

Developments in Business Simulation & Experiential Exercises, Volume 15, 1988

THE USE OF JOURNALS IN MANAGEMENT SIMULATIONS: A LITERATURE REVIEW AND AN ABSEL RESPONSE

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ABSTRACT

Journals, also called notebooks or log books, are frequently used in conjunction with computerized business simulations. The rationale for using notebooks seems to be a belief that students will gain more appreciation and understanding of the simulation *if* notebooks are part of the simulation process. This paper examines some of the pertinent literature on notebook use, which comes principally from the fields of education and literature and also reports the results of a survey of ABSEL participants (of the 1987 Conference) regarding their knowledge and use of notebooks in conjunction with computerized management simulations.

INTRODUCTION

At the 1987 ABSEL Conference (Hilton Head, S. Carolina), a paper was presented by the present authors which demonstrated a way for students to keep 'better' notebooks or journals of their simulation decisions through the use of a computerized, menu driven input and data-base management program. In thinking about and researching the paper, the authors assumed certain favorable features of notebook use to be true -- or at least standard practice. First, that notebooks were in and of themselves an enhancement to the learning process. Second, that many instructors used notebooks as part of the simulation process. Third, that notebooks were generally collected and graded by the instructors. Fourth, that notebooks *were* generally kept by teams, rather than by individual students. The authors had additional assumptions, but the above list can be said to constitute the major ones.

These assumptions, of course, are precisely that -- assumptions. However, since the authors were building, using and, indeed, promoting a 'better way for students to keep notebooks, one must ask the more fundamental question: Are notebooks really useful?

It was decided to approach this Question in two ways: First, attempt a literature search on notebook use, in the field of management, as well as other fields. Secondly, to survey ABSEL members to ascertain their opinions on notebook use. It should be noted in the latter approach that notebook use is confined only to the use of notebooks in conjunction with management simulations. For example, opinions were not surveyed regarding the use, or possible use, of notebooks in management courses which did not employ simulations.

A BRIEF REVIEW OF THE LITERATURE

An extensive literature search was carried out using the ERIC Database.¹ Ninety-seven references were discovered. As anticipated, most of the articles concerned the use of journals as a pedagogical aid or supplement to teaching a particular subject area. The most common area was in elementary and secondary education, where students preparing to be grammar or high school teachers (n=43), while the next most frequently found theme had to do with the use of journals in college composition classes (n=29). Other interesting academic areas where the use of journal was recommended were: in Sociology, where the author relates how students are required to formulate journal entries based on an issue or questions that they raise for themselves (Roth, 1985); in Mathematics, where Nahrgang and Peterson (1986), propose that writing has an important place in mathematics classes and can be used to enhance learning by helping students organize their thoughts. In Engineering, it is claimed that students who used journals benefited because the journals served as good problem solving tools and forums for personal comments, while faculty benefited because the journals could be used to help in student evaluations (Selfi and Arbabi, 1983). The field of Medicine reported several studies where journals were believed to be invaluable teaching aids (Greenberg and Jewett, 1983; Soler, et al., 1981; Garbutt, et al., 1981; and DaRosa and Folse, 1981). The last study cites some specific objectives for the journal, which may be relevant to management professors interested in using journals, such as: (1) to reinforce students habits to systematically record relevant data concerning patients for purposes of future recall and reference; (2) to serve as a stimulus for discussion in lecture rounds, and; (3) to provide a medium for collecting data on the students and their daily activities. In Geology, students are required to keep a journal of their daily observations, impressions and questions which come to mind about the Earth (Cropp, 1980). Finally, the only management reference was to an article by Kruger and May (1986), which describes two reinforcement techniques designed to ensure transfer of learning from management training courses to the workplace. One was the journal, which was used to capture management insights occurring during training. The authors believe that the journal *was* an effective way of sustaining what went on in the classroom. (It should be noted that the lack of articles in this area does not signify that management instructors do not use notebooks; it is either that ERIC was unable to retrieve articles in this area or that nothing has been written directly on the subject).

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NOTEBOOKS, LOG BOOKS, JOURNALS: A BABYLON OF TERMS

A search of the literature indicated that while the terms notebook, journal and log were commonly used words to describe what the authors call "the notebook," journal was the most frequently used term in the literature. Hence, the term journal will be used for the remainder of this article.

Surprisingly, there seems to be no specific definition as to precisely what is meant by a journal, although one could say that there seemed to be tacit agreement among the authors, since no controversy was found as to whether one definition or concept was better than another. Apparently, the definition or concept is somewhat constrained by the nature of the subject matter, as well as the instructor's objectives. Despite the lack of a definition, what might be called a set of 'common' objectives attributed to journal usage can be stated. These are:

- a. think more clearly about what they learn;
- b. do research on a particular issue;
- c. serve as a way to recall what was learned (but which seems to have been forgotten);
- d. practice skills which were learned theoretically;
- e. creative thinking;
- f. practice writing skills.

A set of what might be termed 'practical' objectives, are:

- a. helping the teacher evaluate students (for example, when exams or tests are difficult to use);
- b. to have ones peers read and comment on the journal;
- c. Forces students to pay attention in class if daily journals are kept;
- d. journals appear to be non-threatening;
- e. journals help bring out the subconscious (if that's ones purpose);
- f. forces students to learn discipline;
- g. maintains students interest throughout a course;
- h. serve as a stimulus for future class discussions on that particular topic;
- i. forces the student to ask questions about the subject matter which he/she would not otherwise raise;
- j. help determine their career choice (presumably, having to keep the journal Forces to student to consider whether he or she is in the right career area).

RESEARCH ON JOURNALS

Interestingly, few of the references found were of a research orientation. Most of the studies Found can be classified as post hoc studies, one-shot cases studies or preexperimental designs, although no author laid claim to an experimental design. This means that the researchers did not make use of randomization and/or control groups. Hence, one might describe the literature as normative. Unfortunately, the lack of sound and rigorous research studies leaves the value of journals in doubt. Despite this lack, many fields ardently endorse the use of journals as a learning enhancement.

ABSEL RESPONDENTS ON JOURNAL USE

Respondent Profile

Of the approximately 150 attendees at the 1987 ABSEL Conference (Hilton Head, S. Carolina), 46 filled out and returned the questionnaire. This represents a 31% response rate.

Sixty-nine percent of the respondents had either a PhD or DBA. The two most frequently taught courses were Business Policy (n = 27), and Management (n = 28). Of the 27 respondents who taught Business Policy, 24 said that they are (or have used) using a simulation and of these 24, 11 said that they use (or have used) journals; while 20 of the 28 persons who taught Management said that they are (or have used) using a simulation and of these 20, 9 said that they used a journal with the simulation.

In part, the above does nothing more than support the kinds of people who belong to ABSEL. Obviously, many ABSELErs use simulations and teach Business Policy or general management-type courses. What is somewhat surprising is that slightly less than half of the Instructors who use simulations do NOT use journals as part of the simulation pedagogy.

Most respondents have apparently been using simulations for same time as 44% said that they have been using simulations For at least 10 years. However, it is not known whether these long-time simulation users are the principle users of journals or not, is there was a paucity of data points hence no correlation analysis was meaningful. What is interesting is that 28 respondents apparently have never used journals or have dropped using them. Unfortunately, the survey did not distinguish between instructors who dropped journal use and those who have simply never used them. However, the non-journal group was asked to state why they did not use journals (or used them and dropped them). The following lists the reasons (in rank order):

1. no reasons cited (n=9)
2. never thought of using a journal (n=8)
3. inappropriate to subject matter (n=4)
4. class size too large (n=4)
5. did not fit grading policy (n=3)

It is unfortunate that people responding to the 'no reasons given' category did not fill in any specific reason(s) why they did not use journals, so it cannot be determined why they did not -- perhaps all the above reasons contributed to their decisions or perhaps the reasons is difficult to define. In designing the survey, For example, it was difficult to come up with a listing potential reasons for not using journals as an adjunct to a simulation.

Journal Use

Most of the instructors (80%) using journals to accompany their simulations tended to use journals in more than one course (presumably, with a simulation -- although this was not specifically stated).

Respondents were about equally divided in terms of whether journals were used by individual students (47%) or by student teams (53%). As anticipated, 75% of the respondents stated that they collected the journals. Of these, most respondents (63%)

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said that the journals accounted for approximately 10% of the course grade. In terms of grading, the following reasons were listed as Important (in rank order):

1. understanding of variables;
2. development of overall strategy;
3. thoroughness of documentation;
4. use of quantitative tools;
5. writing mechanics.

The respondents were also asked about the type(s) of instructions they gave. Most instructors said that they gave instructions to the students (90%) on how to maintain the journals, and of these, 62% said that the instructions were both written and verbal, as opposed to verbal instructions. No one gave just written instructions.

As the literature review indicated, each field seems to have both a common set of reasons for using journals, as well as some specific reasons, which relate to that field. Hence, a question was asked regarding the reason or reasons -- in which case respondents were asked to rank order -- for using journals. The following are a list of reasons, in order of importance:

1. forces the student to think strategically;
2. forces the student to rationalize his/her decisions;
3. forces the student to take the simulation more seriously;
4. forces the students to express themselves in writing;
5. forces the students to do outside research (no fill in responses were given).

Finally, a question was asked regarding possible problems in using journals. The following lists the reason respondents gave in order:

1. evaluation of journals is difficult;
2. students do not take the journal seriously;
3. too many journals (meaning to evaluate);
4. do not really help in learning (no others were given).

CONCLUSION

Generally, the literature suggests that journals provide the students with several educational benefits. A principal benefit mentioned often had to do with the idea that journals helped the student learn to express him/herself better, although this benefit was found in the areas of Literature, Composition, and Psychology and noted by a several articles in the area of Elementary and Secondary Education. Unfortunately, the authors found little experimental research to corroborate these benefits. However, the reader should note the limitations of the literature search (cited previously). What seems clear is that journal usage is a popular pedagogical sidekick in many fields. As noted earlier, only one management study was found, which mentioned journal usage, although this study did not pertain to simulations.

It remains clear that journal use, at least as a supplement to simulation use, has face validity in terms of various learning benefits. On the other hand, as the survey pointed out, journal use is not without its problems, the two principal ones being large class size and the difficulty in establishing

a criteria by which to evaluate journal. This last difficulty also relates to the issue of what purpose one expects to serve. In other words, can the simple, but vague guideline of: 'the reasons and records of your decisions' be made more specific and meaningful. The authors hope to make this the subject of further research and study.

NOTES

¹ERIC is a standard database for literature in the field of the social sciences literature. ERIC provides citations to journal articles, selected books, and unpublished materials such as project and technical reports, curriculum guides, speeches and conference papers, and research findings in the field of education. The database covers 1966 to the present. Search Strategy: student - occurring with the words journal or journals or log or logo or logbook or logbooks - searched against document titles and subject identifier. Copies of this search are available to interested parties upon request.

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