Jennifer Vandenbussche* (jvandenb@spsu.edu), Christina Scherrer, Alexandra Brigham and Anasstasia Semenova. An analysis of the effectiveness of using exclusively workshop-style instruction in the College Algebra classroom. Preliminary report.

Over the past few decades, evidence has grown for the effectiveness of collaborative learning in STEM fields. The question of how best to balance collaborative learning workshops with traditional lectures, however, remains open. In particular, there is little literature available investigating the effects of workshop-only instruction, especially in lower-level math courses.

This talk reports the results of a study intended to investigate this issue. The presenter taught a section of College Algebra in a workshop-only format and a traditional lecture section concurrently, giving each section similar assignments and exams. The two sections were administered surveys throughout the semester, measuring their attitudes toward mathematics. An undergraduate research assistant also conducted interviews of the students.

Analysis of the students' performance at the end of the semester found very little statistically significant difference between the sections. This suggests that the additional resources needed for workshop-only instruction may be better allocated elsewhere. However, positive feedback from the surveys and interviews suggests that the idea of including a workshop component in College Algebra merits further study. (Received September 12, 2011)