Case Studies In The Field Of Marketing Education: Learner Impact, Case Performance, and Cost Efficiency

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ABSTRACT: The major objective of this study is to identify a methodology that will help educators in marketing to efficiently manage the design, impact, and cost of case studies. It is my intention is to examine the impact of case study characteristics in relation to the degree of learner involvement in the learning process. The author proposes that educators in marketing must process models and tools that can evaluate the performance of each educational method introduced into the learning process. The author suggests that educators in marketing who are interested in being productive should invest in the acquisition and utilization of performance tools for each educational method in order to accomplish their educational objectives. The findings suggest that educators in the field of marketing can assess the effectiveness of case studies using the 13-item performance model and a new formula, the elasticity of quality supply, in order to measure the degree of quality. The author recognizes that the problem of productivity in marketing education has arisen from the lack of tools, models, and performance measures available to evaluate their productivity. The proposed model is based on the ongoing need to customize the learning process, both according to the characteristics and specific needs of learners and also to the requirements of the educator and institution. The concluding point is that educators in marketing must learn not only to build effective case studies, but also to measure the efficiency of case study performance in order to enhance their productivity.

I. Introduction

The use of case studies holds great promise as a pedagogical technique for teaching marketing, particularly to undergraduates, because it humanizes marketing and well illustrates scientific methodology and values. It develops the skills of students in group learning, speaking, and critical thinking, and since many of the best cases are based on contemporary - and often contentious - scientific problems that students encounter in the news, the use of cases in the classroom makes science relevant.

Using case studies is an effective mechanism (Rodriguez, 2004) for bringing "real life" experience into the classroom (Easton, 1982; Leenders and Erskine, 1989; Richardson et al., 1995). The literature supports the view that a variety of teaching and learning methods make sense in education/management programs - and this is irrespective of the level of the educational program, undergraduate or graduate, or of the management course concerned. Case studies and the discussion they provoke, in particular, are acknowledged to provide a beneficial learning experience in areas other than business/management (Klein, 1995) and in relation to team projects/research courses (Lamont, 1995).

The **major objective of this study** is to identify a methodology in order for marketing educators to efficiently manage the performance of case studies. Our intention is to examine the impact of the characteristics of case studies in relation to the degree of learner involvement in the learning process. We address the core research themes of our study using a survey in order to study the experiences of students from three different post-secondary institutes of vocational training.

Background Studies and Hypothesis

A marketing case study is a model of real life which serves to facilitate decision-making practice by, and to improve the managerial skills of, students and practitioners of management. Empirical research in marketing education has largely focused on issues such as: (a) student perceptions and attitudes (Binsardi and Ekwulugo, 2003; Soutar and Turner, 2002; Chapman and Van Auken, 2001; Remington et al., 2000; Houston and Bettencourt, 1999; Meidan, 1977), (b) distance training media in the field of marketing education (Swift et al., 1997; Erffmeyer et al., 1992), and (c) the importance of some of the characteristics of case studies (Kennedy et al., 2001). Few have focused on the effectiveness of the method in developing skills of analysis and synthesis (Gorman et al., 1997) or marketing course evaluation (Palihawadana and Holmes, 1999). No studies have focused on a methodology for the efficient managing of case study performance.

Participation in Adult Learning

Despite the plethora of journals, books, and research conferences devoted to adult learning across the world, we are very far from a universal understanding of adult learning. Even though warnings are frequently issued that at best only a multitude of context- and domain-specific theories are likely to result, the energy expended on developing a general theory of adult learning shows no signs of abating. Judging by epistemological, communicative, and critically analytic criteria, theory development in adult learning is weak, and is hindered by the persistence of myths that are etched deeply into the minds of adult educators (Brookfield, 1992). These myths (which, taken together, comprise something of an academic orthodoxy in adult education) hold that adult learning is inherently joyful, that adults are innately self-directed learners, that good educational practice always meets the needs articulated by learners themselves, and that there is a uniquely adult learning process as well as a uniquely adult form of practice.

Participation is one of the more thoroughly studied areas in adult education. We have a sense of who the participants are, what is studied, and what motivates some adults and not others to enroll in a course or independent learning project. Beginning with the landmark study of Johnstone and Rivera (1965), other national studies have sought to describe adult learning. What is interesting, is that the original profile put forth by Johnston and Rivera (1965) has changed little over the past thirty years. Compared to those who do not participate, participants in adult education are better educated, younger, and wealthier, and most likely to be Caucasian and fully employed.

The accumulation of descriptive information about participation has led to efforts to build models that try to convey the complexity of the phenomenon. This work on determining why people participate, that is, the underlying motivational structure for participation, has been carried on most notably by Boshier and others using Boshier's Educational Participation Scale (EPS) (Boshier and Collins, 1985; Fujita-Starck, 1996). Between three and seven factors have been delineated to explain why adults participate, such as expectations of others, educational preparation, professional advancement, social stimulation, and cognitive interest. A number of other models, grounded in the characteristics of individual learners, have been developed to further explain participation; several of these models also link a more sociological or contextual approach with that of the individual backgrounds of learners (for example, Sissel, 1997).

Case Studies in Business Studies

Case studies, according to Buchanan and Huczynski (1985) are detailed investigations of single individuals, single groups, or departments in an organization, or a whole organization in its entirety. No attempt is made at experimental control although it is important to identify accurately the time order of events. Case study data can be extremely rich, varied, and detailed. The sequence of events can help to establish cause and effect relationships. Case study data can be collected over an extended time series to produce what are called longitudinal studies.

Buchanan and Huczynski (1985) thus help us to gain understanding of the nature of case studies, although their emphasis on cases as research vehicles leads them to place more emphasis on the need for structured presentations, time accuracy, and general validity of the material communicated than is always appropriate for the case teacher who might, for example, wish to develop and use a fictitious case context, or present case material which purposely includes information gaps.

Thus, for the purposes of this study, the following definition (Richardson 1994, p.3) of the case study is adopted: "Case studies are [a means] to provide practice in problem solving and decision making in a simulated situation...The case method is primarily a vehicle for developing skills; skills which are a vital part of a decision maker's armoury...together [these skills] can be described in one phrase - creative problem solving".

The Characteristics of an Effective Case Study

Cases reflect problem situations in real life and create an authentic learning environment for students. When students engage with cases, learning takes place: they analyze, synthesize, and apply knowledge; they also perform evaluation, reasoning, and problem solving. The growing interest in using cases in instruction indicates a need for the development of new cases. However, opinions about what a good case should be like vary. Some of the major sources on effective case writing (Abel, 1997; Kashani, 1995; Leenders & Erskine, 1989) have summarized some valuable guidelines such as: (a) authenticity and realism, (b) well-organized structure and clear language, (c) existence of background information, and (d) existence of controversial issues, which do not propound theories.

Thus, the influence of the characteristics of case study design in accomplishing the educational objectives of

marketing courses through adult involvement in the learning process suggests the following hypothesis:

($\mathbf{H_1}$): If p is true, then q_1 is true ($p \supset q_1$)

where:

($\mathbf{q_1}$) *The relationship between case study characteristics and learner motivation will be positive for adults involved in the learning process.*

II. Method

Participants and Procedure

The survey was carried out at three different post-secondary institutes of vocational training. Our intention was to reach students (different marketing educators) having varied experiences working with case studies.

The size of sample was determined based on a cross-tabulation analysis as presented below:

Table 1

Cross-tabulation: Sample Size

	First-year Students	Second-year Students
0-9	20	20
10-15	20	20
16-20	20	20

*Grades: the scale of grades that the institutes of vocational training are using is from 0-20. For example, "10" is a "pass" and "20" is "excellent".

In total, 140 students were asked to participate, and only 2 of them declined to take part in the study.

Data Collection

The basic aim of the survey was to test the above hypothesis. Data were collected by means of a self-completion questionnaire. Prior to drafting the questionnaire, pre-survey interviews were conducted in one of the three post-secondary institutes of vocational training that indicated "conceptual equivalence" to the constructs studied.

Measures and Measurement of Variables

This study measures one construct: case study characteristics. The measures used to test the construct were obtained through an analysis of the case study characteristics that motivate adult participation in the learning process. The key variables were: (a) interactivity among the members of the team (Johnson et al., 1991; Johnson et al., 1998; Smith, 1995), (b) structure and characteristics of the text (Herreid, 1998; Herreid, 1999; Ortmayer, 1994; Kardos and Smith, 1979), (c) realism of the case (Kennedy et al., 2001), and (d) way of posing questions (Johnson et al., 1998). The construct was measured using multiple items. All items were measured using a seven-point, Likert-type scale (ranging from 1=strongly disagree to 7=strongly agree), in order to measure student perceptions.

In establishing content validity, the questionnaire was refined through rigorous pretesting. The pretesting was focused on instrument clarity, question wording, and validity. During the pre-testing, three doctoral students and three professors (of the University of Ioannina) were invited to comment on the questions and wordings. The comments of these 6 individuals then provided a basis for revisions to the construct measures.

The questionnaire included the following 5 items:

1. Realism in a case study
2. Text length in a case study
3. Structure in a case study
4. Type of questions that present the problem in a case study
5. Teamwork that a case study might demand

Data Analysis

Using Mann-Witney U and Kruskal Wallis tests, in order to test the statistical differences among the independent samples for each characteristic, tested hypothesis 1. The Mann-Witney U test will be conducted in order to test the statistical differences between the 2 independent groups of students, according to the year of study (first-year students, second-year students). The Kruskal-Wallis test will be given in order to test 3 independent groups of students according to student records (0-9 = poor records, 10-15 = moderate records, 16-20 = good records).

III. Findings

Sample Characteristics

The response rate between the participating subgroups was 99%. The participants in the study were 138. About fifty-one (51.4%) were first-year students and about forty-nine (48.6%) were second-year students.

Descriptive Statistics

Characteristics of the distributions of the answers were obtained by calculating means and standard deviations. The largest standard deviations (1.03 and 0.94) were found in relation to items 3 and 4 above. These items deal with the structure of the case and the type of questions that present the problem of the case study.

Comparisons Among the Independent Groups

Results based on the Mann-Witney U test, show us that there are statistical differences between the two independent groups (first-year students, second year students) only for the following characteristics: (a) realism of the case (0.001) and (b) the way that questions are posed (0.002).

Results based on the Kruskal-Wallis test, show us that there are statistical differences among the 3 independent groups (0-9, 10-15, 16-20) for all the under review characteristics (0.000).

Based on Table 2, it seems that almost all students from the group of records in the category 16-20 (good records) recognize that the under-review characteristics are of high importance.

Table 2
Assessment of Characteristics from the Group Students, which have achieved good records (16-20)

Characteristics	"Very Important" prob.
1. Realism of the case	0.000
2. Length of text	0.000
3. Structure of the text	0.000
4. Way of posing questions	0.000
5. Degree of implying teamwork	0.000

The frequencies, as presented in Table 3, show us that all the under-review variables are assessed some importance by the majority of the students at least. Based on Table 3, almost all of the students indicate that length of text and the degree that the case study implies teamwork are, comparatively, much more important than the other three under-review characteristics.

Table 3

Answers for each item*

Characteristics	"Slightly Important"	"Quite Important"	"Very Important"
1. Realism of the case	28.3%	39.9%	20.3%
2. Length of text	13.8%	37.0%	44.2%
3. Structure of the text	31.9%	34.8%	21.7%
4. Way of posing questions	33.3%	25.4%	18.8%
5. Degree of implying teamwork	2.9%	20.3%	71.0%

* The "Not Important" choice has been excluded.

Interpretation of the Results

Based on the findings of our research, it seems that there is a direct effect of the characteristics of a case study on the accomplishment of the educational objectives of a marketing course (see Table 2). This means that q1 is true and hypothesis (H1) is accepted. This finding is not surprising, as the educational method in question, i.e., the case study, is the most effective mechanism to motivate adult learners towards heightened involvement in the learning process.

IV. Proposition: An Assessment Model Based on the Performance of Case Studies

The objective of this study is to propose a methodology for the efficient management of case study design and performance. Based on the findings of the literature review and the survey, we suggest a 13-item performance model (see Table 4) in order for marketing educators to assess the effectiveness of a marketing case study. We assume that the level of performance of a case study will have a direct effect on learner motivation through involvement in the learning process.

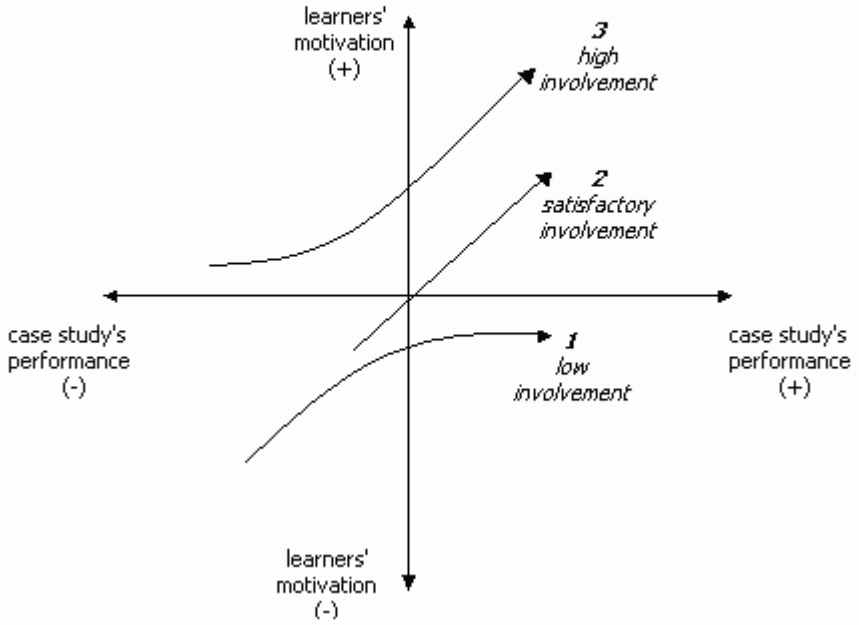
Table 4: Scoreboard

ITEMS	POOR									EXCELLENT
1. Text design	1	2	3	4	5	6	7	8	9	10
2. Text format	1	2	3	4	5	6	7	8	9	10
3. Length of the case	1	2	3	4	5	6	7	8	9	10
4. Readability	1	2	3	4	5	6	7	8	9	10
5. Narrative aspect	1	2	3	4	5	6	7	8	9	10
6. Presentation of data	1	2	3	4	5	6	7	8	9	10
7. Complexity of data	1	2	3	4	5	6	7	8	9	10
8. Type of questions that present the problem	1	2	3	4	5	6	7	8	9	10
9. Background information	1	2	3	4	5	6	7	8	9	10
10. Comprehension	1	2	3	4	5	6	7	8	9	10
11. Questions and activities enhancing team-working	1	2	3	4	5	6	7	8	9	10
12. Reliability of the source	1	2	3	4	5	6	7	8	9	10
13. Challenge of the case	1	2	3	4	5	6	7	8	9	10
RESULT										

The result from the above 13-item performance model will be obtained by calculating the average of the column scores. Based on the score of the model, we propose a categorization of three (3) levels of involvement (participation) in the learning process (as shown in Diagram 1). According to the dimension of learner involvement in the learning process, we have the following levels of involvement:

1. Low involvement
2. Medium (satisfactory) involvement
3. High involvement

Diagram 1
The Levels of Learners' Involvement
Based on the Case Study Performance



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A new formula is proposed and is defined as ***the elasticity of case study quality supply*** **(ε^{CQS})**. It is the ratio of the percentage point of the variation of case study quality to the percentage point of the variation of cost for a marketing educator to build the case studies (as shown by the following fundamental formula, **{1}**):

$\varepsilon^{SCS}=\%\Delta Q/\%C \Rightarrow$

$\varepsilon^{SCS}=\Delta Q/Q/\Delta C/C \Rightarrow$

$$\varepsilon^{SCS}=\Delta Q/\Delta C \cdot C/Q$$

where:

Q=quality of case study (based on the performance measures of case studies)

C= cost (time, money, psychological) for a marketing educator to build the case study

V. Discussion

Implications

This study examines a methodology for the efficient management of case study performance. There is an extensive literature on: (a) student perceptions and attitudes (Binsardi and Ekwulugo, 2003; Soutar and Turner, 2002; Chapman and Van Auken, 2001; Remington et al., 2000; Houston and Bettencourt, 1999; Meidan, 1977), (b) distance training media in the field of marketing education (Swift et al., 1997; Erffmeyer et al., 1992), and (c) the importance of some of the characteristics of case studies (Kennedy et al., 2001). Few have focused on the effectiveness of the method in developing skills of analysis and synthesis (Gorman et al., 1997) or marketing course evaluation (Palihawadana and Holmes, 1999). There have been no studies which have focused on measuring the effectiveness of case studies and the efficiency of the process of case study building as determinants of a marketing educator's productivity.

Limitations and Research Directions

Measuring the opinions of students from different vocational training institutes is both a strength and a weakness of this study. Using such an approach enhances generalizability because case study characteristics are based on general rules of adult learning.

A weakness is that the respondents may have had differing experiences with the case study method. For example, some students may have experienced the case study's technique P-like style in predominantly lecture situations, while others experienced it in relatively autonomous or individual situations. Relative to research projects by individual students, as opposed to participation in group projects, some students may have experienced individual and group assignments where the instructor provided high direction, while others experienced assignments with low direction. In classroom discussion technique, some instructors provide more structure than others (Dickson, 1999).

This study provides a useful extension of past research streams on the effectiveness of the case study in developing skills of analysis and synthesis (Gorman et al. 1997). Marketing educators should recognize that the problem of marketing education productivity has arisen from the lack of suitable evaluation and performance measures, tools, and models to evaluate the effectiveness and efficiency of the education methods that are introduced in the learning process.

VI. Conclusion

Empirical research in marketing education has largely focused on issues such as: (a) student perceptions and attitudes (Binsardi and Ekwulugo, 2003; Soutar and Turner, 2002; Chapman and Van Auken, 2001; Remington et al., 2000; Houston and Bettencourt, 1999; Meidan, 1977), (b) distance training media in the field of marketing education (Swift et al., 1997; Erffmeyer et al., 1992), and (c) the importance of some of the characteristics of case studies (Kennedy et al., 2001). Few have focused on the effectiveness of the method in developing skills of analysis and synthesis (Gorman et al., 1997) or marketing course evaluation (Palihawadana and Holmes 1999). No study has focused on a methodology for the efficient management of case study performance.

Our findings suggest that marketing educators can establish a methodology for the efficient management of case study performance in order to measure the level of quality supplied in the case studies introduced in a marketing course.

The model is based on the ongoing need of customizing the learning process according to case study characteristics and the specific needs of learners. The concluding point is that marketing educators must learn not only to build effective case studies, but also to measure the efficiency of the process of case study building in order to enhance their productivity and facilitate student learning.

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