

Active Learning and Critical Thinking in Marketing: Using "Exercises" to Better Comprehend Concepts and Solve Problems

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Abstract

This paper proposes using "exercises" (articles to spur Socratic dialogue), a pedagogical innovation to foster learning of critical concepts in marketing. Exercises enable students relatively unfamiliar with business and strategic decision making to learn marketing theory by applying concepts to better understand and solve current problems confronting an actual company. By allowing students to apply concepts in specific, feature-rich, real contexts, exercises stimulate critical thinking ability in the best traditions of the Socratic method. Exercises inspire understanding, analysis, and problem solving through reading, reflection, discussion, and application of marketing concepts. Learning from peers by sharing information and applying marketing concepts to generate insights about compelling problems helps enhance student retention of critical ideas.

Index terms— active learning, experiential learning, critical thinking, marketing theory, marketing education, Socratic method.

1 I. Introduction

Teaching and scholarship are presumed to constitute the bedrock of higher education with teachers possessing a deep and scholarly understanding of their discipline that is shared with students. The training of marketing teachers emphasizes scholarship and research with little attention given to teaching itself (Bearden, Ellen, & Netemeyer, 2000; Burton, 2003). In recent years, doctoral students are increasingly being mentored in teaching and assigned classes to teach even if minimum measures of teaching performance are not used as criteria in awarding the degrees certifying their suitability for employment as teachers. In the initial years of a teacher's career, research productivity in terms of papers published vastly if not wholly overshadows excellence in teaching (see, e.g., Martinez, Toyne, & Menger, 2000) with reputable universities known to deny tenure to their best teachers who fail to satisfy research criteria (see Clayson & Haley, 2005). An inherent tension seems to exist between teaching and scholarship, particularly in terms of incentives and rewards. But for good scholarship to translate into good teaching, we must find fresh approaches to sharing the complex concepts that emerge from good scholarship with students in ways that foster learning and exemplify good teaching. Exercises represent a pedagogy that bridges the divide and facilitates student understanding of concepts and the ability to apply them to solve problems.

In order to make marketing decisions, students must learn and apply concepts that provide the deductive knowledge and analytical frameworks for making these decisions. A precise understanding of these concepts is essential for students to comprehend, analyze, and solve problems following Bloom's taxonomy (see, e.g., Frontczak, 1998). If, however, students fail to fully grasp the concept and have only an imprecise understanding of it, the concepts will be reduced to mere definitions that can be recalled and recited but not applied to solve problems. Making it easier to get a good grasp of the concept and its implications is essential for use by students in their future role as managers. Using exercises to practice use of a concept by applying it to real life situations in which the problems encountered by an actual company familiar to most students are described in a factual

3 A) WHAT ARE EXERCISES?

account rich in detail enables students to better understand the concept as well as develop proficiency in its use. An added advantage is that exercises make learning fun and help students remember complex concepts.

Using exercises to teach marketing can help resolve the implicit contradiction that some academics and practitioners perceive between theory and practice (see Finch Traditionalists in education favor knowledge-based education while others argue that the emphasis should be on skills training (Pearce & Bonner, 2000). Universities may even equate the teaching of practical skills as vocational education that is at variance with their focus on research to discover and disseminate knowledge. Students are expected to learn concepts and theories essential for critical thinking, which become more important as students advance in their careers and move to higher level positions. However, education for professional careers in marketing must teach not only the concepts and theories required for decisionmaking but also the application of these concepts in practice (Hughes, Tapp, & Hughes, 2008; Schibrowsky, Peltier, & Boyt, 2002). Marketing education "must emphasize the development of foundational meta-skills through experiential methods that demonstrate application in unique marketing contexts" (Finch, Nadeau, & O'Reilly, 2013, p. 65). Learning marketing concepts and theories and applying them to solve problems in exercises featuring unique marketing situations helps students develop fundamental career skills.

Exercises enable active learning (also known as action learning) by allowing "students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises which require students to apply what they are learning" (Meyers & Jones, 1993, p. xi). Characteristics that distinguish active learning from traditional learning are its focus on the task rather than the classroom, the group rather than the individual, output rather than input, active rather than passive learning, the present and future rather than the historic, return rather than cost, and learner led rather than teacher led learning (Cunningham, 1999). Active learning engages students (Prince, 2004), maximizes their participation in the learning process (Johnson & Malinowski, 2001), and helps "prepare students to be lifelong learners, adaptable team players, and critical thinkers" (Morgan et al., 2005, p. 20). By enabling students to make meaningful connections that improve both comprehension and retention of concepts (Bacon & Stewart, 2006), exercises can help achieve the potential of the Socratic method.

2 II. Exercises to Learn Marketing Concepts

Scholars have long debated if marketing is an art or a science and attempted to push towards making the discipline more scientific by developing deductive frameworks for analysis. Despite considerable progress in the past few decades, marketing, like management education in general has relied on inductive models to provide students with an understanding of marketing problems and the ability to solve them. For example, marketing texts routinely use vignettes to introduce ideas at the beginning of chapters, use analogies to explain and reinforce concepts, and end with a short mini-case to illustrate the portent of the chapter. The intent is to improve understanding but terse analogies without counter-arguments, accompanied by highlighted terms could result in a simplistic understanding that might even trivialize concepts essential for marketing decisions.

For instance, introductory texts in marketing present a more disaggregated view of marketing practice than the greater integration of marketing tasks and activities seen by practitioners (Dibb, Simoes, & Wensley, 2014).

In graduate classes a popular solution has been to use cases that are comprehensive descriptions of decision-making situations faced by a company that require careful reading to decipher problems, identify and evaluate alternatives, and recommend a strategy. Typically, cases are prepared by small groups prior to discussion in class and considerable time and effort has to be devoted to the analysis. Students must be highly motivated and possess the background and experience to appreciate and understand the situation depicted in the case. These requirements usually preclude the use of comprehensive cases to teach the introductory principles course to undergraduate students who are mostly young and inexperienced (see, e.g., Wheeler, 2008). Even in the case of older commuter students who hold jobs, work experience is at the lower rungs of the hierarchy with scant knowledge of the business or involvement in strategy. To introduce these students to the broad array of topics covered in the introductory marketing course, which for many will be their only course in marketing, it is important that they learn their lessons well and with sufficient depth that they are able to apply the concepts to better understand and solve problems when in the course of their careers the need for marketing decisions arises. A pedagogic approach that greatly facilitates the learning of critical marketing concepts by students relatively unfamiliar with marketing decisions is the use of exercises in the classroom and online teaching.

3 a) What are Exercises?

When I first started teaching I would suggest to my students who were adult learners in continuing education classes or students in a part-time MBA program that they gain a better understanding of businesses and marketing by reading periodicals like Business Week, Forbes, and Fortune. I would also recommend reading the Wall Street Journal or the business section of the local newspaper. Soon it became clear that if I wanted students to heed my advice, I would have to recommend a particular publication and perhaps encourage them to subscribe by circulating forms for reduced rate subscriptions. Next, I selected articles with current news related to what we were discussing and read it aloud in class, expecting students would realize the relevance and value of the concepts taught. Subsequently, I started making copies of the articles and distributing them in class. When a student asked what they should do with the handout I was distributing, I was nonplussed. Wasn't it clear that

I expected them to better understand the concepts we had covered by reading and reflecting on the situation described in the handout? That was when I realized that for students to benefit I had to be far more selective in my choice of articles, ensure that they

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Volume XV Issue II Version I Year () tied neatly into the topic discussed, raised questions in the minds of students, and led to an engaged discussion that stimulated critical thinking and reflection. Better guidance was also required for the discussion to improve understanding of the concept and how it might be applied in practice. The idea of exercises was born.

Exercises are self-contained, well written, and easy to read articles authored by journalists that simply state the facts of a problem situation faced by actual companies after interviewing company personnel, competitors, buyers, suppliers, analysts, or other industry watchers. The article should focus on a specific issue germane to a particular concept covered in the course and illustrate how the concept might be utilized to comprehend and solve the problems faced by the company. It must not require other concepts that are learned later in the course for the analysis, an especially onerous requirement for exercises used early in course.

Unlike mini-cases at the end of chapters or short cases often found at the end of textbooks, the articles are not condensed versions of several articles rewritten by an expert in the field that prompt students to draw a specific conclusion. Any opinions expressed in the article are those of the key informants interviewed whose opinions are usually cited within quotation marks. Reporters are expected to desist from interjecting any subjectivity into the article and not slant the analysis towards a point of view. It is thus open to students to make of it what they will and the exercise becomes an opportunity for them to apply a concept they may have just learned to make sense of the situation and think through the possibilities.

By using the concept to make sense of the exercise, students are able to better understand the concept and reflect on it as well as develop the ability to apply the concept to solve problems indicated in the exercise.

Justifying their analysis in the ensuing discussion with peers by relying on the concept helps students learn how to use the concept to sift through the options and make decisions. Exercises simulate reality, featuring real companies with real problems for students to practice problem solving virtually through interactive discussion using relevant marketing concepts. The brief cases from Harvard are probably the closest substitute but they lack the engaging immediacy and dynamism of current news and are more suitable for well-motivated undergraduates in elective classes rather than the novice learner in introductory marketing classes. Exercises represent a pedagogic approach that makes it possible to more fully realize the benefits of the Socratic method.

5 b) How to Select Exercises

Exercises are chosen from articles written by journalists that appear in the popular press or online media. They should be well written in straightforward prose that is easy to read, and report the facts pertaining to problems encountered by a particular company and the decisions it must make. The article must contain adequate detail for analysis but also be short enough to permit reading and reflection followed by discussion in class or online with the teacher as moderator. Over the years I have found that I prefer articles from the Wall Street Journal and the New York Times, which are usually two letter-size pages of newspaper columns. Students must be able to read the entire exercise in ten to fifteen minutes, think about it, and then discuss the situation in thirty minutes or less. The exercise must be intrinsically interesting, a compelling even exciting read, able to capture the student's attention, and stimulate critical thinking. Usually discussion of the concept to which the article relates immediately precedes the exercise and reading it should help clarify the concept as well as enable a better understanding of the situation depicted in the exercise. By applying the concept to identify and discuss possible strategies, exercises should allow students to reflect on the concept individually as well as refine their understanding of the concept by sharing information and learning from each other through discussion and debate.

Selecting exercises can follow the stages suggested for new product development (e.g., Kotler & Armstrong, 2014). The idea for an exercise may come from any article, which is screened for readability, clarity, length, and interest, then checked to see how well it illustrates a specific concept, before developing a strategy for its use, turning it into a prototype for discussion, testing in class, and deciding whether to adopt or not. For example, consider the potential for a new exercise based on news about the discovery of horsemeat in products like lasagna and meatballs supposedly made from beef sold in several countries in Europe. Of the many interesting articles on the subject, only a few survived screening for readability, clarity, and length, and only one appeared suited to teach a specific concept. An article in the Wall Street Journal entitled "IKEA's Iconic Meatball Drawn Into Horse-Meat Scandal" (Molin & Stoll, 2013) seemed to hold promise to teach consumer behavior using the information processing framework. It was well-written and easy to read, self-contained with adequate information for the analysis, and a good illustration of information processing concepts like selective attention, selective perception, and selective retention. However, it would replace another recent article about the redesign of ketchup packets for drive through customers of quick service restaurants by Heinz (Nassauer, 2011) that generates considerable discussion and has been a favorite of students.

The new exercise has the advantage of being interesting as well as intriguing news that can be linked to other examples of food contamination and safety in the discussion, but had to test well for its adoption. The key

to the use of exercises as a pedagogic method is asking questions. Reading the exercise raises questions in the minds of students seeking to make sense of it. The concepts just learned in the course may assist in trying to understand and make sense of the exercise as well as improve understanding of the concept itself. Information from the critical thinking and reflection prompted by these questions is shared in the ensuing discussion with classmates, in turn raising more questions. Based on the analysis and opinions that emerge during a free-flowing and nonjudgmental discussion and debate, the teacher may pose additional questions to help better comprehend the concept as well as identify and evaluate possible solutions. The importance of insights from questioning and reflection are emphasized in active learning (Revans, 2011). Exercises represent a pedagogy that unites active and deep learning to teach problem solving skills in marketing courses (see Diamond, Koernig, & Iqbal, 2008), thereby improving retention of knowledge (Bacon & Stewart, 2006). For instance, an active learning class exercise in mental models was found to increase both understanding of the concept and retention of knowledge, suggesting that critical thinking skills were enhanced (Wilson, 2014).

Students become active partners in the learning process and contribute to their own learning (Clayson & Haley, 2005) and the education of others through interactive discussion (Frontczak, 1998). Exercises enable students to become involved participants and co-creators of value in learning, enhancing both their own learning and that of others. Involving students in the creation of value increases student engagement in marketing classes (Taylor et al., 2011). Students have to think on their feet and provide the supporting rationale for their arguments in peer-to-peer discussion using the concepts just learned. In turn, exercises improve understanding of the concept itself. Exercises, by enabling value co-creation through interactive discussion among peers, not only facilitate active learning and critical thinking but also improve student engagement.

The use of exercises for active learning in marketing can be modeled with the help of Revans' virtuous circle of learning (Cunningham, 1999) or Kolb's (1984) experiential learning cycle. Based on work with practicing managers, the virtuous circle of learning consists of the following stages (Cunningham, 1999):

1) Learn from experience 2) Reflect 3) Share the experience with others 4) Have them criticize and advise 5) Take their advice, reflect, and implement 6) Reflect and share the lessons learned

Exercises enable students to learn from the situation and experiences described in the exercise, reflect using the concepts learned, share information and insights with classmates, engage in critical discussion and obtain advice from peers, leading to further reflection and sharing of lessons learned. In terms of Revans' (2011) learning equation of $L = P + Q$, where L stands for learning, P for programmed knowledge, and Q for questioning insight, marketing concepts represent P and exercises represent Q.

An alternative approach to model the use of exercises for active learning in marketing is the experiential learning cycle. The four stages of the experiential learning cycle (Kolb, 1984) are:

1) Concrete experience 2) Reflective observation 3) Abstract conceptualization 4) Active experimentation
Students can complete all four stages of the learning cycle using exercises. In order to satisfy the requirements of the learning cycle, activities in marketing classes must provide concrete experience for students by encouraging their active participation and involvement, reflective observation by allowing students the opportunity to express their feelings, abstract conceptualization by assisting students understand the relevant marketing concepts and theories, and active experimentation by improving their ability to apply concepts learned to new experiences and marketing strategies (Frontczak, 1998). Figure 1 is a schematic representation of how exercises can be used to enhance the learning of marketing concepts by leading students through the four stages of the learning cycle.

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Volume XV Issue II Version I Year () Designing activities that explicitly incorporate all four stages and intrinsically motivate students "seem to be the foundation for stimulating the use of deeper cognitive learning processes and meaningful learning" (Young, Caudill, & Murphy, 2008, p. 36). Students who complete the four stages utilize a deeper approach to learning and perceive that they learned more (Young, Caudill, & Murphy, 2008). Active learning course designs -experiential and participative designs -are more effective than traditional passive designs and produce statistically superior student outcomes (Black, Daughtrey, & Lewis, 2014). Teachers and students can achieve learning goals through active learning (Graeff, 2010) by using exercises.

7 III. Student Assessment of Exercises

In general students are engrossed in the exercise, reading it in silence immediately after the exercises are distributed. This is true in classes of varied size ranging up to 150 students. Instructors can read along with the class, pausing to observe their progress and check the time every so often. When most seem to be done reading, usually after ten to fifteen minutes, the instructor may begin the discussion and allow everybody who raises their hand to speak before intervening with questions related to the points made or issues that might have been neglected. Most students participate and are not reluctant to voice their analysis and opinions. A vigorous back and forth discussion ensues with some delighting in their ability to interpret the exercise using the concepts just learned. Students build on the points made by one another and through interactive discussion identify potential solutions using the concepts and theory learned immediately prior to the exercise. Many also add insights derived by applying concepts from previous classes as the discussion progresses.

Opinions expressed in person and by email during the course as well as at the end of the course and in student evaluations attest to the beneficial value of exercises in learning marketing. Students are vocal in their appreciation of exercises as a tool to make abstract theory more concrete, improve understanding of the concept as well as the ability to identify and evaluate alternative options in order to select a potential solution using the concept. A positive classroom experience with active learning exercises benefits both students and instructors and increases student learning, participation, and interest (Schee, 2012).

To confirm the qualitative evidence, survey data was gathered from students in two introductory marketing courses: (1) The overall mean on all dimensions is 4.04 for undergraduates indicating that students in introductory marketing courses see exercises as a valuable pedagogy. The ratings ranged from a high of 4.44 for exercises are interesting to a low of 3.69 for exercises help me learn career skills. The difference between the high and low ratings is a mere 0.75 in the case of undergraduates. The overall mean on all dimensions is 4.13 for graduate students, indicating that graduate students also see exercises as a valuable pedagogy (slightly higher overall mean for graduate students in comparison to undergraduate students). The ratings ranged from a high of 4.60 for exercises are interesting and exercises help me apply concepts to a low of 3.70 for exercises help me learn career skills and exercises give me a sense of satisfaction. The difference between the high and low ratings is 0.90 for graduate students.

8 b) Graduate Course

The high and the low mean scores for the two courses are both higher for graduate students than for undergraduate students. Interestingly, the mean score for involvement (exercises give me a sense of involvement), which is a requirement for the first stage of Kolb's (1984) learning cycle is high (> 4.0) in undergraduate as well as graduate introductory marketing courses.

In the opinion of undergraduate as well as graduate students in introductory marketing courses, exercises get a high rating (mean score > 4.0) on several dimensions. Students find exercises interesting, well written, easy to read, give a sense of involvement, help understand and apply marketing concepts and learn marketing theory, and a good use of class time.

9 IV. Conclusion

Exercises represent a potent method to enhance learning and application of marketing concepts, especially in introductory marketing courses. By engaging students in real problem solving situations faced by real companies, exercises increase participation and involvement, reflection, understanding, and application of concepts to identify and select marketing strategies. Exercises encourage students to become active learners and co-creators of knowledge, share information through interactive discussion, make meaningful connections that improve retention, and help achieve the promise of the Socratic method. Exercises enable students to acquire both the practical skills required at the start of their careers and the critical thinking skills required for higher-level strategic decision making as their careers progress.

By enabling students to better comprehend marketing concepts as well as improving their ability to solve problems using these concepts, exercises provide a pedagogic method that heeds the call to align theory and practice in marketing (Reibstein, Day, & Wind, 2009). Exercises can help fill the gap between theory and practice "where critical reflection and knowledge of fundamental principles may be vital in dealing with contemporary business challenges" (Hughes, Tapp, & Hughes, 2008, p. 236). A review of the marketing education literature concludes that "Research is thus needed that helps students become independent thinkers and problem solvers, such as articles that focus on exercises and tools that help students solve the business problems they will encounter" (Gray, Peltier, &

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Figure 1: 1

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an undergraduate principles of marketing course, and (2) a foundations course in marketing for students entering the MBA program without an undergraduate business degree. The pedagogic value of exercises is assessed on several different dimensions (see, e.g., Li & Greenberg, 2009) using a 5-point Likert scale.

a) Undergraduate Course

Table 1 presents the means and standard deviations on 14 dimensions for 6 exercises used to stimulate action learning and critical thinking before the mid-term exam in the introductory marketing course for undergraduates.

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Figure 2: Table 1 :

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Figure 3: Table 2

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Figure 4: Table 2 :

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