

Extracurricular Undergraduate Research: Student Perspectives and Experiences

Undergraduate research has been linked to improved student success in collegiate coursework (Desai et al., 2008; Lopatto, 2003; Lopatto, 2004; Silva et al., 2004; Wood, 2003). While research projects can be time consuming, engaging in research with undergraduate students can be a rewarding experience for both students and faculty. Participating in research activities with undergraduate students does not require large amounts of faculty involvement, but it does yield a substantial number of positive outcomes for the students. Despite the mutual benefits of undergraduate research for faculty and students, undergraduate research seems to be poorly represented.

A part of their role as a research-friendly institution, Southern Illinois University Carbondale provides different venues for undergraduate students to present the results of undergraduate research. While some events are open to faculty, graduate students, and undergraduate students, the Undergraduate Creative Activity and Research Forum (UCARF) is one event that is targeted specifically at undergraduate students. Although the event is available for undergraduate students to present the results of their inquiries, it is poorly attended. For several years, the UCARF had fewer than 250 posters submitted from an undergraduate student population of 13,331 as of Fall 2015 (Institutional Research, 2016). The low level of participation by undergraduate students in research activities deserves to be investigated to understand the different perceptions student-researchers hold about the activity.

This research examined the experiences and perspectives of undergraduate researchers, and sought to understand both the reasons they engaged in research as undergraduate students and what they learned and received from their experiences. This qualitative study used semi-structured interviews which were coded by the researchers to find common themes related to communication, hindrances to research, mentorship, and personal improvement.

References

- Desai, K. V., Gatson, S. N., Stiles, T. W., Stewart, R. H., Laine, G. A., & Quick, C. M. (2008). Integrating research and education at research-extensive universities with research-intensive communities. *Advances in Physiology Education*, 32, 136-141. doi: 10.1152/advan.90112.2008
- Institutional Research and Studies. (2016). Southern Illinois University Carbondale Factbook 2015-2016. Retrieved from http://www.irs.siu.edu/quickfacts/pdf_factbooks/factbook16.pdf
- Lopatto, D. (2003). The essential features of undergraduate research. *Council on Undergraduate Research Quarterly* (2), 139-142. Retrieved from <http://www.cur.org/download.aspx?id=529>
- Lopatto, D. (2004). Survey of undergraduate research experiences (SURE): First findings. *Cell Biology Education*, 3, 270-277. doi: 10.1187/cbe.04-07-0045
- Silva, T. D. N., Aguigar, L. C. C., Leta, J., Santos, D. O., Cardoso, F. S., Cabral, L. M., Rodrigues, C. R., & Castro, H. C. (2004). Role of the undergraduate student research assistant in the new millennium. *Cell Biology Education*, 3(4), 235-240. doi: 10.1187/cbe.04-02-0032
- Wood, W. B. (2002). Inquiry based undergraduate teaching in the life sciences at large research universities: A perspective on the Boyer commission report. *Cell Biology Education*, 2(2), 112- 116. doi: 10.1187/cbe.03-02-0004