Assessment of Concept Mapping as a Learning Method in a Human Anatomy Course

Abstract: Concept maps have been used as a group presentation assignment in PTD 310- Human Anatomy for several years. Anecdotally, I have noted that concept maps have improved student performance on course examination essay questions and students are positive about the concept map assignments. The research questions for this project are:

1. Does studying concept maps have a positive effect on essay question performance vs. study of standard course materials e.g., lecture notes, laboratory, textbook readings?
2. Is there a correlation between student performance in a hypothesized learner ability area with other learner ability areas or course examination performance?

Two experiments are proposed. Experiment #1 will randomly assign the class to a concept map only or a standard course material study group and examine/compare group performance on an essay question. Experiment #2 will determine student and class performance on learner abilities hypothesized to affect student performance on a concept map question. The relationship, if any, between learner ability areas or with examination performance will be determined. A positive outcome on the research questions would support further development of concept maps as an evaluation and counseling tool to improve student performance in a human anatomy course.

Investigator: Robert Sandstrom PhD, PT
Associate Professor
Department of Physical Therapy
143F Boyne
402-280-4325
RobertSandstrom@creighton.edu