



Friday November 15th, 2013
4:10 – 5:00 pm, EPS108

“Meeting Students Halfway: Increasing Self-Efficacy and Promoting Knowledge Change in Astronomy”

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Abstract:

You’ve learned about the reform efforts in introductory astronomy and physics courses, incorporating several of the techniques into your own classes. You might use peer instruction questions with clickers, or Lecture-Tutorials, or both! Yet you sense that your students could still learn more than they do. What else might make a difference? This talk will report on a recent study that looked at the influence of interest and self-efficacy on students’ understanding about stars. Approximately 700 undergraduate, general education astronomy students responded to surveys at the beginning and end of their semester-long course. We found that (1) students’ self-efficacy for learning about stars at the end of the class had the largest influence on their posttest scores on the Star Properties Concept Inventory, and (2) that knowledge, self-efficacy, and interest all increased over the semester. However, additional analysis showed that the learning increases were not the same for all instructors—in fact, the instructors’ whose classes experienced the greatest increases in self-efficacy were those that also had the greatest increases in SPCI scores. Interviews with the instructors provided hints at how these self-efficacy gains might have been achieved, and they are strategies that you can incorporate into your own courses.

Host:

Shannon Willoughby

******Refreshments served in the EPS second floor lobby at 3:45******
