

Title: Affecting Students

Two Discussion Leaders:

J McGrath Cohoon

Mentoring Students

University of Virginia, Department of Science, Technology, and Society, School of Engineering and Applied Science

Joanne McGrath Cohoon is a sociologist who studies gender, technology, and education. She earned her BA in Philosophy from Ramapo College of New Jersey, her MA in Student Personnel Administration from Columbia University, and her Ph.D. in Sociology from the University of Virginia in 2000. Dr. Cohoon has held professional positions in higher education as a researcher, administrator, and instructor. Her research has been funded by the Alfred P. Sloan Foundation and the National Science Foundation.

Sylvia Beyer

Predictors of Female and Male Computer Science Students' Grades

University of Wisconsin-Parkside, Department of Psychology

Sylvia Beyer is a social psychologist who studies the self-perceptions of women in non-traditional domains. She earned a Vordiplom (equivalent of a BS) in Psychology from the Universität Tübingen in Germany and an M.S. and Ph.D. in Social Psychology from the University of Oregon. Her research has been funded by the National Science Foundation.

Objectives: This BOF will discuss recent research findings about effects that mentoring and other features of the educational environment have on students, especially women, in computing majors. Participants will gain a greater understanding of the important role environment plays in student outcomes.

Topics

Dr. Beyer will discuss the findings of a longitudinal study investigating predictors of Computer Science (CS) grades. She will focus on environmental and psychological variables that predicted female but NOT male CS students' grades in CS courses taken one to three semesters later. Prior exposure to computer scientists, the belief that women are as good at computers as men, and the belief that computer scientists work with people predicted higher CS grades for women, but not men. High levels of stress and the perception that there is gender discrimination in the CS program predicted lower grades in future CS courses for women but did not affect men.

Dr. Cohoon will describe the two most common forms of mentoring in undergraduate CS programs. She will present evidence from 40 Doctoral institutions on how mentoring correlates with progression to graduate school, retention of women, and academic success.

Intended Audience: All conference attendees are welcome and could benefit from this BOF. We expect that both students and educators will be particularly interested in the

information presented. There are no restrictions on the number of people who could attend or their background knowledge.

Written Materials: Handouts reproducing the slides that are presented.

Knowledge gained: Participants will gain a deeper appreciation of educational factors that influence women's participation in computing, and evidence of specific faculty behaviors that produce measurable outcomes. Mentoring will be a particular focus with information about how motivation and actions influence results.