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MINIMIZING STARTUP ANXIETY: CASE STUDIES OF NO SIMULATION EXPERIENCES

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ABSTRACT

Many simulation administrators have observed that student teams exhibit a high degree of anxiety prior to the startup of the game experience. Although some anxiety (or stress) is probably productive for the startup situation (Benson and Allen, 1980), excessive tension can distract student teams from their real mission (running their company successfully) and impedes their ability to do any proactive planning. The symptoms range from incomplete plans prior to the startup to excessive difficulty in making decisions. In addition, simulation anxiety probably is one factor that inhibits more universal use of simulation games since many professors have difficulty in handling this aspect of student behavior. This paper reports two approaches to simulation startup that appear to reduce startup anxiety use of a case-simulation package, and integration of a simulation into the total body of knowledge being presented.

USING A CASE-SIMULATION PACKAGE

Airline (Smith and Goden, 1987) is a strategic management simulation/case study of the commuter regional airline business. The case study portion of the players manual presents a real airline including the history of the industry and the history of the company; of particular importance is that the company that is presented in the case is in the takeover condition of the simulation scenario. Students are asked to present a solution to the case in individual written reports to the instructor. This exercise occurs early in the semester and prior to team formation.

Thus, individual students enter the simulation process with some important startup activities already completed:

1. They have a vocabulary for the industry. (in this case they understand the unique language of productivity and profitability in the airline industry).
2. They have developed some idea of current issues facing the industry.
3. They understand the critical events that have led to changes in the past.
4. They have already formulated (individually) a turnaround strategy.

The transition to the simulation environment is made when teams are formed.

At the initial briefing, this movement from individual to group decision-making needs to be explicitly addressed since individual team members may have developed different strategies while solving the case. For example, students may be instructed to spend some time discussing their individual case results so that the decision premises are shared and group evaluation can begin to take place. The briefing then focuses on the specifics of the decisions (e.g.

what numbers to enter on the decision form, how to check for errors, when cash is credited, how loans are issued, stock sales take place and so on). In addition, students are instructed on the determination of maximum utilization of their aircraft (capacity utilization) so they can make asset lease or purchase decisions.

This briefing is shorter than traditional strategy game introductions since students already have a vocabulary for the simulation, some understanding of how to interpret the sample reports, and a tentative solution to the management problem being presented by the simulation. The lessened classroom tension is reflected in a general absence of questions, shorter first quarter decision time, more complete and workable plans, and fewer startup errors. The latter three issues deserve some extra attention.

The startup decision time for most strategy simulation is disproportionately longer than subsequent decision periods due to the decision-making under uncertainty factor. Although many business policy classes anticipate this lengthy startup and reduce other workloads during this period of time, some of the startup time is non-productive and anxiety-induced. The case-simulation experience reduces some of the productivity loss by increasing the certainty of the decision environment through familiarity with the industry.

A second issue mentioned above is the completeness and workability of the strategic plans. An informal review of the strategic plans of five classes representing 46 teams suggests that most students were able to articulate missions, generate measurable goals and objectives with strategies for achieving them with little revision necessary during the audit period. Many students articulated diversification strategies; this phenomenon may be due to the greater understanding of the industry or the possibility that students were able to understand the implications of the incidents as they read the players manual. Either alternative would suggest that there was less uncertainty about the play of the game.

Finally, there appear to be fewer startup errors. Historically, the first decision period of a simulation (regardless of the class level) is fraught with incidences of missing decision forms, failure to order raw materials (in Airline, failure to put aircraft in service). These mistakes are generally acts of omission rather than commission and are probably due to information overload that increases the anxiety level of team members. The reduced error rate is not directly attributable to the content of the case-simulation experience but may reflect the calmer ambience being reported here.

The case-simulation package appears to have some desirable attributes that assist in simulation startups by reducing the classroom anxiety level. One can simulate the characteristics of this methodology by assigning an industry/product class to a genetic simulation and have the students conduct an industry study. Although they lack the experiential exercise

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of solving a case in the simulation takeover condition, they still develop a vocabulary and a sense of the industry relationships. For example, the authors have used Micromatic (Scott and Strickland, 1985) and directed the students to compete in an industry of countertop appliances. Another attempt to reduce classroom anxiety for simulation startup has been the total integration into the classroom vocabulary. The case below reports this approach.

INTRODUCING THE SIMULATION AS PART OF THE CLASS GESTALT

A second approach to reducing startup anxiety is to make the simulation a familiar part of the classroom activity by referring to the scenario and the play of the simulation as illustrations of various management topics. This approach was used in a Principles of Management class with Entrepreneur as the simulation. Continual reference was made to the simulation scenario by comments such as "When you open your retail operation in the simulation, you will need to . . . The better students read the manual before it was assigned so that they could participate in the class examples. The lectures save a constant, general message to keep the simulation in mind. When a prebriefing simulation quiz was administered as part of a regular exam, students indicated their familiarity with the game by:

1. Performing very well on that portion of the exam.
2. Referring to their (Entrepreneur simulation) store as if they were already operating it.

Briefing the simulation was smooth and consisted of reviewing the eleven decisions that were required for each decision period. Many students had clearly been thinking about the simulation as evidenced by individual attempts to name the business or select a product line (two decisions in the startup of the simulation). The initial decision periods in two sections went smoothly with students asking few questions of the administrator except a recapitulation of materials to be submitted. There were no student errors made (e.g. failure to order inventory, price goods).

This example is not specific to one simulation but can be used as a format in any simulation classroom. The features are the continued salience of the impending simulation in a non-threatening manner and the internalization of the simulation scenario prior to the startup period.

IMPLICATIONS

One weakness of reporting observations in a non-experimental manner is that they may not be generalizable to other instructors or all simulations. However, startup anxiety is a significant issue that keeps some instructors from repeated use of a simulation and causes simulation users to have their own set of anxieties during the startup period. The experiences reported here need to be observed in a controlled, experimental design to see if there is a significant difference in classroom behavior based on differences in pretreatment. A unique feature of such an experiment is that the laboratory is the field.

A second issue of concern is the determination of a productive level of anxiety. The literature suggests that some stress and anxiety is beneficial for productivity and decision-making. Thus, one would not want to create a completely benevolent simulation environment. Thus, a second experiment might be developed that manipulated anxiety level and its association with dysfunctional behaviors. Such experimentation may lead to some additions to the guidelines that current simulation administrators use in presenting and briefing simulation games.

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