Student Perceptions of Participation in Extracurricular Undergraduate Research

Abstract

Undergraduate research has become a key part of the university experience for many students. While undergraduate research has a long history, recently changes in undergraduate research policy can be traced, in part, to the Boyer Commission's report (1998) which encouraged the use of undergraduate research to promote improved critical thinking and more rapid integration of students into their chosen academic arena.

The literature supports the Boyer Commission assertions and indicates that student participation in research as an undergraduate improves the student's success in their chosen academic programs (Desai et al., 2008; Lopatto, 2003; Silva et al., 2004; Wood, 2003). Undergraduate research also seems to help students understand their academic goals and encourage them either toward graduate level education that may not have considered it before, or away from graduate level education if students find they are ill suited to research (Lopatto, 2004; Russell, Hancock, & McCullough, 2007; Desai et al., 2008). This literature, however, is focused on traditional academic and STEM (Science, Technology, Engineering, and Mathematics) fields. There is little research on the effect of undergraduate research participation in applied fields, with the exception of medicine.

This research sought to understand the lived experiences of students enrolled in a large professional flight training program, who had actively participated in and conducted extracurricular research. This phenomenological case study involved contacting the students in the professional flight training program who had conducted extracurricular research and then interviewing those that chose to participate. The interviews were then transcribed and coded using open, closed, and thematic coding methodologies. By understanding the experiences and

motivations of these undergraduate researchers, it is hoped that more students can be encouraged to participate in research of this manner and enjoy the same benefits that the study participants expounded upon. Some of the key themes that emerged from the research were: engagement, pride, and educational attainment.

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