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NEW HORIZONS IN SIMULATION RESEARCH

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Business students devote a great amount of class and homework time pursuing the study of the institutional structure, legal environment, channel relationships, etc., in which business operates. It is hoped that through instruction in these areas, the student of business can prepare himself for later assuming decision-making responsibilities. However, although many facts about business can be taught in the classroom, the uncertainty and accrued responsibility of decision making is best learned through time, uncertainty, and responsibility to the business owners create a dynamic framework within which the business executive must function. It is within this framework that the executive must make decisions requiring an ability to integrate many diverse aspects of business operation; decisions which solve not only today's problems but anticipate future problems; and decisions which often must be made on the basis of incomplete information. In some courses in which case materials are used, students are places in a decision-making role, i.e., they are required to solve a problem and determine a strategy for a business firm to follow. However, the traditional lecture and case methods of business instruction do not allow the student to see the effectiveness of his decisions, to recognize and react to mistakes, and to adjust to changing circumstances in a dynamic environment.

As a result, the use of simulation gaming has been adopted as means for providing the business student with an opportunity to experience decision-making responsibility. The simulation places the student in a dynamic decision-making environment which forces the student to make decisions under many of the same pressures the business executive faces. Educational simulations capture much of the substance of real business situations by replicating the environment of a particular industry and provide valuable experience to the student in making managerial decisions. The business simulation requires the student to draw upon and integrate the knowledge he has obtained from all previous courses and requires him to put this knowledge to use in business decision making. The simulation creates a synthetic environment in which a group of students act as the management team of a hypothetical company operating in an operationally defined industry made up of similar companies producing and selling the same products. In short, the simulation provides the business student with an experimental decision-making laboratory.

GROWTH OF MARKETING SIMULATIONS

Lecturing is undoubtedly the oldest method of teaching, dating back several thousand years. This also was the first method applied to the teaching of marketing courses (i, pp. 1-4)

The earliest marketing courses were offered in the period 1902- 1903. Naturally, at that time, very little literature on marketing was available meaning that the lecture method was all that was available to convey marketing principles to college students. The use of the case method for teaching marketing courses dates back at least 60 years. Professor Melvin T. Copeland indicates that the business faculty at the Harvard Business School began developing cases from actual business situations to give the students experience in solving marketing problems during the period between 1912-1916 '12, pp. 1-3). The use of simulation gaming in marketing courses, by contrast, is only about twenty years old (5, p. 21). However, although marketing gaming is relatively new, gaming as a teaching tool has been used for over a century. Military commanders have long utilized war games during peacetime to train personnel and to study battle strategies (. 6, p. 13).

The first survey of marketing games appeared in the Journal of Marketing in 1962 (9, p. 69). This listing included 29 simulation games about half (15) being computerized, the remainder noncomputerized. Interestingly, twenty of these marketing simulations were developed by business firms for their training purposes and only nine by academicians for university teaching. From this point, marketing simulation gaming for teaching purposes grew rapidly. A 1967 survey of American Association of Collegiate Schools of Business members reported that 94 percent of the respondents used decision simulations in some part of their curriculum (3, p. 58]) . More recently, a 1974 survey of marketing simulation games included 53 marketing simulation games and this list was not complete as a number of marketing games known to the authors were not included(7, p. 6). Finally, in recent years, several organizations devoted to the study of simulation and gaming techniques such as the Association for Business Simulation and Experiential Learning, the National Gaming Council and the North American Simulation and Gaming Association have come into existence.

A NEW RESEARCH FOCUS

Ever since the first simulation was designed and implemented in a classroom situation, the primary focus of most research efforts has been on justifying the simulation as a meaningful learning tool. Simulation usage is not new to our contemporary educational setting as the previous section indicated. However, it still remains unique with respect to traditional teaching/learning methods. As such, the current research emphasis plods on and on in an attempt to justify simulation gaming as a meaningful adjunct to the educational system. To date, reams of material have poured into various conferences and journals highlighting the educational experience via simulation usage. We must admit that we have

contributed to this. In light of this research, it is surprising that no "real" results have been obtained indicating that simulation gaming is:

a. a teaching tool superior to any of the normally used, more traditional methods, i.e. lecture, cases, etc., or
b. an even adequate teaching tool

One simply has to scan the material, examine the research that's been performed, read the analytical sections of most papers, and view the conclusions to realize that most authors cannot reach valid conclusions as to the results of their studies. One wonders if, in fact, we haven't been beating our heads against a brick wall for the last 10-20 years trying to measure something that is non-measurable.

The business simulation has become a very important element within the curriculum of many business schools. As indicated, a survey conducted by the American Association of Collegiate Schools of Business members reported that •94% of the respondents used business simulations in their curriculum (3, p. 581). Beyond that startlingly high percentage, the study further pointed Out that participating faculty members felt that the simulation experience offered several advantages over existing teaching methods, including the case method, such as:

1. High student interest and involvement
2. The opportunity to integrate concepts from diverse areas of business
3. The experience of living with past decisions
4. The experience of group decision making
5. Increased awareness of the role of the businessman

Beyond these advantages, we have found that the simulation competition typically results in enhanced student/teacher rapport as well as opening the door for the teacher to consult individually with each team and team member on various problems that the simulation creates. Furthermore, each teacher is able to inject his own personality into the simulation by selectively altering certain aspects of the simulated experience.

It is obvious from speaking with many faculty members who have utilized simulation gaming as a teaching tool, that simulation users are thoroughly convinced as to its' value in generating participant enthusiasm, creating an atmosphere of meaningful experience, and as a teaching tool. Their satisfaction alone leads one to believe that perhaps we may be wasting our time trying to measure that which requires no measurement. Those of us who use simulation gaming regularly are thoroughly convinced that it is an excellent method for accomplishing our educational objectives. Perhaps it may be intuitive, but we who utilize simulation gaming do so because we feel it is a superior teaching tool. Past research aimed at

determining whether or not the simulation technique is a superior, or even useful teaching tool has concentrated on the student (simulation participant), rather than the game administrator or the primary simulation user. To this end, perhaps it is time to reorient our research efforts and begin to examine the motives and attitudes underlying simulation usage by faculty members and businessmen alike to further their educational objectives. We no longer care to debate the point that simulation is a superior tool to the lecture or the case study methods, it appears to be a moot point. Let us examine our own motives, our own feelings, our own rationale behind simulation usage and try to portray these as convincing arguments within the academic and business communities.

The question remains, why does simulation gaming experience relatively heavy usage within a wide variety of college curricula? Is it because users feel that the simulation offers a truly meaningful learning experience for their students, or, on the other hand, does it indicate that many simulation users feel that it affords them an easy out with respect to lecturing or analyzing case studies. To deny the existence of either aforementioned user motivations would be closing our eyes to the facts. It is interesting to note, however, that those professors who initially undertook the usage of a simulation exercise because they thought it represented an escape from their teaching duties soon found that it required a great deal more of their time than they had expected. In most cases, more time than they normally would have spent using their traditional methods. The net result being that certain professors drop the use of simulation gaming and return to the traditional methods with which they feel more comfortable. On the other hand, many users are so pleasantly surprised by the added student contact and the involvement generated by the simulation exercise that they become hard core simulation advocates.

The purpose of this paper is not, as it may appear, an attack on all previous research regarding simulation and the learning experiences derived there from. The fact that we feel much of the research represents wasted effort cannot be ignored. However, the major purpose of this paper is to suggest a possible new avenue of research in order to expand upon the results of past research. In a paper entitled "Experiential Learning: Conceptualization and Definition" (8, p. 3)), Jay Duane Hoover indicated that experiential learning is a highly qualitative concept and cannot be properly regarded within a rigidly defined theory of learning. In his paper, Dr. Hoover recognizes the contribution made by Carl Rogers who conceptualized experiential learning by defining it as a quality of personal involvement. The whole person in both his feeling and cognitive aspects being involved as part of the learning

event (10, p. 5). To the extent that the game administrator's participation has long been recognized as a stimulant to the simulated experience, we feel that Rogers' definition may be expanded to include the game administrator within the "whole person" involvement aspect of the simulation environment.

The success or failure of a simulation competition within an academic framework can, in many instances, be traced to the abilities and enthusiasm of the game administrator. A highly enthusiastic, participative administrator typically enhances the simulation and stimulates the participants. On the other hand, those administrators who sit back and allow the computer to do their work usually find the participants adopting attitudes which are similar to their own.

Enhancing the Simulation Competition

The really enthusiastic game administrator may take many different avenues in his use of the simulation competition. In an earlier paper presented at the first ABSEL conference, we detailed the many ways in which we enhance our use of the simulation competition (4, pp. 57-59). We utilize three different types of written assignments, selected reading and case assignments, video-tape commercials, stimulators introduced through the use of news releases and many other assignments. Through the use of these many and varied assignments, we are able to use the simulation competition as the entire focus of our marketing management classes.

We have found that enhancing the simulation competition in this fashion has made it more interesting and rewarding for the students as well as for us. Enhancing the simulation competition in this fashion has made us hard core simulation users. The more we have added to the simulation competition, the more interested we have become as game administrators. It is quite possible that had we let the computer do the work for us, we might have become simulation user drop-outs.

The New Focus

As mentioned earlier, the purpose of this paper is to introduce new avenues for research with respect to simulation gaming. The focus of some of the research should move from the participants to the game administrators. Some of the forces that should come under investigation include the following topics:

1. Where did current simulation game users hear or learn of this technique?
2. Why did they start to use simulation gaming?
3. What did they expect to gain through the use of this method?
4. What initial satisfaction or dissatisfaction was experienced?

5. What factors have caused some teachers to become simulation drop-outs?
6. Why do the rest of us continue to use this technique?

The answers to these questions may help us to better understand the motivations, feelings, and attitudes of simulation garners. Through a better understanding of game users we may be better able to understand what it is that we expect the simulation game to do for our students.

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