

UNIVERSITY STUDIES OF STUDENT PERSISTENCE IN ENGINEERING AND COMPUTER SCIENCE

In Spring 2011, engineering and computer science students at a Midwestern university were surveyed with respect to persistence in their major. The survey was designed to investigate the aspects of persistence and the reasons behind switching majors. This paper extends the analysis to include two independent studies that were conducted in 2009. The studies were academic surveys of climate and persistence with the intent of providing university benchmarks for improvement. The three surveys overlap on questions regarding perception of professors (within the classroom and their personal treatment of students), perception of treatment with respect to gender, the contacts and interactions with fellow students, and the students' perceptions of the field of engineering. This work analyzes the three data sets individually and collectively to determine what impacts student persistence (including factors such as major, gender, student-student and student-faculty interactions, and career opportunities). The results are analyzed to show possible ways to change the university climate and to improve retention.