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ABSTRACT

Students enter the introductory Management Information Systems (MIS) class having heard all the hype regarding the information technology (IT) profession, but often knowing little of the realities. In an effort to have general business students gain a deeper understanding of the IT profession and the IT professional, the authors developed an interview exercise that serves many purposes. Students receive instruction on conducting interviews and the research project in which they are participating is described. Then each student selects an appropriate interview candidate and researches the candidate's organization. Each student conducts an in-depth interview, including both a structured and an unstructured interview. Each student submits a paper describing the organization and reporting on interview results. Finally, each student makes a formal presentation to the class. This paper details the methodology for this pedagogical exercise and reports results obtained after over 100 interviews. Benefits achieved are substantial from a pedagogical, research, and community-relations perspective. An appendix includes the "CISM Interview with IT Professional" interview form. (Contains 9 references.) (Author)

EXPERIENTIAL LEARNING IN THE INTRODUCTORY MIS CLASS: INTERVIEWS WITH IT PROFESSIONALS

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ABSTRACT

Students enter the introductory MIS class having heard all the hype regarding the IT profession, but often knowing little of the realities. In an effort to have general business students gain a deeper understanding of the IT profession and the IT professional, the authors developed an interview exercise that serves many purposes. Students receive instruction on conducting interviews and the research project in which they are participating is described. Then each student selects an appropriate interview candidate and researches the candidate's organization. Each student conducts an in-depth interview, including both a structured and an unstructured interview. Each student submits a paper describing the organization and reporting on interview results. Finally, each student makes a formal presentation to the class. This article details the methodology for this pedagogical exercise and reports results obtained after over one hundred interviews. Benefits achieved are substantial from a pedagogical, research, and community-relations perspective.

INTRODUCTION

The introductory Management Information Systems (MIS) class at the undergraduate level in most universities represents the only opportunity most business students have to learn about the Information Systems (IS) or Information Technology (IT) profession. The topics covered in this course vary greatly among schools. (See O'Hara and Stephens, 1999a and 1999b and Stephens and O'Hara, 1998 for more details regarding course topics and requirements). While there is typically some exposure to the real world, it is usually limited to exploring case studies, performing web-based research, or listening to guest speakers in class.

One way to allow students to explore the profession is for them to conduct field interviews with IS professionals. This interview activity serves a number of useful purposes. First, it provides the student with a unique opportunity to develop their research skills by conducting a formal interview with the professional. It also allows students to interact with someone in the IS/IT field. This is very often the first formal interaction students have with these professionals. This experiential learning exercise has proved very valuable to the students. Second, since the interview is preceded by hands-on training in conducting an interview, students gain valuable skills they can use throughout their business careers. Before conducting the interview, students must explore the company they plan to visit -- either doing web-based (preferred) or library-based research. Students then write a synopsis of the company. After conducting the interview, students present their findings to the class, share the insights they gained from the process, and submit all written documentation to the instructor.

In this paper, the authors first provide some background on experiential learning in the IS class. They then offer details concerning the interview assignment, and how the assignment helps students hone a variety of skills. While the purpose of this paper is not to explore the results of the interviews, the major insights and lessons learned by students are also shared.

EXPERIENTIAL LEARNING IN THE IS CLASS

Experiential learning may be simply defined as active participation in the learning process. In general, experiential learning (or education) involves "immersing students in an activity (ideally closely related to course material) and then asking for their reflection on the experience" (Clements, 1995, p. 116). The value of experiential learning has been known for some time. As early as 1916, Dewey stated:

> In schools, those under instruction are too customarily looked upon as acquiring knowledge as theoretical spectators... the very word pupil has almost come to mean one who is engaged not in having fruitful experiences but in absorbing knowledge directly (Dewey, 1916, p.164).

Carl Rogers, the noted psychologist, defined two types of learning: meaningless and significant. Meaningless learning involved memorization and cognitive process; significant learning was directed to the specific needs and wants of the leamer. For Rogers, experience was paramount:

> The touchstone of validity is my own experience. No other person's ideas, and none of my own ideas, are as authoritative as my experience (Rogers, 1995, p.63).

To Rogers, the teacher's role was to facilitate significant learning through experience.

Experiential learning currently plays a significant role in higher education. Programs exist in Arts and Humanities, the Social Sciences, and the Professional and Technical fields (Cantor, 1997). These programs take many forms, including role-playing, community-based work programs, and internships. Still, experiential learning does not need to be so formalized. It can occur more simply when faculty provide the means for students to gain more relevance from their educational experiences, something students are demanding (Matson and Matson, 1995).

Experiential learning has been popular in MIS classes as well. MIS faculty have long recognized the need for and value of student exposure to the workplace (Dick and Jones, 1995), and often include a real-world component. In the Systems Analysis and Design class, for example, students often interview each other to learn various information gathering techniques and design systems for small businesses in the community. Another class in which a real-world project is often undertaken is the Database class. Inclusion of a real-world project in the introductory class is much less common. Students in this class cannot typically develop an information system, nor is there is knowledge extensive enough to complete an internship. For these students, an alternative to a full-scale project is an interview with an IS professional.

THE INTERVIEW ASSIGNMENT

The specifics of the interview assignment have changed since it was first used in the MIS class. Initially, students simply found a likely candidate, conducted an unstructured interview and reported their results to the instructor in writing. During the last two years, the assignment has evolved into a multi-faceted, multi-purpose project. Results of the interviews conducted by students are being studied by the faculty involved and will be reported on in another venue.

The first aspect of the project is developing interview skills. Some students, especially the traditional ones, have never taken part in an interview—on either side of the desk. Most who have participated in interviews have been the interviewees, not the interviewer, so this is a new role for them. Thus, at least one full class (75 minutes) is devoted to developing interview skills. Topics such as courtesy, staying focused on the interview questions, providing verbal and non-verbal feedback, and closing the interview are discussed. The final exercise of the interview skills class is a hands-on one. Students practice the first few moments of the interview—often the most awkward—with the instructor. They "enter" the interviewee's office, shake hands, make small talk and get started on the interview.

Next, the interview form itself is distributed to the students electronically. The form consists of two parts: The Structured and Unstructured Questions. The Structured Interview section has three sub-sections: The IT Profession, Job Satisfaction, and Work Environment

(See Appendix A). These questions were developed and pre-tested over two semesters. Students are told to begin thinking about what questions they might want to ask during their interview, and to continue to formulate questions as they determine their interviewee and conduct their company research. As interviews are conducted and presented to the class, students gather ideas for the unstructured questions they will ask.

Students then find an IS person to interview. Oddly, this has never proved problematic for them—there always seems to be enough IS people available and willing to participate. Students are free to interview people who work in any IS capacity—from help desk to CIO. This allows for a broader base of information to be shared with the class. Interviews may be taped; this is mutually determined by the student and interviewee. Students are encouraged to keep the interview time under one hour to accommodate busy IS professionals.

Students must follow strict guidelines when setting up the interview. They must get the interviewee's permission to be identified to the instructor (identities can be kept from the students in the class). Participants must also agree to take part in a possible follow-up study from the university. Students must call to confirm the interview two working days before it is scheduled. When the interview is completed, students must send the IS professional a copy of the interview for review, and obtain a signed statement from the participant that the information is factual and accurately presented. Finally, students must follow-up the interview with a Thank You note, a copy of which must be submitted to the instructor.

Once the interviewee is selected, the student submits the person's name, title and job description to the instructor for approval. Only rarely are interviewees deemed unacceptable. Reasons for such have included duplicate interviews (i.e., the previous semester) and an overabundance of interviewees in the same areas (e.g., programmers). Discussions of the interviews are scheduled to coincide as much as possible with course topics. Thus, interviews with network engineers and administrators are presented during the Telecommunications chapter; while Database Administrator interviews are discussed while covering the database chapter.

Once the interview subjects have been approved, students begin their company research. Using the World Wide Web, they explore the company history—both financially and culturally if possible. They may also obtain more information regarding the job title of the interviewee to ask informed IS-related questions. Web site evaluation is another required assignment in the course, and if the company has a public web site, students may choose to evaluate the site using criteria developed in class. Once their research is complete, students must type a brief (one page is fine) synopsis of the company and include a works cited page.

Students present their interview results in groups. The day of their presentation, they must have the interview form completed, a PowerPoint presentation of the interview details, and all other supporting documentation. The scheduled presenters gather in the front of the room and each presents for about seven minutes. Typically, there are no more than five students in each group, so the first phase takes about a half hour. After all the students have presented, there is an open forum for discussion. The formal presentation portion is used to present the factual parts of the interview (i.e., the structured section). The open forum begins with students sharing the information they gleaned from the unstructured portion. These forums typically generate an active class discussion.

Student response to the interview exercise has been overwhelmingly positive. Many students mention the assignment specifically on their end of semester evaluation forms as being the one from which they learned the most. As was demonstrated above, the interview assignment is extremely valuable to the student for a number of reasons:

- It involves students in a real world situation
- It provides students with useful interviewing skills
- It allows students to participate in a research project
- It provides students with an opportunity to analyze a web site
- It affords students an opportunity to hone verbal and written communication skills
- It requires students to use computer skills learned previously (e.g. PowerPoint)
- It strengthens the university relationship with the business community

One unexpected benefit of the interview has been in job placement services. One student interviewed three professionals in different IS areas. He felt he had learned so much about possible employment from the first interview that he would conduct more. By doing so, he was able to glean great insight into the various career

paths available to him. Several students have been offered jobs by the people they interviewed; some others have taken semester-long internships working with the people they met during the assignment.

The interview exercise is also quite valuable to the instructor, the MIS department, and even the business school. The interviews generate a vast amount of data that can be analyzed and reported upon in later research projects. Issues such as work environment, turnover rates, and job satisfaction have all been covered in interviews. Thus, faculty can benefit from the research papers the interviews produce. The interviews have also provided information as to the issues the professional see as important for business students. Thus, the interviews tap into an information source that departments and schools can use as a first source for decisions regarding course and curriculum issues. Further, because the students are out in the community, the interview process can raise the visibility of the IS program and establish a link to the business community.

MAJOR INSIGHTS AND LESSONS LEARNED BY STUDENTS

While the data gathered in these interviews has provided the authors with a wealth of information for other research efforts, the primary purpose of this paper was not to share the results of the interviews. Still, the students' insights and lessons learned are germane to a discussion of the value of the exercise. In this section, the authors present some of those lessons.

Students were most surprised by the consistent level of job satisfaction of the IS employees versus the number of hours worked. In interview after interview, subjects reported that they were satisfied with their jobs, despite long working hours. While the average work week for the IT professionals was over 50 hours, most reported being at least somewhat satisfied with their jobs. Moreover, all but eleven of the interview subjects were required to spend time on-call, typically one week every six weeks.

Another surprising aspect of the interviews was the number of subjects who told the students not to make money their first priority in finding a job. While the goals and objectives (other than financial) varied greatly among the interviewees, some of the areas mentioned included: finding a firm that will offer a broad range of experiences, working for a company that allows you to stay current with respect to IT skills, and doing something you enjoy.

One interview question specifically targeted the IS majors. These students were surprised to learn some of the advice the interviewees had for them: learn a broad range of skills, knowing technology is never enough, and focus on the training you will receive rather than the salary. Among the skills deemed important to IT professionals were: communications (both verbal and written), strong business background, project management, general management skills, and team work skills.

CONCLUSIONS

The interview exercise serves a multitude of purposes in the introductory MIS class. It offers the students a chance to improve interviewing, writing, and presentation skills. Further, students actively participate in a research project. It provides the instructor with valuable research data, and it establishes a link between the business school and the IS community. Insights gained from the interviews can be used to generate class discussion and assist students in their search for the appropriate career.

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APPENDIX A
THE INTERVIEW

CISM INTERVIEW WITH IT PROFESSIONAL

Name: _____ Company: _____

Job Title: _____ Mailing address: _____

E-Mail: _____ _____

Phone: _____ _____

PART I: STRUCTURED INTERVIEW

Section 1: IT Profession

1. How many years have you been in an information systems or information technology job?_____
2. How many IT job changes have you experienced with your present firm?_____
3. How many company changes have you experienced while in an IT job?_____
4. How many geographic relocations have you experienced while in an IT job?_____
5. What were the major reasons for job changes? (within same firm)?

   _____
   _____
   _____
   _____

6. For company changes?

   _____
   _____
   _____

7. What are the five key (general business) knowledge areas for today's information systems majors?

1. _____
2. _____
3. _____
4. _____
5. _____

8. What are the 5 key (technology) skill sets for today's information systems majors?

1. _____
2. _____
3. _____
4. _____
5. _____

9. What do you believe to be the 5 key issues facing IT professionals today?

1. _____
2. _____
3. _____
4. _____
5. _____

10. What are the three major ways you keep your IT knowledge and skills current?

1. _____
2. _____
3. _____

11. Which level of management support for keeping current best describes your situation?

1-none 2-very little 3-some but inadequate 4-adequate 5-good 6- very good 7- excellent

12. What advice would you give an information systems major who has just graduated and is seeking a job in the field?

_____
_____
_____
_____
_____
_____

Section 2: Job Satisfaction

1. What is the average number of hours you work per week?_____

2. What is the range of hours per week B a maximum and minimum ?_____

3. Are you on call? If so, what is your on call schedule?_____

_____

4. Which description best fits your level of job satisfaction:

1- very dissatisfied 2- dissatisfied 3- somewhat dissatisfied 4- neutral
5-somewhat satisfied 6- satisfied 7- very satisfied

Section 3: Work Environment
(student observation if interview done face-to-face; ask if telephone interview is conducted)

1. Office or cubicle? _____

2. If office, high wall or low wall?_____

3. Approximate size?_____

4. Which phrase best describes the sound level?

1-loud and distracting 2-frequently distracting 3-occasionally distracting
4-not noticeable 5-other noise does not penetrate work area

5. Are there headsets for listening to music?_____

6. Is there a window? If so, describe the view (natural scenery, industrial view, pavement, etc.)_____

_____

7. If so, does the window open? _____

8. Is there natural light?_____

9. Describe the lighting fixtures (glare/non-glare; fluorescent and/or area lighting, etc.)_____

_____

10. What amenities are present?
_____ guest chairs
_____ conference table
_____ decorative items (wall hangings, diplomas, etc)
_____ personal souvenirs and photographs (brief description)_____
_____ others (please describe)_____

11. (For students to complete) Would you want to work in this environment? Why or why not?

Part II: UNSTRUCTURED INTERVIEW

For this part of the interview, you may ask the IT professional any questions you want. They should be open-ended questions so that you obtain rich information rather than simple "yes or no" answers.

Try to ask questions that flow from information you may have learned in the first part of the interview.

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