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AN INTERDISCIPLINARY WORKSHOP: SPREADSHEET MODELING AND CASE ANALYSIS TECHNIQUES FOR BEGINNING EXECUTIVE MBA STUDENTS

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ABSTRACT

This paper describes an interdisciplinary workshop utilized as the introductory experience for new students in an executive MBA program. A three day on-campus residence period introduces spreadsheet modeling methods and traditional case analysis methods as effective decision analysis techniques. The workshop is successful in reaching the objectives of: 1) forming a collection of individuals into a cohesive class, 2) establishing functioning small study groups, 3) acquainting all students with the interdisciplinary techniques, and 4) reintroducing an academic environment. In addition students are uniformly enthusiastic and motivated at the termination of the workshop.

INTRODUCTION

For two years, the authors have conducted a workshop at the beginning of an Executive MBA curriculum. The purpose of the workshop is to form a collection of individuals into a cohesive class, to reintroduce the students to an academic environment, to establish functioning small study groups, to acquaint all students with spreadsheet modeling, and to acquaint all students with traditional case analysis methods. The academic portion of the workshop is conducted during an on-campus residence period of three days. During this residence period, students reside in a hotel; all meals are provided. Except for the final Friday evening (when students return home until 8 AM Saturday), the students are immersed in the workshop experience.

The students In the program are typical of those in many Executive MBA programs. Their average age is about 35, with a range from 28 to 52. All students have at least five years of managerial or professional experience. Backgrounds range from accounting and engineering to medicine and journalism. Their employers range from large defense contractors and large consumer product companies to self-employed professionals and entrepreneurs. All students were classified according to their self proclaimed degree of experience with spreadsheets, models and personal computers, as follows: "experienced", "less experienced", or "inexperienced".

The Interactive Financial Planning System was chosen as the spreadsheet modeling language for the workshop. This language was chosen because of its diversity: beginning users are pleased with its English-like format, while experienced computer users are pleased with its advanced features (such as solving of simultaneous equations).

The workshop is designed so that the sessions the first day are focused upon modeling (about six hours) and problem solving and analysis (another six hours). Each of the faculty members has individual responsibility for one of these blocks, which extend from 8 AM to about three hours after

dinner. After the first day, the workshop is conducted with joint faculty responsibility, with both instructors present throughout the remainder of the workshop. The purpose of this design is to solidify the concept that modeling is useful only as a tool for problem-solving and analysis, and is not an end in itself.

Methodologies Utilized

Students were introduced to IFPS initially by using short problem situations which required each to participate in a hands-on series of computer lab sessions with assignments turned in to the instructor. Following this introduction to IFPS the students were immersed in a discussion of problem-solving techniques. They were also familiarized with the traditional five-step approach to case analysis: situation analysis, problem statement, alternatives generation, recommendations, and results expected. Then the students were grouped into teams for a series of breakout sessions in which specific cases were assigned. The cases were discussed first in small groups and then by the whole class.

Following these introductory sessions the students were assigned two complex cases. Each of these two cases covered a variety of the functional areas of a business firm such as production, marketing, finance, personnel, and so on. Each of these cases was chosen to be challenging and to require the student teams to utilize the modeling approach. The cases were also chosen to require the use of rational and logical thinking processes in an organized fashion to solve the complex problems and issues in each case.

A general case discussion was used for bringing closure to each of these case assignments. In these discussions each student has the opportunity to express individual thoughts and opinions related to the case issues. This was done so that each person would feel a part of the group, even if there had been domineering behavior in the small group discussion.

The use of a group presentation to the total class was included in the workshop so that each student would feel the need to become a contributing member of the team. It also served notice to the students that presentation skills are an important part of the program. As a companion aspect to the presentation, each team was required to submit a report which elaborated on the analysis which they had reported. This was intended to insure that students realized that written communications were also an important aspect of the EMBA program.

Observed Reactions

Because the EMBA students entering the program come from a fairly diverse set of backgrounds (as noted

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above) a major concern of the faculty was to bring this group of individuals together into a more cohesive group, and to teach problem solving skills for their regular courses.

For purposes of describing the results, we divide students into classifications according to their experience with spreadsheets and models. Those students who were experienced in computer usage initially reacted in a somewhat negative manner: they seemed to expect to be unchallenged (if not downright bored) by the workshop. However, the team approach of many assignments caused these individuals to become involved with the team's activities, often assisting (teaching) other team members. As the workshop progressed, the more sophisticated aspects of modeling capabilities began to intrigue the experienced students; their interest was aroused, and their motivation was enhanced. The use of interesting, complex, and challenging cases insured the total involvement of experienced students for the final two days of the workshop. Informal feedback from experienced students after the workshop indicates that a favorable learning experience did occur.

The initial reaction of the less experienced students was similar to that of the experienced students: somewhat negative, with an expectation of some repetition of familiar material. In general this group of students seemed more willing to give the workshop a chance and to trust that the instructors would be including items which if not totally new would at least be more sophisticated. Again we noted that the use of a team approach quickly involved these less experienced students in both helping inexperienced team members and also learning from more experienced team members. This requires that the teams be structured so that each team contains a cross section of students. It was also observed that within the first day of the workshop the less experienced student was already being exposed to materials which they did not previously know. The result: total involvement by mid-afternoon of the first day, and with continuing total involvement throughout the workshop. Informal feedback from these students was again similar to that of the experienced students: a favorable learning experience occurred. In addition, a willingness to verbalize enthusiasm for the workshop and a very positive attitude of favorable expectations for the EMBA program was frequently observed and often stated directly to faculty.

Inexperienced students enter the workshop with announced trembling. Within the first hour of the workshop inexperienced students are observed to be totally involved. Almost everything is new to these students. Because everything is new to the inexperienced student, a concern is that they not feel overpowered by the materials. The use of hands-on assignments combined with the team approach seemed to lower the anxiety level of inexperienced students. Accepting help from a fellow team member appeared to be a no-risk situation to these inexperienced students. It was "all right" to expose the degree of lack of knowledge in an open and forthright manner to a fellow team member. To the observing faculty this open attitude in a learning situation was extremely important. In summary, the inexperienced student very quickly became totally involved in the workshop and stayed totally involved until it was finished. Informal feedback from these students was extremely favorable; they take a very enthusiastic attitude toward the EMBA program.

Competition

There is an important consideration related to the degree of competition introduced into the workshop by its design and by the faculty. If too much intergroup rivalry is introduced and fostered by the faculty the result appears to have a

detrimental effect on the inexperienced student. The social and time pressures of a strongly competitive environment within the workshop results in the experienced students dominating the small study groups organization and its activities. Inexperienced members of the small study groups are relegated to less important activities, while experienced members take on the important tasks. The learning aspects of the activities are given a very low priority compared to the desired result of having the group look good to the faculty and the other teams. Looking good in this instance appears to equate with appearing to be able to quickly master the workshop materials and make effective use thereof in case analysis and decision making. The key to defusing this "too competitive" occurrence is to insure both by the design of the workshop assignments and also by the attitudes expressed by the faculty attitude from the first year to the second caused a desired change in the competition between groups. Reducing this competition improved learning within the groups.

Conclusions and Implications

The postmortem evaluation sessions which were held by the faculty and the program coordinator concluded that overall the interdisciplinary design of the workshop was successful. The major objectives of the workshop - to form a collection of individuals into a cohesive group, to establish functioning small study groups, to insure that all EMBA students were familiar with spreadsheet analysis techniques and traditional case analysis methods, and to reintroduce executives to a functioning classroom environment - were all achieved to a degree which was judged to be extremely effective.

But the most important results seemed to occur in relation to attitudes and motivation of the EMBA students. Not surprisingly the inexperienced group were quick to become enthusiastic and remained so not just until the end of the workshop but also into the regular program. The less experienced group (although somewhat slower to become enthusiastic) did become enthusiastic by the end of the first day of the workshop or by early on the second day. This group also remained enthusiastic and motivated past the end of the workshop and into the regular EMBA program. The experienced group was of greatest concern to the faculty; however, the design of the workshop enabled the experienced group to become enthusiastic during the second day of the workshop and remained so into the following academic curriculum.

The implication is that this type of interdisciplinary workshop is effective in introducing EMBA students to spreadsheet analysis techniques, to traditional case analysis methods, to small group interactions and to classroom interactions in the academic environment.