Steminism: Analyzing Factors That Improve Retention of Women in STEM

Date: February 22, 2024
Time: 11:00 a.m. to 1:00 p.m.
Place: Remote

Abstract
Our co-authored research ‘Steminism: Analyzing Factors That Improve Retention for Women as STEM Majors’ analyzed factors that contributed to the retention of women in science, technology, engineering, and mathematics (STEM) programs at Missouri University of Science & Technology (Missouri S&T). Women make up half of the US population, and while careers in (STEM) are an integral part of the US economy, women are underrepresented in these career fields. The purpose of our dissertation is to address the underrepresentation of women in STEM majors. Our methodology included homogeneous sampling to collect qualitative data. More specifically, we consulted with academic advisors and admissions staff to identify women with at least 48 credit hours and completed four semesters of STEM majors at Missouri University of Science and Technology (Missouri S&T). We then conducted a basic qualitative study using a purposeful sampling approach. We examined the student’s perceptions of (1) early access programs, (2) the importance of arts integration, (3) and the impact of extracurricular activities as tools for retention and found that the major factors that inhibit the retention of women in STEM is the shortcoming of achieving communal goal congruence. All interviews were conducted with Zoom, and Ottr software was used to transcribe the data. Solution-focused, our research affirmed that to achieve communal goal congruence, students participated in extracurricular activities, student life, and work-study. As practitioners, we used our co-authored research to develop EmpowHer: A Steminists Guide to Cultural Border Crossing, a manual for administrators in higher education and prospective STEM students.