

## EXPERIENTIAL LEARNING: IMPACT OF TWO INSTRUCTIONAL METHODS ON STUDENT-INSTRUCTOR INTERACTION, CRITICAL THINKING, AND COURSE EVALUATIONS

Robert Wheeler, Communications Department, College of Communications, California State University, Fullerton, College Park 400-26, 2600 Nutwood Ave., Fullerton, CA 92834;  
(714) 278-5974, rwheeler@fullerton.edu

### ABSTRACT

Experiential learning is a topic that has received considerable research attention over the past five years. Two important pedagogical methods within the experiential learning family not receiving as much attention are project-based learning and problem-based learning. While these instructional methods share similar characteristics, they are different. This study explores these two instructional methods in relation to critical thinking, student-instructor interaction and course evaluations.

Project-based learning emphasizes information search and retrieval, knowledge application, and critical thinking. Groups engage in lengthy projects based on commonly encountered problems and situations. These efforts end with delivery of a marketing plan and presentation

Problem-based learning challenges students to "learn to learn," by working in small groups seeking solutions to real world problems. Students meet regularly to investigate, explain and resolve complex real-world problems. Problems commonly consist of a description of a situation requiring an explanation and resolution. These problems often take the form of business cases.

This study compares these two pedagogies in an undergraduate introductory marketing class. Three research questions were asked: 1) Will problem-based learning increase student-instructor interaction and critical thinking more than project-based learning? 2) What were some of the students' thoughts and feelings experienced during the course? 3) Will the problem-based learning help or hurt an instructor's course evaluations?

In this study, two classes (n=190) were assigned a single project-based learning marketing plan project due at the end of the term. A third class (n=105) received four individual problem-based learning cases. Each case required iterative cycles of observation, evaluation, reflection, abstract thinking, hypothesizing, and testing.

The nature of this study is both descriptive and exploratory. The students' feelings and attitudes were analyzed using standard quantitative and

qualitative research techniques. Seventeen Likert scaled questions measured students' perception of the two instructional methods. One open-ended question invited students to record feelings experienced during the class. Course assessments provided the data necessary to evaluate variance of instructor evaluations

The data collected on the seventeen individual questions was analyzed using the independent-sample t-test procedure in SPSS. The results indicated significant differences in critical thinking and student-instructor interaction between problem-based learning and project-based learning, with problem based learning higher.

The open-ended question was thematically coded and analyzed. Five of the six comment categories that emerged indicated a significant difference between the two pedagogies (groups, assignments, class structure, real world experience, and critical thinking).

Three of the eleven instructor evaluation items were significantly different and higher for problem-based learning: "Emphasizes conceptual understanding," "Has students apply concepts to demonstrate understanding," and "What grade do you expect?"

In summary, problem-based learning is suitable for undergraduate introductory marketing classes if increased student-instructor interaction and critical thinking are goals. Other important objectives making this methodology appropriate are: greater self-directed learning and class discussion, a real world orientation, and more analysis – evaluation – creation. Issues making this teaching method problematic are: the ill-defined nature of the problems, lack of student real world experience, students unwilling to engage in the learning process, student assessment, and increased instructor time and effort.

Finally, marketing educators must decide whether the return in increased gains in student knowledge is worth the additional preparation and time necessary to teach a problem-based learning curriculum successfully.