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AN EXPERIMENTAL TESTING OF TEACHING METHODOLOGIES IN MARKETING

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Interest in developing teaching methodologies which lead to more effective learning have been the everpresent concern of educators in all fields.

This paper reports the results of a teaching methodology study conducted in the basic principles of marketing course. It involved a less structured learning environment in contrast to the more traditional lecture-discussion approach. In the less structured environment the student had the opportunity to establish much of his own program of study and could incorporate some of the aspects of "individualized" methods of instruction. At the same time the less structured approach also utilized some of the ideas of "experiential" learning methods and gave students the opportunity to discover and experience the content of the field rather than merely reading about it or being told about it by the instructor.

In total, students had an opportunity to learn in an environment wherein they had more control and choice as to how they were to learn the required content. Additionally, each student had to assume more responsibility for his own learning progress. The next section describes the details of the study.

METHODOLOGY

The study used a before-after with control group design. The test group had sixty-one students and the control group twenty-five.[1] The experimental and control groups involved regularly scheduled sections of the required basic course. The students enrolled represented the "draw" of regular open registration and sectioning procedures. Attempts to randomly assign students to the two groups were not made. Students were not informed of the test prior to registration or during the term. Both groups met at fairly popular mid-morning hours. Both groups were made up of approximately seventy-five percent business majors and twenty-five percent non-business majors. (X , P = .99). Both groups were comprised of a cross section of sophomores, juniors, and seniors. The experimental group had slightly more juniors than the control, but overall the class standing distributions were similar. (X , P = .67).

[1] Attrition over the semester and critical absences, especially in the control group which had a smaller enrollment originally, reduced the sample size to these numbers who satisfactorily completed all measurements.

The cumulative grade point averages of the two groups were similar. (X , P = .20). The experimental group's overall averages were skewed toward the lower side, being about a C+ typically in contrast to a B- for the control group.

In total, there did not seem to be marked differences between the experimental and control groups on these academic characteristics. At the same time, little was really known of the students' motivations, learning capabilities, personalities or likely psychological response to the experimental situation.

The experimental situation employed a less structured approach than the traditional lecture-discussion oriented course commonly built around an introductory textbook. The experimental group was not assigned a textbook at all. Students were introduced to the field by mini-lectures and through readings from various journals and periodicals, e.g., Business Week, Advertising Age, and The Wall Street Journal. At the start of the term some highly condensed formal lectures focusing upon terminology and basic concepts were given. Subsequently, regularly scheduled classroom periods were devoted to the discussion, analysis and application of marketing concepts; to the examination of current issues and events as they arose; and to answering questions. In these sessions, concepts and theories were introduced and/or expanded upon by exploiting the potential and interest of highly relatable current events and happenings.

Participation in the discussion sessions plus minimum examination requirements constituted one-third of each student's grade. The remaining portion was determined by each student through selecting cafeteria style from a variety of optional, independent activities that suited his own interests, goals, learning style, and motivation.

Among the optional activities afforded to students were: a) making an intensive, first-hand case study of an actual organization, b) performing a set of prescribed field and/or library exercises requiring data collection and analysis, c) developing a term paper on an approved topic from a comprehensive review of the literature of the field, d) taking additional examinations over the course's content, and e) an "open" option whereby the student could propose and, with the instructor's consent, conduct a specially designed study of particular individualized nature and interest.

The control group employed a standard lecture-discussion format that was typical of the course in previous terms. A well-known, widely adopted teaching package was used in the control as well as in other sections of the course. Typical practices as far as examinations and outside course requirements were followed.

During the first week of the term, and following a brief orientation to the course, students in each group were given a "diagnostic quiz" to discern their entry state of knowledge about the field. The rationale for such an exam being to help the instructor determine the direction to be taken in the course. The quiz explored twenty major concepts and topic areas that a student would normally be expected to know and understand upon completion of this course.

Students were encouraged to answer the questions even if they were uncertain about them. They were also told that the quizzes were not being used to determine their grade, but that a good performance would be taken into consideration in the case of a borderline situation at final grading time. A poor performance, however, would not be used against them. The quizzes were not returned and only a very few inquiries were ever made about time.

At the end of the term, both groups were retested on the same set of concepts; the "test" questions being incorporated with others on the regular final examination. Subsequently, the matched sets of examination papers for all students completing both the diagnostic and final examination were compiled. These were given, along with a standard key for evaluating the answers, to an independent judge who had not been in residence during the course of the experiment. The judge was knowledgeable about the course having taught in it for several years.

Students' answers on each concept were scored on a scale from one to five based upon the quality of their responses and a total score on both the pre-test and post-test computed. Comparisons were then made between a student's performance on the before and after exams on each individual concept and upon their total score. The findings are shown in the following section.

FINDINGS

A listing of the twenty major concepts and topics studied, the manner in which they were explored, and the summary of results of student performances are shown in Table 1. Student performances are measured by showing the percentages of students who improved from the before to the after test. Improvement was noted if a student received at least a one point higher score on the same concept on the "after" text. As can be seen from these results, the experimental group generally showed sizable improvement differentials. In all but one instance there was more improvement in the experimental group.

Before-after test result comparisons based on total scores were also made. Mean differences between the pre- and post- test scores were computed and tested for significance.

TABLE 1

STUDENT PERFORMANCE STATUS BY CONCEPT

Concept	Nature of the Probe	Percent Improving		Significance Level (X^2)
		Experimental	Control	
Market Segmentation Policy	Definition	79%	52%	.03
Channel of Distribution	"	75	48	.03
Marketing Mix	"	89	88	(.76)
Selective Selling Policy	"	75	56	(.13)
Administered Pricing	"	49	40	(.59)
Non-price Competition	Discussion	66	32	.01
Nature of the Competitive Environment	"	72	24	.01
Competitive Strategy	"	67	32	.01
Pervasiveness of Marketing Functions	"	79	44	.01
Functional Influence on Marketing Costs - Prices	"	85	32	.01
Promotional Mix	"	77	52	.04
Functions/Objectives of Promotional Elements	"	75	60	(.24)
Influence of Promotion on Consumer Behavior	"	89	36	.01
Classification of Market Types	Case Problems	85	56	.01
Distributive Policy	"	92	56	.01
Selling Policy in Multiple Markets	"	84	44	.01
Product Line Policy	"	79	32	.01
Branding Policy	"	79	36	.01
Development of a Marketing Strategy	"	84	40	.01
Influence of Shoppers' Behavior on Marketing	Discussion	43	60	(.21)

The mean difference for the experimental group was 24.49 versus 11.88 for the control group. A weighted standard error of difference was computed and a "t" test run. The difference in mean differences was highly significant at .01 level (t = 7.64) . Thus considerable difference in Learning as measured by these test scores was noted.

Overall, the trend in performances between the experimental and control groups was quite favorable for the less structured approach. There did seem to be more consistent and greater improvement in test scores for the experimental group. At the same time, and while students were not told of the experiment se, they obviously were aware of the difference in format being followed. This, in addition to other factors not explicitly controlled for or even known about, may have decidedly influenced their study behaviors and performances. Even so, the results are encouraging and have favorable implication for incorporating elements of "individualized" methods of instruction and "experiential" learning techniques in the marketing classroom.

REFERENCES

1. Ang. Henry S., "The Case Method in Teaching Marketing," International Quarterly Journal, (Summer, 1974).

2. Kagerer, Rudolph L., "Business Training Outside the Classroom," The Journal of Business Education, (November, 1973).

3. Schwebel, Andrew I., Steven J. Gross, and Sumner Clarren, "An Experientially Based Problem Solving Teaching Approach," Improving College and University Teaching, (Corvallis: Oregon State University Press, 1974).