
Bridging the Gap Between Theory and Reality: A Comparison of Various Teaching Methods

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Abstract

Students often find it difficult to relate theoretical material from courses to practical situations in industry. The undergraduate agricultural marketing course at Oklahoma State University used a variety of methods to help students better understand the relationship between theory and reality. Evaluation of the methods; such as guest lectures, a group exercise and a videotape presentation suggest effective ways to apply theory to reality in future courses.

Introduction

In the undergraduate agricultural marketing course at Oklahoma State University, guest lecturers from industry have been used to help students relate theory to reality for several years (Henneberry, 1990). However, during the Fall 1994 semester, additional methods were used to help students relate theoretical material from the course to practical examples. The additional methods consisted of a group exercise exploring the agricultural futures market and a videotape presentation on the agricultural futures market and use of options in the market. The objective of this article is to examine students' perceptions and evaluation of the various teaching tools that were used to relate theory to reality. The use of teaching methods to apply classroom theory to "real world" situations can enhance the learning and retention of economic concepts better than vicarious experiences (Laney, 1988). An important way to accomplish economic learning is to provide students with increased opportunities to become more actively involved in the application of economics (Carlson and Schodt, 1995)

Attempting to teach effectively amid the myriad of challenges in the mid-1990s, college and university instructors are running into obstacles and criticisms on all sides (Cornesky, 1993). By analyzing the student's perception of how effective each teaching method was at applying theory to real situations, the most helpful methods in relating real world situations to theory can be implemented in other

courses. Although many professors incorporate the teaching methods used in this course, by analyzing the student's evaluation of the methods we can understand which combination of teaching tools are most effective for bridging the gap between theory and reality.

Courses and Background

"Agricultural Marketing" is a junior level course at Oklahoma State University. All numerical results presented in this paper were obtained from a survey administered to students enrolled in the undergraduate agricultural marketing course at Oklahoma State University during the Fall Semester of 1994. Ninety-four students were enrolled in the course; students taking this course must first complete an introductory course in agricultural economics. The purpose of the course is to further the student's knowledge of agricultural marketing theory and practice. Agricultural marketing is a career area that many students are interested in entering after obtaining their degree. The use of teaching methods that help students apply theory from the classroom to real situations, is expected to provide students a better understanding of the career field they may be considering. Students' evaluation of various teaching methods that were used in Agricultural Marketing to bridge the gap between theory and reality are given in the following sections. Teaching methods include lectures by industry speakers, a group exercise on the agricultural futures market, and a videotape presentation of the day-to-day operations of the futures market.

Guest Lecturers

In the undergraduate agricultural marketing course at Oklahoma State University, lectures from professionals within the state's agricultural industry have been used to help strengthen the relationship between students' future career activities and the theoretical material from class. The response from the guest lecturers has been very positive and most request the opportunity to address the class again in the future.

The use of guest lectures to bridge the theory versus reality gap was chosen for several specific reasons. Source credibility is a powerful element in the learning process (Arnold, 1988). Students believe what they hear from someone who is actually in the type of position they plan to hold. Guest lec-

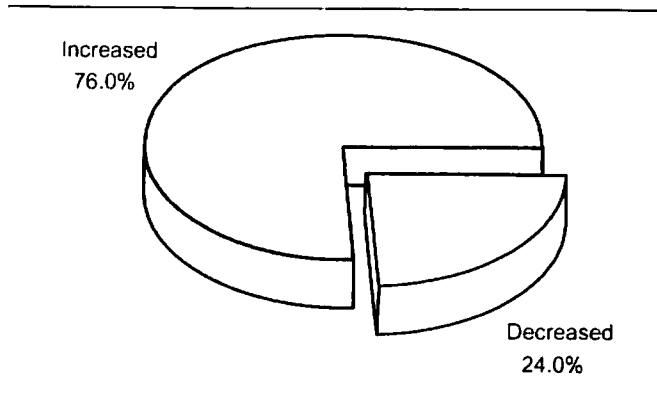
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turers often point out to students that they already have experience in many applied marketing areas. Also, students are interested in learning about how someone in the field that they hope to enter uses theory in their day-to-day activities. A better understanding of how the student may implement class material in their careers tends to make the students more interested in the course and the material which it covers.

Student acceptance of the guest lecturer has been very positive. Seventy-six percent of the students stated that their desire to ask questions and participate in the class discussion was increased when guest lecturers spoke to the class (Figure 1). Eighty-five percent of the students indicated that 2 to 5 lectures per semester should be devoted to guest lecturers, 14 percent felt that more than five lectures should be presented by guest lecturers, and only one percent felt that guest lectures should not be used to in the course. The students are particular as to what type of guest lecturer they prefer. Fifty-four percent of the students indicated that they preferred a speaker from within the state, while thirty-four percent prefer to hear from out of state speakers and the remaining 12 percent of the students would like to hear a guest lecture from an overseas speaker. Thirty-seven percent of the students stated that they prefer a guest lecturer that is an agricultural marketing representative, 27 percent prefer a farmer, 17 percent indicated a preference for a government representative, and 12 percent prefer a representative from the input industry. Transportation industry representatives and professors from other universities were each preferred by 3.5 percent of the students. The student's preference of the type of speaker has become more diverse in recent years. In 1989, a study of the use of guest lecturers in this course was conducted and approximately 75 percent of the students indicated a preference for speakers in either the agricultural marketing field or farming (Henneberry, 1990). Many of the students indicated that they would enjoy lectures from several different types of speakers to provide them with a broader perspective on how to apply theory to real situations. During the fall semester of 1994, three guest lecturers addressed the undergraduate agricultural marketing class. All of the guest lecturers were from a different position in the agricultural field to which concepts covered in the undergraduate agricultural marketing course applied to their daily activities. By using guest lecturers from a variety of backgrounds and positions within the industry, students are better able to understand the many aspects of the industry that are addressed by the theoretical material covered in the course.

The student's opinion of the most important contribution that a guest lecturer can provide is also important to understand the areas in which students are the most interested. Forty-six percent of the students felt that the guest lecturer's practical examples from industry experience were the most important contribution that the speaker could provide the class. Information about careers is also a valuable contribution by guest lecturers according to thirty percent of the students. Advice on preparing for the future was rated as the guest lecturers most important contribution by twenty-two

Figure 1. Percentage of students whose desire to ask questions is increases or decreased when a guest lecturer is invited.

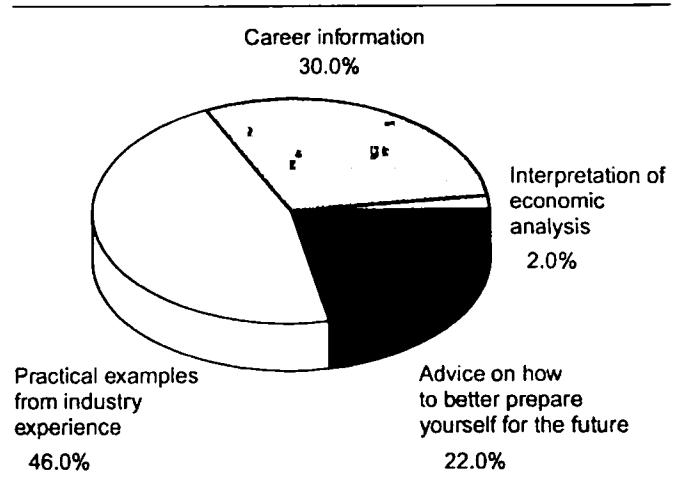


percent of the students. Interpretation of economic analysis was the least important contribution of guest lectures as only two percent of the students indicated that this factor as important (Figure 2). Thirty percent of the students responded that the guest lecturers provided them with a unique opportunity to learn more about their chosen career field, and the remaining seventy percent of the students indicated that the experience might be good or bad, depending on the quality of the speaker. The student's rating of the amount learned from the guest lectures varied according to the speaker; however, on average fifty-six percent of the students indicated that the amount learned from the guest lectures was high.

Additional Teaching Methods

Another teaching tool that was used to bring a practical understanding of theory was a group exercise on the agricultural futures market. In this exercise, the students were placed into groups of ten based on the seating chart. Each group was asked to select an agricultural commodity traded on the futures market. The groups were given one month to make

Figure 2. Students' opinion of guest lecturer's most important contribution to the course.



speculative trades with their chosen commodity. Each individual of a group whose trading activities at least broke even received five bonus points (maximum possible score in the course was 420 points). The use of a group exercise to bridge the gap between theory and reality were not as successful as the use of guest lecturers. As only thirty-six percent of the students indicated the amount learned from the exercise was high. Many of the students enjoyed the exercise; however, most felt that the groups were too large and did not allow for interaction from everyone in the group (as was stated above, each group consisted of ten individuals). Forty-five percent of the students indicated that the exercise gave them an above average opportunity to apply a practical example to the theoretical material presented in the course. The exercise allowed students put the theory to work in a mock situation, but provided no information about the consequences of an incorrect choice. After completing the exercise the students did not feel that they had truly been able to put their knowledge of theoretical concepts to use in a real situation. A factor which may have resulted in the students' opinion of the exercise is the fact that the exercise did not have a notable impact on their grade in the course, and was only for bonus points that accounted for a very small percentage of the final grade. By not requiring the exercise as a part of the student's course grade, students were likely not as motivated to apply the exercise to the knowledge gained in the course. Group exercises are often not popular among students because it is likely to have students in the group that are not interested in the exercise and will not participate with the rest of the group members (the free rider problem). However, it is important that students learn to work together in groups so that they are prepared for the group projects that are likely to occur in their chosen career field. Many challenges facing agriculture today are more appropriately solved by groups rather than individuals, thus group exercises are valuable to help develop the students' team work and interpersonal skills.

A videotape presentation on the futures market was used to give students a better understanding of the day-to-day operation of the futures market. The use of the videotape presentation was also viewed as less successful than the use of the guest lecturers. Only eighteen percent of the students rated the amount learned from the video as high. The students indicated that the video had a lot of useful information, but did not allow them to apply classroom examples to real world situations. Several of the students indicated that the information on the videotape should be presented by a guest lecturer, thereby allowing the students to interact with an individual that has actually been involved in real situations to which theoretical examples from class apply. The use of the videotape presentation allows students to see that theory was put to use, but may not allow them the opportunity to learn about how the theory was used and demonstrate how the material covered in class may be important to the students after graduation. Several students mentioned that while the video contained interesting information it was easy to let their attention wander since a person was not actually present to explain the information and interact with the class. Addi-

tionally, the videotape was shown to approximately ninety students in the classroom on a single television: many students had difficulty hearing the videotape and others could not see the screen clearly. Therefore, the lack of technology in the classroom with which several monitors can be used for the viewing of video presentations may have biased the students response to be slightly negative toward the use of the video as a teaching tool. Technology is slow to enter many college classrooms due to the high cost of bringing technology to the classroom that would allow for more innovative teaching techniques.

Summary and Conclusion

The use of several techniques to bridge the gap between theory and reality has been used in the undergraduate agricultural marketing course at Oklahoma State University. Students prefer teaching methods which allow them to interact either among themselves or with a professional to apply the theoretical concepts learned in the course to real situations.

Lectures from industry speakers allow for the students to understand several different situations in which the theoretical material from the course can be applied to real situations. Although videotape presentations may contain very interesting information, the results of this study show that students prefer to receive the information from a guest lecturer with whom they can interact and ask questions. Group exercises in which the students can interact and try to apply theory from the classroom to a practical problem are very effective for applying theory to reality. However, for group exercises to be successful the groups must be small enough for interaction from everyone in the group, and provide sufficient incentive for participation.

In closing, the theoretical material from courses can be applied to practical examples by using a variety of teaching methods. Instructors may need to experiment with different teaching methods to understand which method is most effective in applying the theory taught in their courses to "real world" situations. Although students generally prefer guest lecturers, the use of other teaching methods can also provide students with a broader understanding of the theoretical material that can be applied to practical situations.

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