Enhancing the effectiveness of case study pedagogy by clubbing complementary teaching strategies for better students learning

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Enhancing the effectiveness of case study pedagogy by clubbing complementary teaching strategies for better students learning

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Abstract

Case studies have been used for a long time in social science disciplines like business and marketing as an effective teaching tool. It promotes interaction/discussion, team work, and critical thinking in students. It is helpful in understanding application of the theoretical concepts by using problem solving approach. This study investigates the use of questioning on engaging students mind and critical thinking by using case method in a 300-level marketing course in place of lecture format. The results from this study will be helpful in understanding usefulness of questioning (asking specific questions) in students learning while using case method.

Introduction

Essentially there are three broad approaches used in education - lecture, role playing/simulations/experiments (empirical analysis), and case method. Case method is in use for almost 90 years and considered as successful pedagogy using problem solving approach (Burgoyne & Mumford, 2001). Case studies can be simple or complex and can be video or document. Reason for its success in business and marketing field is due to its story-like format, students’ active participation, engagement of minds in critical thinking, and understanding of applications rather than memorizing concepts in easy and interesting way (Barry & Yadav, 2007; Bowe, Voss & Thomas, 2009; Herreid, 2007; Lee, Lee, Liu, Bonk, & Magjuka, 2009; Lundeberg, 2008). On the other hand, case method is criticized by many educators as being less dependable being a-theoretical. The detractors argue that it is not clear how the learning takes place by using case method or how much depth it provides in learning (Davis, C., & Wilcock, E., 2003). Though there is evidence of ‘active learning’, ‘participative process’, and ‘engaging minds’ in general, but there is almost no research on how use of specific questioning can enhance students learning by engaging their minds constructively.

Undergraduate students’ in a 300 level marketing course ‘The Hospitality and Apparel Marketing Strategies’ provides lots of concepts, which is overwhelming for many. The purpose of this course is to provide important marketing principles and its applications in hospitality and apparel industries. While students get good grades by memorization, they do not necessarily understand its application. The other problem is that most students in this large size class (120 students) do not prefer to interact and/or ask questions in front of others, thus do not engage their mind in class. Thus, it is hypothesized that the use of questioning (or asking specific questions as in ‘windows too…’) in case method can engage students mind constructively and help improve their learning in a large class. ‘Windows too…’ is a tool with a set of four questions developed by Dr. Licklider Barb (Professor, School of Education, ISU) for the purpose to engage students mind. This study answers the following research questions:
1) Will students be more involved in deeper thinking, if ‘windows to…’ is used with case study method?
2) Does structuring case study discussion by asking specific questions help students to understand marketing concepts better as compared to non-structured discussion?

**Method**

This study is conducted in two semesters fall 2016 and spring 2017, on 138 and 115 students respectively. Ten case studies were included each based on a chapter in the syllabus. Five of them were video cases and five document cases (see annexure-I: List of case studies with concept). The purpose of keeping both types was to assess the difference in the effectiveness of the formats, if any. Descriptive research design is used in this study to explain undergraduate student’s expectations and perceptions of using ‘windows to…’ or specific set of questions to discuss the cases (see annexure-II: List of questions).

The study had both qualitative and quantitative phase. The qualitative phase includes focus group discussions (FGDs), while the quantitative phase includes survey. Two FGDs were conducted with seven students in each, being appropriate group size. The discussion time was 45 minutes and it was moderated by one faculty member at the level of assistant professor.

Two types of surveys were conducted; first, a short (quick) survey with four questions was completed after each of the ten cases. A total of 638 usable responses were gathered. Second, main survey with 10 questions was completed towards the end of each semester with 107 and 110 usable responses. The questions in the main survey were based on six-point Likert scale to have forced agreement or disagreement response rather than neutral response.

**Results and Findings**

**Qualitative phase:**

The two FGDs were recorded and transcribed by a professional transcriptionist. The written transcript was analyzed to find out the themes emerged from the discussion. The important themes from the two discussions are summarized below, which highlight the importance of case study method:

- Case studies are helpful

Participant: “I think case studies are helpful to like kind of… see real life examples just because it's easier to compare… you can actually see it happening.”

- Video case studies are better.

Participant: “I like the video case studies better just because sometimes it's hard to like ... Well first of all, I don't like to read on a computer… it was more like for visual learners and you could
see it, you could actually see it in action... real people who are actually using these concepts in their businesses.”

- Questions help in preparation of case studies.

Participant: “I think, it definitely helps you zone in on… what you're looking for throughout the video or reading… keeps people accountable… provide structure”

- Questions on ‘Feelings’ and ‘Life’ were most intriguing

Participant: “…it said what questions can you come up with. So that was kind of interesting…”

- What kind of main questions do you come up in your mind?

Participant: “I guess asking such questions does like lead into deeper thinking…”

- What feelings of your own did you notice as you engaged with this information?

Participant: “Just because, if I don't feel anything, that means I either didn't care for it or I didn't grasp it well.”

- How can you use this information from a case study in your life?

Participant: “I think that was my favorite question…”

**Quantitative phase: Short/Quick survey**

As the name suggests short/quick response survey was conducted to analyze the immediate response after the case discussion. Students were given around 7 hours to complete the survey, if they could not complete it in class, after which it was not acceptable for analysis. The response on the four questions shows students agreed that overall case study was successful in engaging students mind, understanding of the marketing concepts, active participation, and enthusiasm. The results showed mean value ranging from 4.42 to 4.47 on a scale of 5 with an average variance of 0.62.

**Quantitative phase: Main survey - fall 2016**

It was surprising to see main survey results from fall 2016, which contradicted the findings from FGDs and quick survey. In the main survey, students responded negatively towards the usefulness of case study in learning and that questions do not help in engaging their minds. The results from the responses on ten questions reflected mean value ranging from 2.31 to 3.30 on a scale of 6 with an average variance of 1.5. On the contrary, the same students agreed that case study and specific questioning (like in “windows too…”) helped in overall learning, as evident from the findings from FGD and quick survey. Thus, it was decided to collect a fresh set of responses from a different sample to validate the findings. Also, the technique used for data
collection, which was online survey using ‘Qualtrics’ software was changed to paper format. Finally, the same set of ten case studies was included in spring semester. A slight change in the process was made, wherein students had to write briefly about the case study as homework before coming to the class for discussion. This was done to ensure that students read the case and relate it to the chapter/concept before coming to the class. Towards the end of the semester 110 students out of a total of 115 students took the survey on the same set of questions.

Main survey - spring 2017

The results from spring 2017 showed that students agree with case study as a helpful pedagogy in learning and questions help in engaging minds constructively. The results from the responses on ten questions reflected mean value ranging from 3.71 to 4.28 on a scale of 6 with an average variance of 1.6. These results are similar to FGDs and Quick response survey of fall 2016.

While results from the independent samples (fall 2016 and spring 2017) were different on all ten questions, it was important to confirm whether these differences are significantly different with each other. Independent sample t-test was run, which showed that the results are significantly different.

Discussion and Conclusion

From the multiple phases used in this study, it can be concluded that case method is an effective method in students learning and engaging their minds. To answer the two research questions, results show that students mind gets engaged in deeper thinking, when specific questions like in ‘windows to…’ are asked in case study discussion. Non-structured discussion where no specific questions are asked does not work well with undergraduate students and they get confused with the purpose of discussion. Regarding the discrepancy between fall 2016 and spring 2017 results, it is concluded that success or understanding from case method depends on pre-discussion preparation like reading the case and making notes, and as this was ensured in spring 2017 it had positive results. Similarly, FGDs had volunteers (more committed students) and quick survey was immediately done after discussion, both had positive results. Another reason was that main survey in fall 2016 was done at a time when students were burdened by unnecessary work like survey on peer evaluation and other survey for extra credit. Also, case study had a small proportion in the overall grade, while the time involved in the class was way more than other activity like lecture or projects in fall 2016. All these reasons may have led to negative impact on their responses on case method.

Thus, case study is an effective method in students learning and engaging minds. Use of specific questions like in ‘windows to…’ helps in directing the discussion and critical thinking. Case method cannot be clubbed with other methods of teaching like lecturing and research projects, which makes it too heavy for the undergraduate students. Further research may be required to improve our understanding in this area and validate these results.
References:


Lundeberg, M.A. (2008). Case Pedagogy in Undergraduate STEM: Research We Have; Research We Need. White Paper commissioned by the *Board of Science Education, National Academy of Sciences*. 
### Annexure – I: List of case studies

<table>
<thead>
<tr>
<th>Concept/Topic</th>
<th>Case Study (Video or Document)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concepts of marketing</td>
<td>Las Vegas: Video case study</td>
</tr>
<tr>
<td>Customer Behavior</td>
<td>Dewey Weber: Video case study</td>
</tr>
<tr>
<td>Analyzing marketing opportunities</td>
<td>Vending Opportunities: Document case study</td>
</tr>
<tr>
<td>Marketing Research</td>
<td>Franchise Services Evaluation: Document case study</td>
</tr>
<tr>
<td>Marketing segment and trends</td>
<td>Chocolate a la carte: Video case study</td>
</tr>
<tr>
<td>Strategies, positioning, and marketing objectives</td>
<td>Blue Thistle Country Club: Document case study</td>
</tr>
<tr>
<td>Promotion and communication</td>
<td>Specialized Marketing Services: Video case study</td>
</tr>
<tr>
<td>Product development</td>
<td>Marketing Ingenuity and Product Development: Document case study</td>
</tr>
<tr>
<td>The marketing plan</td>
<td>Wombatta Public Library: Document case study</td>
</tr>
<tr>
<td>Overall Marketing</td>
<td>Freedom Innovation: Video case study</td>
</tr>
</tbody>
</table>

### Annexure – II: List of questions

<table>
<thead>
<tr>
<th>Question</th>
</tr>
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<tbody>
<tr>
<td>What are the key facts or important information provided in the case?</td>
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<tr>
<td>What feelings of your own did you notice as you engaged with this information?</td>
</tr>
<tr>
<td>What new questions come to your mind as you ponder these phenomena?</td>
</tr>
<tr>
<td>How can you use this information in your life?</td>
</tr>
<tr>
<td>What is the most critical issue or problem in this case?</td>
</tr>
<tr>
<td>What are the TWO alternatives or solutions for most critical issue?</td>
</tr>
</tbody>
</table>