

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts Dorothy Anna Trippel

Will defend her thesis

Tools for Problem- and Project-Based Learning In Sustainability: A Case Study of Two Undergraduate Classes

Abstract

Teamwork and project management (TPM) tools are important components of sustainability science curricula designed using problem- and project-base learning (PPBL). Tools are additional materials, beyond lectures, readings, and assignments that structure and facilitate students' learning; they can enhance student teams' ability to complete projects and achieve learning outcomes and, if instructors are able to locate appropriate existing tools, can reduce time needed for class design and preparation.

My research uses a case study approach to evaluate the effectiveness of 5 TPM tools used in two different ASU Sustainability classes: an introductory (100-level) and a capstone (400-level) class. I explore which TPM tools were most effective in each class, what factors contributed to their effectiveness, and how instructors can improve effectiveness of these TPM tools in other sustainability classes.

Tuesday, April 16th, 2013 12:30pm Wrigley Hall, 401

Faculty, students, and the general public are invited.

Supervisory Committee:

Dr. Charles L. Redman, Chair Dr. K. David Pijawka, Member Dr. Molina Walters, Member