NSF TUES GRANT

Project Lessons Learned

In January 2013, SJSU announced a partnership with the online education company Udacity to offer three online courses for credit to both current SJSU students and non-SJSU students. This project is designed to inform the development and implementation of this new online learning environment.

Award Number: 1321336
Project Principle Investigator: Elaine D. Collins
Organization: San Jose State University
NSF Division: Division of Undergraduate Education
NSF Program: TUES-Central Resource Project

Project Title: “Experiments in student mentoring, tutoring and guided peer interaction in Massive Open Online Courses (MOOCs)”

Project Summary
This project assesses the effectiveness of human mentorship and guided peer interaction in the context of Massive Open Online Courses (MOOCs). It is based on the observations that
(a) MOOCs are presently more successful for highly self-motivated individuals
(b) there is a nearly complete absence of interactive human mentoring in MOOCs.

This project will investigate the effectiveness of six forms of human mentoring, including group and individual mentoring as well as instructor-guided peer interaction in small groups. In pursuing this project, the PIs seek to characterize the effects of these different types of mentorship on the collection of variables that measure course completion and learning outcomes.

The overall objective of this project is to find ways in which MOOCs can be made successful among a much broader segment of students. The six forms of human mentoring to be tested are:
• 1:1 mentoring of students by instructors in scheduled video sessions
• 1:1 mentoring of students through email
• Group mentoring in scheduled video sessions with peer interaction
• Guided peer interaction within small peer groups using video and other communication methods, initiated by instructors
• 24/7 on-demand chat lines in which students can interact with instructors
• Discussion for a large-group peer interaction

Partial support for this work was provided by the National Science Foundation’s Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES) program under Award No. 1321336. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.