AN EXPERIENTIAL-COGNITIVE METHODOLOGY IN THE FIRST COURSE IN MANAGEMENT: SOME PRELIMINARY RESULTS<sup>1</sup>

#### J. Duane Hoover Carlton J. Whitehead

#### Introduction

The first course in management, commonly called the "Principles Course," exists in nearly all schools with programs in business. As many of its teachers will attest, it is one of the most difficult courses to design and to teach effectively. It is difficult to "package" the complex and multidisciplinary body of knowledge of management into a one-semester course. Students are forced to learn the concepts, terminology, and perspectives of managerial action simultaneously. Furthermore, some of the analytical perspectives introduced in the first course, such as systems thinking, are new and alien to the beginning student.

The first course in management is usually a required core course, which often leads to "monster" classes, a high percentage of non- management majors, and pervasive problems of student motivation and interest. Furthermore, the first course in management is usually a "service course" to the rest of the Campus, and many first-course students lack even minimal exposure to organizational and business topics.

As a result of these problems, the first course is frequently avoided by the faculty. However, we feel that while the first course is a challenging one, it can also be a highly rewarding endeavor. The remainder of the paper will present our teaching methodology and some experimental results.

### **Experiential Learning**

We are engaged in a continuing process of examining and developing experiential learning methodologies in the College of Business Administration at Texas Tech University. Much of our work has focused upon the first course in management.

There are many approaches to experiential learning, but it can be defined most simply as "learning by doing". The following specific definition attempts to describe experiential learning as an ongoing process.

Experiential learning exists when a personally responsible participant (s) cognitively, affectively, and behaviorally processes knowledge, skills, and/or attitudes in a learning situation characterized by a high level of active involvement.

This positive definition introduces the prescriptive role of the learning individual--one of autonomy and self-direction. In some usages, the term experiential learning is often associated with the better utilization of the full human potential to learn. It is this "full potential to learn" which has led us into

<sup>&</sup>lt;sup>1</sup> The research leading to this paper was made possible by a grant to the first author from the Office of Applied Business Research and Special Programs, College of Business Administration, Texas Tech University.

the use of experiential techniques in the first course in management.

#### Our Lecture and Lab Approach

The design and teaching methodology used for the basic course in management constitutes a resource allocation problem. Since fulltime faculty are used to staff the course, sections with many students are necessary. Because of room-size and communication/coordination problems, sections with approximately 200 persons seems to achieve the best results, given our resource limitations. We have experimented with sections as large as 450; however, two sections of 200 persons each plus other small sections seems more suited for our purposes.

Our approach consists of a combination of rather traditional lecture sections supplemented by experiential laboratory education. Students in large lecture sessions are assigned to laboratories ranging from 15 to 25 people. Lecture sections meet twice per week, while laboratory sections meet once. The lab classes are designed around a series of structured experiential exercises in order that affective and behavioral skills may be developed and cognitive concepts from lecture may be reinforced.

The success of this approach is contingent upon the careful selection of teaching assistants (TA's) because they act as facilitators for the exercises to be conducted in labs. Successful TA's must possess a tolerance for functioning in uncertain environments. Although the structured experiential exercises are carefully planned and conducted, the students' behavioral and emotional responses to the exercises cannot be "programmed". Considerable adaptive behavior is required for the experiential facilitator, especially when interpreting and discussing exercises.

Since the facilitating skills of the instructor will be influential in determining the success of the exercise, we feel it necessary to work intimately with the teaching assistants. At the beginning of the week, with all the TA's attending, Professor Hoover models both the conduct of the exercise and the subsequent discussion. After the lab class, we meet briefly with the TA's to discuss the behavior which Professor Hoover has just modeled. Our experience to date indicates that teaching assistants can develop considerable facility in conducting these experiential labs. Additionally, TA's gain confidence in what these labs can do, they generally become much more committed and involved in the process. As a matter of fact, we are more confident in their capacity to handle the behavioral labs than in processing the cognitive materials (the traditional TA job).

Our confidence in the cognitive-experiential approach has increased substantially as a consequence of observing the learning reactions of the students. We feel that we have achieved substantial behavioral and affective results in the lab by giving the student a cognitive background for interpreting these experiences. For example, it is one thing to talk about interpersonal and organizational communication and quite another to run an exercise where the person directly experiences some of these problems. The level of insight and personal impact is tremendously different. Quite frequently our students will reflect insights gained from exercises in class discussion and questions, and vice versa in labs.

For this approach to be successful, the laboratories and lectures need to be coordinated. Again, the real key to success here is the teaching assistants. Their confidence, skill, and level of commitment is more readily apparent in the experiential facilitator role than in the traditional cognitive class role. The students are very sensitive to the skill and commitment of the teaching assistant. If the TA does not adapt rapidly to this teaching role, he or she (we are presently using two males and two females as TA's) can essentially negate this combination of teaching technology. Thus, the role of Professor as a designer and manager of a learning experience has to be complemented by competent, committed teaching assistants. In that regard, we have been very fortunate in the last two years by selecting carefully and working closely with our TA's.

In the following section, preliminary results from research with experiential learning methodology in the basic management class is discussed.

### Some Preliminary Results

We are conducting several experiments in experiential learning, with our primary goal being to test the relative efficacy of the experiential format. At this time, we have gathered only some preliminary data. However, these data support many of our "prejudices" about the experiential approach, and we are hopeful that our subsequent research will verify and reinforce our preliminary conclusions. Most of our results to date come from an 18-item satisfaction measure. This instrument was developed to measure the students satisfaction with his current class as compared with previous business classes. Each of the items is presented as a continuum on a Likert-type scale which ranges from 1 to 7. This satisfaction measure was given before and after the class on a pretest and posttest basis, and was evaluated by analyzing the pretest and post-test means using a t-test.

These analysis produced some interesting results in terms of two experimental classifications of labs which we created. We divided the labs for one of our monster sections of the Introduction to Management course into 6 "cognitive" labs and 6 "experiential" labs. In the cognitive labs the students engaged in reviews of the textbook chapters and lecture notes, and emphasized the intellectual/knowledge dimensions of the course. In the experiential labs, the subjects participated in various kinds of structured experiential exercises, which were tied into the relevant concepts and topics of the lecture sessions. Both labs received a test review session prior to each of the course exams. Each TA had an equal number of labs and students in both experimental conditions. All students attended the mass lecture sessions.

The satisfaction measures were evaluated with the t-test using a .05 significance level. With these criteria, the cognitive labs increased their mean scores on two of the 18 times, and decreased at a significant level on 8 of the items. Conversely, the experiential labs mean scores showed significant increases on four of the 18 items and no significant decreases. While this indicated a generally negative experience for the cognitive lab members, it must be remembered that they, to some extent, were comparing themselves to the experiential lab members. These comparisons situations were minimized as much as possible by the experiential design.

The summary of these results can be found in the accompanying Table 1. Items 1&2 produced positive change at a significant level for both experimental groups, indicating that all students felt that their experience in the course had helped to develop their managerial skills (Item 1) and that their labs had assisted in integrating the course material (Item 2). This last finding is especially interesting, considering the extreme differences between the two types of lab learning environments. Both groups indicated, at a high level of significance, that our management course, compared to their previous business administration courses, had done a significantly better job of integrating labs with lectures.

The next 7 items (Items 3-9) indicate the negative evaluation of our management course when compared to previous business administration courses by the cognitive lab students. The students in our course who were assigned to the cognitive lab evaluated our course as being lower in terms of interest, satisfaction, information, challenge, and initiative required. Especially interesting is Item #7, which indicates that these students felt less active and less involved in this course than in their previous business administration courses. In summary, as indicated by Item #9, these students were not particularly glad that they had taken the course.

Item 10 is probably the most interesting from the satisfaction measure, since it indicated a significant level of change by both experimental groups, but in opposite directions. Item 10 indicates that the cognitive lab members felt that they could not express themselves freely and easily in their labs. On the other hand, the experiential lab members felt significantly more satisfied with their ability to express themselves. This single result probably summarizes the impact of the experiential as opposed to the cognitive labs.

Finally, Item 11 (like Items 1, 2, and 10) indicates the satisfaction of the experiential lab members, in that they felt the course required them to exercise more independent judgement in evaluating textbook theories than had previous courses. While the experiential labs went up in only four of the 18 measures, it is important to note that they went down, or evaluated their experience negatively, on none of the items. This contrasts quite strongly with the cognitive labs' evaluations of the satisfaction measures, which went down, or were negative, on eight of the 18 measures.

While these results indicate that satisfaction varied considerably in the groupings they really do not speak to the central purpose of a college course, which is to produce learning/knowledge acquisition/skill development in the student. To this end, it is especially interesting to note that the cognitive students and experiential students performed quite closely on examination scores and on a standardized quiz on management topics. In other words, the cognitive behavior and knowledge demonstrated through the testing material was essentially the same for both experimental groups. This leads to the rather promising conclusion that experiential learning, through the use of labs in the first course in management, produces significantly higher levels of satisfaction and student involvement, without sacrificing knowledge acquisition or mastery of the cognitive content of the course. This would seem to indicate that we, as management educators, can enrich our courses for the student, and for ourselves, by attempting to integrate the behavioral and affective dimensions of learning with its cognitive counterparts.

TABLE 1 **Summary of Satisfaction Measure-Pretest** to Posttest Comparisons by Item<sup>2</sup>

	<u>Item</u>	Direction of Change	<u>Group</u>	Significance Level
1.	Helped to develop managerial	Positive	Cognitive	.05
	skills	Positive	Experiential	.05
2.	Labs assisted in integrating course	Positive	Cognitive	.01
	material	Positive	Experiential	.01
3.	Interesting	Negative	Cognitive	.01
4.	Satisfying	Negative	Cognitive	.01
5.	Informative	Negative	Cognitive	.01
6.	I felt the course challenged me	Negative	Cognitive	.01
7.	I felt active & "involved"	Negative	Cognitive	.01
8.	I felt the course required me to exercise initiative	Negative	Cognitive	.01
9.	I was glad I took the course	Negative	Cognitive	.01
10.	I felt I could express myself freely	Negative	Cognitive	.05
	& easily	Positive	Experiential	.05
11.	I felt the courses required me to exercise independent judgement in evaluating testbook theories	Positive	Experiential	.01

<sup>&</sup>lt;sup>2</sup> <sup>2</sup>The seven test items which did not produce significant degrees of change are not presented.

#### Summary

Although the first course in management submits the management educator to rigors that are perhaps unparalleled in his other tasks, it also provides an outstanding opportunity for including the student affectively, behaviorally, and cognitively in the learning experience.

The methodology that we have employed is experiential--that is, one which involves learning by doing. By reinforcing the cognitive experience with direct and vicarious experiences, the learning process is enhanced because the "whole person" is included. By employing experiential techniques, the future manager can be assisted in developing conceptual and behavioral frames of reference for application to future real world problems. In general, we feel that experiential methodologies are useful in presenting a positive atmosphere for enhancing learning and perceptual capabilities, for providing a significant impact upon emotions and behavior, and finally, for achieving behavioral consistency with the insights gained from processes and experiences.