Developments in Business Simulation & Experiential Exercises, Volume 12, 1985
GENERAL MANAGEMENT POLICY SIMULATIONS: WHICH GAMES ARE POPULAR,
AND WHY DO PROFESSORS STOP USING GAMES?

Michael J. Keeffe, University of Arkansas
Carol J. Cozan, University of Guam

ABSTRACT

One-hundred professors who are members of the Academy of Management policy division were surveyed as to the use of simulations in the policy/strategy course. The intent of the survey was to determine the extent of usage, the names of the simulations used, simulation relationship to other instructional methods and the percent of final grade attributable to simulation play. Current users were asked if they had stopped using a specific simulation in the past and the reason(s) why. Sixty-four valid responses were received and tabulated. Slightly more than 48% of policy/strategy professors currently use games and they consume approximately 25% of the time spent in the course, slightly behind cases. Almost all require the decisions to be made by student groups.

INTRODUCTION

Hegarty [4], at the Academy of Management communicated a survey concerning the use of “general management” computer simulations in the policy/strategy course. His results showed that less than 50% of policy/strategy professors use computer simulations as a course component. Wren, Atherton, and Michaelson [15], claimed that younger, more junior, and less experienced faculty rely more heavily on experimental exercises (simulations) to add practical instructional methods and the percent of final grade attributable to simulation play. Current users were asked if they had stopped using a specific simulation in the past and the reason(s) why. Sixty-four valid responses were received and tabulated. Slightly more than 48% of policy/strategy professors currently use games and they consume approximately 25% of the time spent in the course, slightly behind cases. Almost all require the decisions to be made by student groups.

Another body of literature indicates a negative preference for simulations by players and administrators and questions the value of simulation games as a component of the policy class. Rowland and Gardener [10] stated that course evaluations were higher when computer simulations were not used in the course. A survey by Summers and Boyd [2] found that both business executives and professors rated case analysis and lecture/discussion as the most popular learning methods. Professors rated simulations in third place ahead of other experimental exercises while business executives rated experimental exercises third and simulations last. Richards [9] found simulations to be appropriate in teaching functional integration, but less effective in the structural interface in the policy/strategy course. A critique of simulation literature by Greenlaw [3] concluded that the effort and expenditures invested in the development of business games has not been justified by the knowledge of what computer simulations teach, if anything.

Very few experimental studies have attempted to ascertain the learning effects of simulation use. Strother [13], in an attempt to address some of these issues, the purpose of this paper is four-fold. First, what percentage of policy professors currently use simulations in their courses? Second, which simulations seem to be the most popular? Third, why have simulations been dropped as part of the course requirement by professors who have previously utilized simulations? Finally, some future research endeavors are outlined.
SURVEY METHODOLOGY

One-hundred professors who are voting members of the Academy of Management teaching the policy course were randomly sampled. The criterion for inclusion in the sample was as follows:

1. Must be a faculty member at a four-year institution, preferably a university, and teaching the business policy/strategy course.
2. No more than two faculty members per institution was permitted. (Although the cover letter was written to a specific faculty member, it asked that the survey be passed along to a colleague if the original respondent did not meet the criteria.)
3. In order to prevent a state or regional bias, no more than 12 faculty members per state was allowed. (40 states were represented in the sample pool.)

The survey participants were mailed a personalized cover letter explaining the intent of the survey along with an eight-item, open-ended, general survey questionnaire. Specifically, the survey instrument addressed the use of simulations as a course component, the prior experiences of professors who have used simulations and decided not to integrate them into the policy course, the names of the games that are currently used, and the relationships between various pedagogical techniques common to the business policy class. Sixty-four responses were received and tabulated. The data were analyzed using conventional statistical methods.

RESULTS OF THE SURVEY

Of the 64 returned questionnaires, 48.43% of the respondents use "general management" simulations while DISCUSSION 51.57% do not. Almost 16% of the respondent professors had never used a simulation game in the policy/strategy course. (See TABLE I)

In terms of popularity, over 29% of policy/strategy professors use The Executive Game by Henshaw and Jackson and 20% use The Executive Simulation by Keys and Leftwich. Tempomatic, by Scott and Strickland, follows in third place with a frequency of 13%. The Executive Game and The Executive Simulation have been on the market longer than most games refuting the myth that newer is necessarily synonymous with better. These games, in comparison with other simulations, are simpler in the demands they place on the student and the professor. Games that require more decisions by the students and have more complexity such as The Business Policy and Strategy Game (Bates and Eldridge) and Business
Developments in Business Simulation & Experiential Exercises, Volume 12, 1985

Management Laboratory (Jensen and Charington), were both used by less than 7% of policy professors. Since Raia [7] contended that simple games provided as much benefit to the students as more complex simulations, any game chosen by policy professors should assist in accomplishing course and learning objectives.

Of policy professors who do not currently use computer simulation games as a course component, almost 70% had used simulations from the business policy course requirements only generalization that can be made is that many of the simulations dropped are more complex and require a larger computer related problems were stated. Here, computer operational problems and access for students were most frequently listed. Comments concerning the realism aspect of simulations and the appropriateness of simulations in the teaching of business policy/strategy concepts and facts were placed in the “unrealistic” category. Many felt that simulations were just “number crunching” and did not accurately portray the strategic management process. Comparing the behavior of simulations to commodity industries, the remark was made that game results tend to be too volatile and difficult to predict from period to period, therefore encouraging decisions to be short-range instead of long-range. A few professors claimed that simulations are too micro-oriented, while another stated that all the students learned was how to play a game.

In relating specific simulations to each of the categories, no commonality or pattern was found. Games mentioned in one category were also mentioned in other categories with no difference in frequency. It was interesting to note that of the two most popular games used in the policy/strategy course only one professor mentioned dropping one of the games because it was too much of an administrative burden. The only generalization that can be made is that many of the simulations dropped are more complex and require a larger number of decisions per period of play.

Many of the professors who indicated that they had dropped simulations from the business policy course requirements stated that their simulation experiences were in the mid-1960’s. Many could not remember the names of the simulations they had tried. Considering the changes in computer technology and the development and refinement of various simulations, one has to wonder if a dissatisfying experience with a simulation has altered the perception of these individuals in relation to all simulations.

Based on the observations of the authors and the many comments made on the survey, apparently two opposite forces are debating the value of simulations. Many professors hailed simulations as a technique that when used with other methods, creates a more comprehensive policy/strategy environment. Some had stated that they have used simulations for more than 15 years. Some universities have added a one-hour required game course that is part of the policy/strategy capstone sequence. Other professors who totally rejected simulations stated that games should not be a policy course component since games were “not a creative challenge” and “do not portray a real strategic management process.”

RESEARCH IMPLICATIONS

The results of the survey seem to suggest that many basic questions remain unresolved and require further investigation. In determining the extent of simulation usage, it would be interesting to longitudinally observe the demographic characteristics of policy/strategy professors who use simulations. Data of this type could provide a profile of professors and institutions who use simulations. There could be biases for or against simulations based on background of the professor, the type and classification of institution, region of the country, and relationship of the policy/strategy course to the rest of the business curriculum.

As far as the popularity of “general management” simulations in the policy/strategy classroom, the reasons why some games are more preferred than others and the extent of usage of these simulations would be of interest to prospective game users or others who are thinking of changing simulations. Asking current users what they would like to see included or left out of simulations would be of assistance to game designers. Surveying non-users as to what factors would cause them to adopt simulations might indicate specific refinements to current or proposed games, or new ways of marketing these games. A comparison of currently used “general management” simulations across a number of factors such as complexity, number of decisions, number or products, etc. may assist a professor in selecting which simulation may best serve overall needs.

Another issue of concern is the learning value of general management simulations. Although this area was not specifically addressed in this survey, the issue needs more investigation. Comparing both perceptual and experimental studies may assist professors in determining which teaching methods are best for specific learning objectives and help in the structuring of the policy course.

It is still the opinion of the authors that the reasons for dropping simulations can be clustered and that specific simulations or characteristics of simulations will be highly correlated to these clusters. It is also possible that there may be some demographic or background characteristic correlated to non-use. A more extensive survey that could erase the stigma of professors perceiving that they were naming “faculty products” may yield 3 or 4 groupings with high association. Peripheral information on the professor, the structure of the policy/strategy class, and the relationships of pedagogical techniques to class objectives gathered with reasons for discontinuing simulations might provide insights beyond just negative game perceptions.

REFERENCES


