

ASSESSING THE IMPACT OF A CHANGE FROM A TEACHING PARADIGM TO A LEARNING PARADIGM IN THE INTRODUCTORY COURSE IN MARKETING

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ABSTRACT

This study is designed to investigate the response students have to a traditionally structured course when compared to a course designed based on what research suggests contributes to increased student learning. In particular, an Introductory Marketing course was structured in two different ways: traditional and learning based. The two different course structures were assessed over time and were contrasted regarding both student perception of learning and actual learning outcomes. Effects on pedagogy were also investigated.

INTRODUCTION

The objective of this article is to explore the impact of reengineering the principles course in Marketing to reflect what research has suggested about the conditions under which students maximize their learning. An extensive amount of research has been devoted to exploring the conditions which lead to maximizing student learning in post secondary education. From a global perspective, educators have explored the conceptual differences between the traditional teaching paradigm and the more contemporary learning paradigm (Bailey, 1994; Barr and Tagg, 1995; Chickering and Gamson, 1987; Roach, Johnston and Hair, 1993; Wright, Bitner and Zeithmal, 1994). From a more focused perspective, educators have studied the impact on student learning of using specific technological tools such as the internet, computer simulations or other more interpersonal methods involving experiential and reflective learning exercises (Droge and Spreng, 1996; Frand and Broesamle, 1996; Graeff, 1997; Hair, 1995; Laughlin and Hite, 1993; Sigel, 1996; Wellington and Faria, 1996).

COURSE DESIGN

The two courses used in this exploratory study were designed to represent each of the two paradigms noted above. The course modeled after the Instructional Paradigm was structured as a 15 week, three unit course meeting three times a week for 50 minutes each period. It had a course enrollment of 110 students. The course examinations consisted of 50% objective questions and 50% essay questions. A selection of cases and homework assignments were also included. A typical class time allocation was 80% to lecture and 20% to class discussion of the cases/homework problems. Students were called on to discuss their solutions to the assignments. No specific time allocation was scheduled for student interaction during or outside the class nor was time allocated for student instructor interaction during or outside the class. All faculty/ student or student/student interaction had to be initiated by the students. In sum, it was a traditionally structured course consistent with the notion that the instructor initiates and controls all the activities in the class.

The course modeled after the Learning Paradigm was structured using the conclusions of the ECS study which are overviewed in Table I below. In particular, the course was structured to have one 90 minute lecture in each of the first ten weeks. In addition, 10 groups of 8-10 students met with the instructor once per week in each of the first 10 weeks. A large conference table was used and each student was provided with a personal name plate. All students were required to introduce themselves and address their fellow students by their first name when discussion ensued. The 10 discussion group meetings were devoted to working on selected cases and problems. The objective was to develop solutions to the problems/cases outside of class which were later shared with the discussion group members. The emphasis was on developing a dialog among the students for purposes of highlighting differences and/or building a consensus

When appropriate. The role of the instructor was to act as a facilitator and not as source of "the answer". Emphasis was put on building communication skills and confidence in expressing opinion and in accepting the perspective of other members your group.

TABLE I

Attributes of Quality in Undergraduate Education

Quality begins with an organizational culture that values:

- 1 . High expectations of students
- 2 . Recognition of diverse talents

Quality instruction builds in:

- 3 . Active learning
- 4 . Assessment and prompt feedback
- 5 . Collaboration among students and faculty
- 6 . Out-of-class contact with faculty

adapted from Educational Commission of the States (1995)

During the last five weeks the format changed from lecture to meeting twice per week for 75 minutes in even smaller subgroups of 3 or 4 students. Each subgroup of 3 or 4 students represented a firm in an industry that was formed for the purpose of competing in a marketing simulation game. Each team was given its own meeting room where they met to discuss the industry and make their decisions. The Marketing Game by Mason and Perrault (1995) was used. The primary purpose was to explore the relationships among the variables that were studied and discussed during the first ten weeks. The teams were formed using members of the ten-person discussion group that each belonged to during the first ten weeks. This procedure for team formation contributed to an efficient work environment since students were familiar with one another after spending the first ten weeks together working in the discussion groups. The instructor acted as president of each team and met with each team two or three times per class period. The only difference between the two courses in terms of assignments and grading was the use of the simulation in the last five weeks of the course.

RESEARCH INSTRUMENT

A survey of students enrolled in each of the two class formats was conducted. A self-administered questionnaire was distributed to those students enrolled in the course during the 13th week of a 15-

week semester. The questionnaire consisted of 15 statements designed to measure student perception on attributes that focus on three factors: the amount of learning that students perceived had occurred, their satisfaction with the manner in which the material was presented (course pedagogy) and their assessment of the teaching style of the instructor. The attributes were incorporated into a five-point Likert scale with a code of five indicating strong agreement and a code of one indicating strong disagreement. In addition, the amount of actual learning that occurred was measured by comparing grade point average for the courses taught under each paradigm.

SAMPLE

The student respondents were enrolled at a mid-sized state university in the Western United States. Ninety two percent were declared business majors, 6% communication majors, and the remaining 2% from other disciplines. Seventy nine percent were junior class standing, 18% were classified as senior standing and the remaining 3% were classified as other. The male/female ratio was 54/46 with the average age of 20.7 years with the majority being 19 to 21 (81%). A total of 94 students experienced the course structured using the traditional Instructional Paradigm while 58 students experienced the course structured using the Learning Paradigm.

PROPOSITIONS AND DATA ANALYSIS

The propositions to be tested are:

- P1:** Student perception of learning will be higher for the course structured based on the Learning Paradigm
- P2:** Student perception of the pedagogy will be more positive for the course structured using the Learning Paradigm
- P3:** Student perception of the instructor's enthusiasm and enjoyment of teaching will be higher for the course structured using the Learning Paradigm
- P4:** Student realized learning will be greater for the course structured using the Learning Paradigm.

The data gathered were considered interval in nature. Analysis of Variance was used to determine if significant differences in the perceptions held by

students regarding the two approaches existed. A t test for unrelated samples was used to determine if significant differences in actual learning resulted from the use of the two approaches. A significance level of .05 was used to test for differences.

STATISTICAL RESULTS

The means and significance levels for each of the attributes captured in the 15 survey questions (Likert scales) across both paradigms are presented in Table II.

TABLE II

**Analysis of Variance Test of Means
of Student Perception:
Learning versus the Teaching Paradigm**

Question #	Teaching Paradigm	Learning Paradigm	1-tail p-value
1) More Competent*	4.20	4.51	0.0135
2) More Knowledgeable*	4.23	4.53	0.0138
3) Feel Challenged	4.12	4.34	0.1218
4) Moves Too Rapidly*	3.57	3.26	0.0352
5) Too Much Material*	3.48	3.12	0.0119
6) Too Time Consuming	2.43	2.64	0.1815
7) Encourages Opinions	4.17	4.11	0.2909
8) Utilizes Discussion	4.44	4.36	0.1125
9) Receptive to Ideas	3.75	3.91	0.1383
10) Course Organized*	4.00	4.35	0.0195
11) Lectures Organized*	2.68	3.44	0.0001
12) Relates Concepts	3.90	4.12	0.0575
13) Enjoys Teaching	4.26	4.41	0.2958
14) Dynamic/Energetic	4.28	4.31	0.3445
15) Enthusiastic	4.45	4.42	0.3309

* significant difference between student perceptions (p<.05)

An examination of the data in Table II reveals that significant differences in student perception exist on six of the fifteen attributes mentioned.

PROPOSITIONS ADDRESSED

Proposition one (student perception of learning) can be addressed by examining student response to questions one through three. Student response to all three questions indicates they feel more competent, knowledgeable and challenged in a course using the learning paradigm. In particular, their responses are significant at the .05 level on increased competency and knowledge while the direction response to the question on being intellectually challenged favors (significant at .1218) the learning paradigm.

Proposition two (student perception of course pedagogy) can be addressed by examining student response to questions four through six, eight, and ten through twelve. Student response to this set of questions indicate they generally feel more positive about the quantity of material covered, pace and overall organization of the course taught using the learning paradigm. In particular, the differences in their responses are significant at the .05 level on questions four and five. The responses to these questions indicate they feel more comfortable with both the speed at which the course moves and the quantity of material presented in the course. In addition, the differences in their responses are significant at the .05 level to questions ten and eleven. The responses to these questions indicates they feel both the course and the lectures are better organized using the learning paradigm. Finally, students report having a better sense of how concepts relate to one another in the course using the learning paradigm (question 12). The observed difference is significant at the .0575 level.

Proposition three (student perception of the impact of the instructor) can be addressed by examining responses to questions seven, nine and thirteen through fifteen. Student response to this set of questions indicates they see no difference in the impact of the instructor's style on the perception of the two courses. All five questions were not significant at the .05 level. The instructor does not appear to introduce a confounding influence on the findings reported for propositions one and two.

Proposition four (actual learning) can be addressed by examining the grades earned by the two groups of students. A comparison of the grades earned seems to indicate more learning did occur. The grade point average for the Teaching Paradigm was 2.52 as compared to 2.86 for the learning paradigm. The observed difference is statistically significant at the .01 level. Examinations administered to both groups were identical in both structure (50% essay/50% objective) and content. They differed only in administration. Four examinations of forty five minutes each were administered in the course taught using the traditional paradigm while two examinations of ninety minutes each were used in the course taught using the learning paradigm.

DISCUSSION

Students

It is clear from this study that if student perception of the amount learned, actual learning accomplished, and satisfaction with the learning environment are used as the objective function, the Learning Paradigm is superior to the Teaching Paradigm. Students appear to prefer the more intense and structured environment inherent in the Learning Paradigm. However, the drop out rate using the Learning Paradigm is considerably higher (33%) as compared to 15% for students experiencing the Teaching Paradigm. The difference in the drop out rate is due, in general, to two factors. First, many students dropped out due to the requirement that they be prepared for the weekly one hour ten person round table discussions. Each student was expected to both contribute to the discussion and be prepared to explain their reasoning to their fellow students. The instructor acted primarily as a facilitator. Students were not able to remain anonymous as they are more likely to be able to do in the larger sections of the course using more traditional lecture discussion format.

A second factor affecting the dropout rate was the requirement that any student receiving a letter grade of D or lower meet with the instructor to discuss their performance. The required "out-of-class" meetings revealed that many students were not able to manage their time properly, had a class/work load they were unable to handle or were experiencing health or personal problems that were interfering with the work required in the course.

These two factors, which are an inherent requirement of the learning paradigm, may have contributed to a higher grade point average among the learning paradigm group since some of the "less committed" students and/or students with health or personal problems dropped the course leaving a smaller sample of "better" students to finish the course.

Perhaps the most significant finding regarding students is the extent to which some students hold unrealistic views regarding their ability to complete the course successfully when they are attempting full academic schedules while working 10 to 30 hours per week, facing personal problems they are having

difficulty solving, and/or suffering or recovering from illness they prevents them from doing quality work.

Faculty

Two major adjustments need to be made to implement the learning approach. First, and most obvious, is the relinquishment of control by the instructor of selected aspects of a course to provide students with the opportunity to control their own pace of learning. The Introductory Marketing course contains elements that are good potential candidates for collaborative learning while other topics are best handled in the more traditional lecture/discussion format. Structuring the course so that students can benefit from taking on more responsibility for their own learning can be very time consuming. The course used in this study required six semesters to develop with respect to the elements most suitable for conversion to a learning oriented pedagogy.

Second, the instructor needs to be comfortable with and capable of engaging students in a more egalitarian format where diversity of opinion and variation in enthusiasm for the course is the rule. It was found that the collaborative approach requires a substantial alteration in the pattern of interaction with students. Implementing the learning paradigm also revealed a great deal of variation in both the approach various groups of students took to a problem but also the level of enthusiasm that they brought to their work. The progress that each group makes and the issues that develop can vary extensively across groups often requiring a great deal of flexibility and creativity on the part of the instructor.

Finally, the learning paradigm results in the instructor spending a considerable amount of time counseling students regarding their progress, or lack of, in the course. The small group sessions inherent in this approach quite naturally lead to numerous "face to face" interactions with students. A significantly larger commitment of time and energy outside the classroom are necessary to be successful using the learning approach.

CONCLUSIONS

From the standpoint of student perception, it is clear that the students prefer the learning approach and, as a whole, are more knowledgeable about the topic as well as holding more positive attitudes toward many aspects of the course. However, this potential gain is not without a cost. Students dropped the

course at approximately twice the rate (15% vs 33%) using the learning approach. The higher dropout rate appears to be due to both the continuous intensity required of a student to be prepared on a daily basis as well as the student/professor counseling that occurs naturally with this approach.

From the standpoint of the professor, several significant changes from the teaching paradigm are required to successfully implement a learning approach. Restructuring the format to accommodate more interactive and collaborative experiences can be both time consuming and difficult. In addition, a more egalitarian level of interaction among professors and students is required. The more personal interaction inherent in using the learning approach could prove to be uncomfortable and perhaps difficult to implement for those accustomed to traditional lecture format. In sum, the learning approach requires as much an adjustment in interpersonal communication techniques as change in pedagogy.

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