BACKGROUND INFORMATION

Traditional teaching practices in higher education have predominantly consisted of classroom lecture (80-85% of college instructors lecture; Benjamin, 2002). However, the lecture has been shown to be a rather ineffective method of promoting student learning and satisfaction (McKeachie & Svinicki, 2006).

Behavioral teaching methods have demonstrated efficacy as an alternative to classroom lecture. These methods capitalize on well-established principles of learning including use of reinforcement, focus on student mastery of course material via presentation in small segments of information, frequent assessment of performance, and presentation of material from simple to complex concepts.

Interteaching is considered a user friendly alternative for classroom instruction that has some demonstrated empirical evidence to support its effectiveness in producing higher student quiz scores when compared to lecture (Saville et al., 2006). There are several components to interteaching (see panel to right), and few studies have systematically evaluated the relative effectiveness of each. We have designed several studies aimed at this purpose – and will present the results of two such studies in this poster.

INTERTEACHING

Key Components

1. Preparation Guides ("prep guide"): Questions designed to guide students through reading assignments. Contain 10-12 items, each of which may cover more than one question, and covers 10-20 pgs. of material. Students are expected to complete prep guide before arriving to class (see Figure 1).

2. Pair Discussion: During class time, students form pairs to discuss the prep guide. Pair discussions last approximately 25-30 min (in a 75 min. class). During the pair discussion, the instructor serves as facilitator by traversing the classroom to answer questions and guide discussion.

3. Record Sheet: After students discuss the prep guide, they complete a record sheet to provide feedback to the instructor on how the discussions went and which material they found most difficult (see Figure 2).

4. Clarifying Lecture: Using comments from the record sheet, the instructor prepares a clarifying lecture to begin the next class period. This lecture typically lasts approximately 25 min (in a 75 min class) and covers prep guide item most requested by the students.

5. Frequent Probes to Assess Learning: Testing occurs frequently via quizzing and exams. Quizzes are tied directly to prep-guide material. Each assessment includes multiple-choice and short answer questions.

6. Quality Points: Extra credit is awarded via an explicit cooperative contingency. Additional points can be earned on each quiz if BOTH students in a pair receive an “A” on their respective quiz.

COURSE INFORMATION

UMass Lowell: PSYC 47.312- Learning and Behavior

Upper-level undergraduate specialized elective taken primarily by psychology majors, but also attracts students from a variety of disciplines (i.e., criminal justice, education, political science).

Course is designed to examine various methods and techniques that are suitable for behavior modification, based on the principles and findings of experimental studies. 28-31 students enrolled in each section during Fall 2013 semester.

Utah State University: REH 6110 – Medical Aspects of Disability

Required graduate course taken by Rehabilitation Counseling students enrolled in a Masters of Rehabilitation Counseling graduate program. Course was designed to provide information regarding the physical, psychological, and social impact of chronic illness and disability. During the Spring 2013 semester there were 25 students enrolled in the online graduate course taught from Massachusetts.

COMPONENT ANALYSIS

We implemented an alternating treatments experimental design to systematically evaluate the impact of the pair discussion on student outcomes. Class sessions were assigned to either a pair discussion or no pair discussion (for on-line course) or lecture (for face-to-face course). Students were notified of the condition in place at the beginning of each class. All other components of interteaching were in place throughout the semester.

REFERENCES


