# **Insights into Experiential Pedagogy, Volume 6, 1979**

A GUIDE TO THE SUCCESSFUL USE OF BUSINESS SIMULATION GAMES

James T. Low, Wayne State University

## INTRODUCTION

Through the years, business simulation games have become more widely used in the classroom. However, the use of simulation games can have several pitfalls for the uninformed instructor. The factors explained below should be considered before introducing a simulation game into a course if the experience is to be successful.

## INTEGRATION OF THE GAME INTO THE COURSE

A simulation game used in a specific course must be appropriate in terms of the subject matter of the game and in terms of the level of difficulty it presents to the students.

Evaluation of the suitability of a specific simulation game for use in a course should take into account the quality level of the game itself. One indication of quality is the evident care with which the game was designed. The authors of a simulation game should provide complete documentation regarding the following features of the game: (1) Recommended methods of implementing the game, (2) An explanation of the internal workings of the same, (3) A list of parameters which the instructor may change, (4) Any sets of options which are provided for the instructor, and (5) Suggestions for any changes which the instructor may wish to make during the course of the game play.

Another indication of quality is the care with which student materials for the game are prepared, These should provide a clear and thorough explanation of the game environment. For business games which are computerized, indications of quality include: (1) Provisions for straight-forward and easy input Lo the game by the administrator, (2) Complete documentation of the computer program with program listings, symbol tables, and flowcharts, (3) Numerous comment cards throughout the program to explain what the program does at each stage, and (4) Well-designed printout of student reports.

An instructor planning to introduce a business simulation game into a course should first acquire a thorough knowledge of the game by playing it as if he were both a student participant in the game, and also the game administrator.

Planning to use a simulation game requires an evaluation of the time, effort, and money which must be committed if the same is to be used. The instructor must take the time and effort to learn the game and to set up a method of administering the game. The cost of materials for the game, hiring an administrator, and any computer time costs should also be taken into account.

The instructor must also consider the best method of grading students in a course which includes a simulation game. The importance of the game in determining the final course grade should be related to the rigor of the same and the amount of work required of the students. It must be decided whether competitive standing at the end of the game is to be the sole criterion for that part of the course grade determined by the

game, or whether additional criteria related to the game will be used. For games requiring student participation in teams, a team member rating form can be used to obtain feedback on the amount and quality of effort put in by individual team members.

In addition, the instructor can require each student to write an individual paper analyzing the team's strategy for the game. Another method of determining the same information is to have each team keep a log of their decisions throughout the game, explaining their current strategies. At the end of the game, the teams exchange logs and results for each of the game plays. Each student then writes a paper in which he or she presents an analysis of the other team's performance.

## REQUIREMENTS FOR USING THE GAME

Use of a simulation game will require the use of class time to explain the game to the students, and to provide timely feedback. Even if the instructor does not serve as the game administrator, he or she must be able to explain the game and should be able to take over the administrator's function in an emergency. An effective method for helping students to learn the mechanical workings of the game and to understand the games environment is to have trial run at the start of the game.

The instructor should be aware that a great deal of time may be required to get a new simulation same operating properly on the computer. With most games, everything will go smoothly, but he or she should be prepared for just the opposite. Last-minute installation should be avoided at all costs.

If the instructor must assume the game administrator's duties, he should be prepared to spend the time needed to do a careful job. The exact procedure to be followed by the game administrator should be carefully written out. Relatively high turnover is usual when student assistants are used as administrators, so that a written procedure is essential for a smooth transition from one administrator to another.

## PROBLEMS WITH FREQUENT USE OF THE GAME

If a simulation game is to be used more than once a year, the instructor must be aware of the problem of pass-through knowledge about the game. Students who have already played the game will often tell other students everything they know about the best strategies to employ. If the game rewards any specific strategies more than it should, this knowledge will quickly spread. One way to deal with this is to change the starting conditions of the game so that students can no longer gain by an unduly rewarded strategy. Another way is to change the parameters of the game from term to term. However, caution is in order here. Changes to the operating parameters of a game can have unexpected and far-reaching consequences. Changes should be made in rather small increments to avoid problems. A careful consideration of the above factors should greatly help in successfully using simulation games.