

THE USE OF EXAMS IN MARKETING EDUCATION

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ABSTRACT

This paper reports the results of a study on the attitudes of marketing professors toward the use of exams in the classroom. The study found that the average number of exams given in undergraduate marketing classes is 2.4, while the average percent of the grade based on exams is 51%. Respondents varied in their attitudes toward use of exams, although respondents generally disagreed with the statement, "Exams should be the primary determinant of student assessment." Marketing professors seem to support the use of exams, yet not as a sole determinant of grades.

INTRODUCTION

Assessment of student knowledge and skills represents a major focus of institutions of higher learning today. Many marketing departments of colleges and universities are now required to develop formal assessment programs for all marketing majors. Once a set of educational goals is established (see Table 1), an assessment methodology must be developed. Frequently, some type of comprehensive exam will test both the student's knowledge level in marketing and their ability to use this knowledge in decision-making. Although other methods of assessment are useful, exams are the most used.

While overall assessment of student performance is important, a marketing professor's main concern is the assessment of student learning in individual courses. Historically, the accepted standard measure of assessment in the marketing classroom is the examination. Although marketing education literature points to greater emphasis on experien-

tial learning [Gaidis and Andrews 1990; Henke, et al 1988], the traditional exam remains the mainstay assessment of student learning.

In their article surveying 144 master teachers in marketing, Conant, Smart, and Kelley [1988] suggested many attributes that set apart these elite marketing educators. Of their many attributes, master teachers have a sincere appreciation for the important role tests and test feedback play in enhancing student learning. These professors work hard to issue challenging and fair exams. Clearly, master teachers acknowledge the important role of exams in student assessment.

From the students perspective, exams are perceived as a major source of stress in their lives. In one study, mid-term exams and final exams were ranked number one and two, respectively, as the main sources of student stress [Bell 1991]. Other sources of stress for students were time pressure, school costs, and in-class factors such as being called on. "Test anxiety" is a serious problem for many college students today. From weekly spelling and math tests to the SAT and ACT college entrance exams, students feel pressure to perform.

Not only do exams create student stress, they are often a major source of frustration for professors. Writing and grading exams consumes valuable time. Also, student complaints and exam discussions can cause conflict. Exams may be seen by professors and students as a "necessary evil."

TABLE 1

Sample Educational Goals for Marketing Students (Consistent with criteria published by AACSB)

Marketing students will be expected to:

1. Understand and use marketing terminology, principles, and concepts.
2. Understand the role of marketing in corporate policy and strategy development.
3. Understand and use market opportunity analysis, consumer behavior analysis, market targeting and product positioning analysis.
4. Understand decision-making, strategy development, and strategic integration of the four elements (product, price, place, and promotion) of the marketing mix.
5. Understand and apply the principles and concepts of marketing to consumer, business-to-business, services, and international marketing.
6. Understand strategic market planning, implementation, and control.
7. Demonstrate the ability to conduct professional communications and presentations.
8. Demonstrate the ability to develop professional written communications.
9. Demonstrate the ability to critically think and analyze.
10. Demonstrate the ability to exercise strategic decision-making.
11. Demonstrate the ability to use computers in data analysis and decision-making.

Since the major goal of marketing education is learning, the question is proposed: In the evaluation of marketing student performance, are exams really necessary? This research examines the use of exams in marketing education.

The Use of Exams in Marketing Education

Although most marketing educators would agree that exams represent a major part of measurement and student evaluation [Razzouk and Masters 1989], little research exists on the value of exams in

the student learning process. Weaver [1985] presented a classification scheme for exams which marketing educators may use. Exams may be classified as essay versus objective, oral versus written, norm-referenced versus criterion-referenced, achievement versus performance, or formative evaluation versus summative evaluation. (See Table 2 for a summary of the various types of exams.) The conclusion from Weaver's study is that no one type of exam is superior.

Increasing test frequency may produce significant improvement in student performance [Miller 1987]. The student learning process can also be improved by changing the process of giving final exams [Razzouk and Masters 1989]. In order for the student learning process to work effectively, students need "feedback" following an exam. Typically, the student never communicates with the professor once the final exam is given on the last day of class or during a final exam week. The authors suggest a "next-to-final final" to resolve this lack of feedback problem. In order to assist student learning from exams, Ratz and Perrachione [1986] suggested a formal appeals procedure for students to use following a multiple-choice exam. Both students and professors benefitted from this recommended policy. Another study also analyzing the importance of a productive learning experience for students considered testing following guest speaker presentations [Hite, et al 1985]. They found that when students expected to be tested on a guest speaker's presentation, they paid closer attention, took more notes, performed better on a written exam (learned more), and evaluated the speaker more favorably.

Objectives

The primary purpose of this study was to assess marketing professor's perceptions of the role of exams in marketing education, in particular, several research objectives were set. They were to determine: 1) the number of exams given and percent of the grade based on exams for

those courses taught most frequently; 2) other activities required in the courses taught most frequently and percent of grade for those activities; 3) the use and degree of successfulness in offering a course where no exams were given; 4) circumstances that would allow them to teach a course without exams; 5) attitudes toward exams; and 6) basic categorization variables.

Methodology

A questionnaire was designed to measure the extent of marketing professors' use of exams and grading criteria. Also, attitudes toward various aspects of exams were solicited. Responses to the attitudinal questions were measured with a five-point Likert-type scale. Basic categorization questions were also included, such as academic rank, years of teaching marketing and the number of sections taught per year.

The respondents for this exploratory pilot study consisted of a convenience sample of marketing professors from six colleges or universities located in the western United States. A total of 55 questionnaires along with a cover letter explaining the survey was mailed to all marketing professors at the six schools. Responses were received from 41 professors. However, six responding professors taught only graduate classes and were not included in the following analysis.

Results

Table 3 shows the marketing classes, the average number of examinations, and the average percent of student grades which was based on exams for undergraduate courses taught during the past year by the respondents. The numbers in parentheses next to the class give the number of respondents who reported having taught the class. Eleven of the 35 respondents (31%) reported teaching only one undergraduate class.

Of the total of 64 classes taught, the grades were based entirely on exams in

only three classes (Principles, Advertising, and Marketing Research). On the other hand, three classes placed no reliance on exams (Advertising (2) and Strategy/Policy (1)).

TABLE 2
Test Classification

ITEM FORMAT:

Essay
Open-ended questions
Objective
Multiple Choice
True-False
Matching
Fill-in-the-Blank

HOW THE TEST IS PRESENTED:

Oral
Professor asks individual student questions in face-to-face approach.

Written
Exams are made up of objective and/or essay questions.

PURPOSE OF THE TEST AND

USE OF THE RESULTS:

Criterion-referenced
Individual student performance is compared to a specified criterion or proficiency level.

Norm-referenced
Test score of individual student is compared to score of other students (curve used to grade).

Achievement Test
Procedure for determining the amount a student has learned.

Performance Test
Student is graded based on a performance, such as a sales presentation or a case analysis.

Formative Evaluation
Tests show mastery of a given learning task (i.e. short, weekly quizzes).

Summative Evaluation
Overall, cumulative assessment (i.e. comprehensive final exam).

The average number of examinations across all undergraduate classes was 2.4. The average percent of the grade based on exams across all classes was 51%, while 49% of the grade was based on other activities. Thus, substantial

emphasis was placed on other required activities to determine the course grade for students.

TABLE 3

Marketing Classes	Average	
	Average Number of Exams	Percent of Total Grade
Principles (16)	2.8	63
Consumer/Buyer Behavior (7)	3.1	68
Advertising/ Promotion (9)	1.9	46
Marketing Research (9)	3.1	53
International (5)	2.2	47
Strategy/Policy (6)	1.2	28
All Others (12)	2.3	52

As expected, there were many different responses to an open ended question which asked the respondents to list those required activities, and the percent of the grade assigned to each activity, for each course taught. Table 4 shows the other activities used in the grading process, the number of times each activity was mentioned, and the "typical" ranges of grade percents assigned to the activities. The word typical is used because there were five classes in which case analysis or projects/papers were heavily weighted. These cases were not included when determining the ranges. Also, it should be pointed out that there is some double counting of the activities shown in Table 4. For example, there were a few responses such as "Term paper and oral presentation" or "Class participation in the discussion of cases." This type of response was counted as "mentions" in both categories. This, of course, had no effect on the calculation of the average percent of a student's grade based on the total of these activities.

An interesting finding from the analysis of exams and other grading activities is that, on average, students receive more than four grading exercises in the determination of their grades (Exams: 2.4; Other: approximately 2.2). Even

with some double counting, the "other" figure is a very conservative estimate because most of respondents grouped more than one exercise under one activity. For example, it was not unusual to have responses such as "Cases (3)" or "Computer assignments (5)." Presumably, each case or assignment is a separate grading exercise, but they were counted as one exercise in calculating the average number of other grading activities.

TABLE 4

Activity	Number of Mentions	% of Grade: Typical Range
Projects/Papers	47	20-50
Class Participation	41	10-20
Cases	23	15-35
Homework Exercises	12	10-30
Oral Presentations	10	10-20
All Others	9	5-20

Interestingly, 10 of the 16 respondents who teach Principles use cases. Yet, with the exception of Strategy/Policy courses, mention of their use in other courses was practically non-existent. Why cases are used primarily at the beginning and the end of the marketing program is not explained by this study. Finally, it is noted that there were only seven specific mentions of group activities. However, this is probably greatly under-reported in the case and project categories.

In a response to the question as to whether they had ever taught a class where examinations were not used in the grading process, 40% of the respondents answered "yes." On a scale of one to five, where 1 = Unsuccessful and 5 = Successful, the courses taught without exams received a mean rating of 4.1. The courses mentioned most often were the Strategy/Policy course (5) and Advertising (5) from a total of 20 courses named by the respondents. Surprisingly, only three graduate courses were mentioned.

Interestingly, with a mean success rating of 4.1, only four of the 14 respondents who had offered courses with no exams listed more than one course. Apparently, offering courses without exams is infrequent even among those instructors who have found the practice to be successful.

Those respondents who answered "no" to the question were asked if they would consider offering a marketing course with no exams and under what circumstances they would do so. Seven of the 21 respondents indicated that they would not offer such a course under any circumstances. The remainder said that they would consider it, but under circumstances such as:

1. A Ph.D. seminar.
2. Very small class size with well-defined activity.
3. When you can find another way to get students to read the text.
4. When other forms of objective evaluation of student knowledge of the material becomes available.
5. If the course was designed around applications rather than content.
6. A pure case course.

Table 5 shows the mean, median, and modal responses to a limited number of perceptual statements regarding explanations. Responses to the statements were given on a Likert type scale where 1 = Agree and 5 = Disagree. As can be seen, the only statement with which there was overall disagreement was "Exams should be the primary determinant of student assessment" (H). This appears to be somewhat inconsistent with the findings shown in Table 3 and the fact that the average percent of the grades based on examinations was 51%. Further, when it is noted that there is agreement, though not strong, with statements D and F regarding the effect of exams on student learning and effort, one must wonder if there are motives for using exams besides student assessment. This may also be indicated by the neutrality toward statement G which addresses the objectivity of exams.

Table 6 shows the basic classification

variables used in this pilot study. No particular differences were found in the courses taught, the grading percentages for examinations or other grading activities, or the attitudes toward exams according to any of the classification variables. This is probably due to the small sample size.

TABLE 5

Statement

- A. In some marketing courses less reliance on exams is appropriate.
Mean: 1.46; Median: 1; Mode: 1
- B. Grading exams is time consuming.
Mean: 1.51; Median: 1; Mode: 1
- C. Making up exams is time consuming.
Mean: 1.83; Median: 2; Mode: 1
- D. Without exams, my students wouldn't work as hard.
Mean: 2.36; Median: 2; Mode: 2
- E. Most professors give exams because it is a "tradition" in teaching.
Mean: 2.53; Median: 3; Mode: 3
- F. Without exams, my students wouldn't learn as much.
Mean: 2.73; Median: 2; Mode: 2
- G. The most objective way to grade is by the use of exams.
Mean: 2.89; Median: 3; Mode: 2
- H. Exams should be the primary determinant of student assessment.
Mean: 3.46; Median: 4; Mode: 4

Conclusion

Professors in this study used examinations in nearly all of the undergraduate marketing classes taught. However, exams are not the only method of assessment in marketing courses. On the average, 51% of the grade in an undergraduate course is based on exams. Professors used a variety of other activities in addition to exams to assess student learning.

Of those professors who had offered courses where exams were not used in the grading process (40% of the respondents), most perceived those courses to be quite successful (mean rating of 4.1 on a 5 point scale). The use of this

grading procedure was most often mentioned for either Advertising or Strategy/Policy courses. Given the level of success described, one wonders why this method of assessment is not used more frequently.

TABLE 6

<u>Type of Institution</u>	<u>Percent</u>
Four Year Undergraduate	26.0
Graduate & Undergraduate	74.0
<u>Rank</u>	<u>Percent</u>
Instructor	5.7
Assistant Professor	25.7
Associate Professor	28.6
Professor	40.0
<u>Years of Teaching</u>	<u>Percent</u>
Less than one	2.9
1-3	17.1
4-6	14.3
7-9	11.4
10 or more	54.3
<u>Number of Sections Taught</u>	<u>Percent</u>
0-2	14.3
3-4	42.9
5-6	25.7
7-8	8.6
9 or more	8.6
<u>Course Level Taught</u>	<u>Percent</u>
Undergraduate only	40.0
Graduate & Undergraduate	60.0
<u>Semester or Quarter System</u>	<u>Percent</u>
Semester	80.0
Quarter	20.0

The majority of professors stated that they would consider offering a course without exams, but only under certain circumstances. Most did not agree that exams should be the primary determinant of student assessment. This is interesting in light of the finding that more than 50% of grades were based on exams.

Whether marketing professors continue to stress exams in measuring student performance or rely more on other activities for assessment, care must be taken to most accurately assess student learning. Further research is needed regarding the overall usefulness of exams in marketing education.

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