of 2005. SEP provides admission, academic and personal guidance, and support for targeted students to ensure their completion of a degree program through coordinated services in cooperation with faculty and staff campus-wide.

The SEP undergraduate research option (URO) living learning community is a program component offered to first-year students. It is designed after successful programs offered at the University of Michigan and the University of Wisconsin at Madison. This living learning community provided a select number of students the opportunity to live together while actively learning via their participation in faculty-directed research projects.

Purpose

The purpose of the program is to engage first-year students in faculty research early in their academic experience. This, in turn, is intended to increase their participation in other research activities at Miami University. Faculty sponsors were responsible for identifying aspects of their own research that could engage a first-year student researcher. Their role with SEP staff assistance was to guide the student through an inquiry-based learning experience.

Student Participants

In the fall semester, thirteen students selected the SEP/URO living learning community as their first-choice residential option. 77% were African American, 14% were White, and 8% were Hispanic. The majority of the students were from Ohio, but others were from Maryland, Michigan, and Illinois. They came from wide range of declared majors, including accountancy, finance, women's studies, chemistry, music, graphic design, theatre, and psychology.

During the spring semester, eleven of the thirteen students continued with SEP/URO. The two students who chose not to continue did so because they had enrolled in more than 18 credit hours. One was a music major with a heavy course load of over 20 credits and the other took on a production of a play along with an independent study with his/her advisor. Both of them felt as though they could not continue in the SEP/URO program, given the additional demands it placed on their time.

Faculty Sponsors and Assessment Results

Twelve faculty sponsors began the project this year. They represented the following departments: geology, chemistry, teacher education, communications, physical education, marketing, psychology, educational leadership, and sports studies. Overall, most of the faculty sponsors clearly indicated they were pleased that they participated in the program. They further reported that they would like to continue their involvement in the future.

In addition to this positive feedback on the program and its intent, the faculty sponsors offered helpful insights that will be taken into account as the program moves forward. Some of them noted concern over what they perceived to be low levels of student motivation. This might be related, as will be discussed below, to the fact that several students did not feel as though they fully understood URO and the responsibilities they would have to take on as participants in the program. Faculty members also noted that in some instances conflicts between their schedules and those of the students with whom they were working complicated matters.

The faculty sponsors applied to participate in URO with pre-established research projects. However, some of them later changed their topics so that they would tie into the students' majors and interests. This degree of flexibility addressed one of the concerns raised by the students in their evaluations reported below. It will be important in the future to devote energy to discerning strategies to make symbiotic connections between student interests and faculty research agendas.

And finally, the faculty sponsors reported their belief that the experience in URO has opened students' eyes to opportunities they may not be presented otherwise, while also raising their expectations with regard to the kind of research they can engage in during their career at Miami University.

Results from Student Assessment Questionnaire

At the end of the spring semester, the student participants were asked to evaluate and reflect on the completion of their first-year research experience with the undergraduate research program.

The students not only reported that they had improved their study skills over the course of their first year, but also attributed that improvement to their being involved in URO.

It is no secret that there is a positive correlation between academic success and time spent studying. URO succeeded in cultivating this important relationship. The questionnaire revealed that the eleven students that remained in the program for a full year increased the amount of time they put into studying. A survey conducted at the end of the Fall 2005 semester showed that 8% of the students studied 16-25 hours per week. The survey conducted at the end of the Spring 2006 semester, however, revealed a significant improvement. A remarkable 30% of the students reported studying 16-25 hours per week during their second semester.

The SEP Undergraduate Research Option had a clear role to play in the development of other attributes that lead to academic success, as well. Six of the ten students that responded to a question regarding analytical, problem-solving, and/or critical thinking skills found that their participation in SEP/URO enhanced them. Five out of ten students said that the experience facilitated a successful research partnership and connection with their faculty sponsor. Five out of ten also strongly said their relationship with their faculty sponsor provided personal and academic support. 100% responded positively to how their experience helped advanced their interpersonal skills and 67% said that participating in the URO Living Learning Community enhanced their ability to interact, network, socialize and collaborate with other students. 56% pointed out that URO provided leadership opportunities for them.

The results can be seen in quantitative terms by considering the grade point averages attained by the students during the fall and spring semester. As the table below indicates, ten of the eleven students that stayed in the program for the entire year made considerable improvements. Ten of the eleven students earned a grade point average of 2.25 or greater, and two of them earned a grade point average of 3.0 or greater.

During the fall semester, four of the thirteen students (30%) earned below a 2.0 grade point average. Five of the thirteen students (38%) earned a grade point average of 2.5 or greater. By the end of the spring semester, none of the eleven students (0%) earned anything below a 2.0 grade point average; six of the eleven students (55%) earned a grade point average of 2.5 or greater.

| Fall 2005 | Spring 2006 | CUM GPA |
|-----------|-------------|---------|
| .63 | 2.46 | 1.82 |
| 1.62 | 2.25 | 1.9 |
| 1.68 | 2.11 | 1.9 |
| 1.85 | 2.45 | 2.14 |
| 2.14 | 2.35 | 2.25 |
| 2.3 | 2.75 | 2.54 |
| 2.35 | 2.68 | 2.54 |
| 2.44 | 2.76 | 2.6 |
| 2.59 | 3.17 | 2.9 |
| 2.61 | 3.91 | 3.21 |
| 3.03 | 2.5 | 2.69 |
| 3.23* | 3.20 | 3.21 |
| 3.48* | 3.18 | 3.3 |

* indicates the two students who did not continue in the Spring semester with URO

It follows that their cumulative grade point averages at the end of the first year also improved. Six of the eleven students earned a cumulative grade point average of 2.5 or greater with one student over a 3.0. These grades verify that the program does have an immediate positive impact on students' satisfaction and academic achievement.

Involvement in SEP/URO culminated in the Undergraduate Research Forum held in April. All eleven students along with their faculty sponsors were listed in the 12th Annual Undergraduate Research Forum. One of our students wrote a featured article and eight students designed and presented posters. The posters generated were most impressive.

The SEP/URO experience clearly taught students how to conduct research, collect data, and utilize the library. It introduced and provided resources that they would not have been exposed to in their first year and gave them the opportunity to interact with faculty on a more personable level. As a result of their participating in SEP/URO, six out of nine students (67%) said they will seek future research opportunities as an undergraduate at Miami.