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CAN A SMALL PREDOMINANTLY BLACK UNIVERSITY INCORPORATE THE COMPUTER SIMULATION GAMING TEACHING METHODOLOGY INTO ITS CURRICULUM?

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INTRODUCTION

Xavier University of Louisiana is a predominantly Black university with approximately 1,800 students in attendance. The school's computer facility consists of an IBM 1130 and PDP/8E.

There were no courses utilizing the computer simulation gaming teaching methodology at Xavier two years ago. Presently, there are approximately four disciplines using this particular teaching methodology.

TRANSITION

The transition at Xavier University from traditional teaching methodologies to computer simulation gaming began with a Danforth Foundation Grant sponsoring a computer simulation gaming workshop. The workshop consisted of two sessions: 1) Computer Simulation Gaming Theory and 2) Playing the game BROADEC.

The Computer Simulation Gaming Theory session defined: computer simulation gaming; discussed the advantages; facilities required; and grading.

Definition--A simulation may be defined as a "sequential decision-making exercise structured around a model of a business operation in which participants assume the role of managing the simulated operation." (1, p. 5)

Advantages--The computer simulation teaching methodology offers many advantages over other teaching methodologies. The following are some of the advantages of using the computer simulation gaming teaching methodology:

1. Students exhibit a high degree of interest and participation.
2. The decision-making experience is condensed into a relatively short period of time.
3. The integration of diverse concepts from business.
4. The team members learn to live with past decisions.
5. The students experience making managerial decisions. (2, p. v)

Facilities--The computer simulation gaming teaching methodology does not require special facilities. At Xavier regular classrooms are used when using a computer simulation game.

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Grading--Five basic forms of grading were discussed at the workshop: grading by group performance, the tattletale method, individual testing, no ranking, and a combination of factors.

The grade by group performance method is probably the most commonly used grading method. [f the goal of the game is based on profit, then each team strives to attain the highest profit. Then the team with the highest profit will be awarded an "A," while the teams with lower profits will receive grades proportional to the teams ranking.

This grading method allows each student to be a part of a management team working on one objective. However, there is a problem in that one student might make all of the decisions. A possible solution to this problem is either to have small groups or have the instructor listen in on each team's discussions.

Another problem is presented if a team is consistently in last place, but then gains and finally ends the game with more dollars earned than the leaders, but still is not in first place. For example, the team moved from minus \$8000 to \$5000, for a gain of \$13,000, while the leaders attained an overall profit of \$10,000. This poses a problem.

A second method of grading is the tattletale method. With this method each member of a team ranks his fellow teammates. This gives the student experience in filling Out evaluation reports, which he will have to do in real life when he becomes a manager. A problem can occur, however, when a student does not evaluate his peers on ability and contributions but on personality or sex. Also, students in grading can be either too lenient or too hard.

Individual testing is another method of grading that can be used in simulation grading. After playing a particular game for a period of time, each student plays the game individually and is graded accordingly. This method allows the student to use his ingenuity, but often there is not enough time for him to develop an individual strategy.

The no-ranking method is a fourth method of grading. It might be said that one merit of this method is that no pressure is placed on the student to perform. The problem is that there is no incentive. In other words, what motivates the student?

Finally, there is the combination of other methods. With this approach, it is possible to have a combination of two or more previously mentioned methods.

These five grading methods can be used with a class that is strictly devoted to simulation gaming. Other group grades can be obtained by assigning each team a report on objectives, an annual report, or a team

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project, e.g., development of an advertisement.

A way to obtain both an individual grade and a group grade is to have a “Steak and Bean Dinner” at the conclusion of the class. This type of dinner provides motivation because the winners get the steaks and the losers the beans.

After the dinner is completed, each member of each team presents an oral report on a particular function of the game, e.g., advertising, distribution, sales, price, etc. The instructor can grade the individual student on his presentation and the instructor can also grade the team for its overall presentation.

The participants of the workshop felt that the best method was the combination approach and preferred using the “grade by group performance” and the “tattletale” method in conjunction with team reports or projects. It was also noted that the five methods could be used in conjunction with various types of teaching methodologies, e.g., the lecture-simulation gaming teaching methodology or the case-study simulation gaming teaching methodology. (3, p. 20)

USAGE

Instructors started using the new teaching technique in a Basic Marketing course. The marketing instructors then asked Xavier University’s Academic Council to approve a Marketing Simulation course designed for seniors. This course was approved by the Academic Council.

Presently, the computer simulation gaming teaching methodology is being used in Broadcast Management, History, Management, and Marketing. Also, instructors have expressed a desire to incorporate this teaching methodology in Accounting and Economics.

RESULTS

Results of using the computer simulation gaming technique at Xavier have shown that students preferred the lecture-computer simulation teaching methodology, they exhibited higher interest, they were motivated to a higher extent, and the students believed they learned more using this technique. (4)

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