Teaching Tip

First Impressions: An Alternative Way to Start a Systems Development Course

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ABSTRACT

The first meeting of any course and its many activities sets in motion the establishment of a course climate and addressing student expectations. How can students be actively and collaboratively engaged, in a non-threatening environment, having their curiosity aroused, and begin to learn about the course all during the first class meeting? This paper describes an approach used to begin a Systems Development course that attempted to do just that. Students were asked to interview one another using a set of questions provided by the instructor. The debriefing process was used to introduce the students to the importance of the interviewing process and interpersonal communication in the systems development process.

Keywords: Systems Development, Interpersonal Communication, Active/Collaborative Learning, Interviewing

1. INTRODUCTION

The old saying, "You never get a second chance to make a first impression" certainly is true. It also applies when it comes to the very first meeting of any college course. Much of what happens over the rest of the semester is an outgrowth of what happens during that first class meeting. How can an instructor use that first day to not only exchange the necessary information with students, but also get students intrigued about the course? This paper describes an innovative approach—not just taking roll and walking through the syllabus—used to get students actively involved and interested in a systems development course.

2. THE TRADITIONAL FIRST CLASS MEETING

There are expectations on both sides of the lectern: What is this instructor going to be like? What kind of students will I have this semester? There are a lot of things that must be packed into that first class meeting: passing out and collecting class cards, going over the class roster, collecting background information from students, discussing the syllabus and the requirements for the course. While there are a lot of activities to be completed, there is even more going on beneath the surface in terms of how the expectations of both the students and the instructor will be met.

Another key factor to be determined the first day of a course is the climate the class will have: Are students relaxed? Are they comfortable asking questions of the instructor, interacting with one another? Do they view the class as non-threatening? Or is the climate tense? Are students nervous about being called upon or embarrassed? Different instructors have different experiences and views on what works best. Typically, a classroom that is non-threatening, where students know that they will be working with their classmates and can ask the instructor questions is one that is more conducive to learning for most students.

One exercise that can be used to help establish an environment that is favorable to student interaction, one that is comfortable and open, is a Scavenger Hunt. In general, a Scavenger Hunt is a search for a set of items. In this case it is a search for information. Appendix 1 provides an example of a Scavenger Hunt. This exercise can be used to have students interact with one another on a non-threatening, cooperative basis. What is more, it can be used with a class of 20 or 200 students. The rules are simple:

1. Find somebody who can answer a question. This requires students to get up, move around, mingle, meet others and interact with a number of other students (i.e., the "aerobic" portion of the course!).

2. Have them complete or provide information to answer all the questions (e.g., hometown, major, and a hobby or interest). This allows students to get to know a little bit about each other.
3. They can receive only one response from each student. This requires that they interact with a number of students; both to find out if they have an item they can answer and then to acquire the information.

4. When they finish (have answers all the questions), they are to help those who have not yet done. Again, this helps to establish a cooperative context for the course.

After a certain period of time, such as 10 minutes, all the students return to their seats. The class is then asked to identify each student, his/her hometown, major and a hobby or interest. This helps the students, as well as the instructor, to get to know a little bit about the students and their names. In a graduate course the information typically includes employment information so that the students, as well as the instructor, get an idea about the current employment of the students. Students can be asked to stand up, but that may be embarrassing to some students. Depending on the size of the class and the configuration of the classroom students can typically remain seated and be seen by most students if they simply turn toward the rest of the class. Student feedback is typically positive when using this exercise— they enjoy getting to know some of their classmates.

3. FIRST CLASS MEETING WITH A TWIST

The particular course at hand was a Systems Development course. This is a junior-senior level course required of all Information Systems majors in the College of Business and Public Administration at Drake University. Many of the students in the current course had taken earlier courses from the same instructor where the Scavenger Hunt exercise had been used. It was desirable to do something different. To do something active, to do something that would not only help to establish a cooperative class environment, but also start off the class and to raise the students’ attention, curiosity and expectations not only about the course, but also about the systems development process.

3.1 Interviewing Process

Students were asked to pair up with another student whom they did not know. Since there were nearly 40 students in the class, even though it was mostly juniors and seniors, it was still not a problem for students to find a person they did not know. Students were given a form to use to interview one another (see Appendix 2: IS 151 Interview Questions form). Students were not told why they were doing the interview.

The students were instructed to take turns interviewing each other asking, then answering, the first four questions. After the students had completed the questions and recorded their answers they moved on to the second set of questions, numbers five through eight. They repeated the process for these questions, for questions nine through 11, and then for questions 12-13.

It was quite interesting to watch as the students asked one another the questions. Some were more reserved at first, as they were interacting with a person they did not know. Others were more comfortable at first as the early questions were rather non-threatening as compared to the latter ones which required them to share some rather personal and potentially embarrassing information. Students were free to share as little or as much information as they desired.

The class was next told that they would introduce their interview partner sharing the person’s responses to the questions with the class. There were more than a few nervous glances as the first pair began to introduce each other, alternating through the sets of questions. The first four. The next three. Then questions 8-11. Then they were told to stop. They were not to share the responses to questions 12-13 with the class. There were quite a few sighs of relief!

Just how nervous were the students? How did they feel about asking and answering the different types of questions? Students were asked to rate their level of comfort in asking and answering the questions. A seven point Likert Scale was used with 7 being “Extremely Comfortable” and 1 being “Extremely Uncomfortable.” Students were asked to rate their level of comfort for each of the 13 questions. The mean responses for the 37 students are displayed in Chart 1.

The data reinforces the perception that students felt quite comfortable asking and answering general questions about background and interests (questions 1-4 and 5-8). It was a little harder to ask and answer questions about course and career goals (questions 9-11), as many students may not have yet put much thought into those issues. Finally, there is a noticeable drop-off for the last two questions (questions 12-13). Here students have been asked to reveal private and potentially embarrassing information about themselves. The data in the chart shows that it is slightly easier to ask such questions than to answer them, at least for this particular group of students.

3.2 Debriefing Process

What followed next was a discussion about the questions used and about the interviewing process. The discussion was used to bring out a number of points for the students to learn from this exercise as well as applying them to the systems development process.

1. Any interview or conversation should have a goal. That goal should be articulated, shared and agreed upon.

In this case neither of the students knew the goal beforehand. They were both in the dark. On more than one occasion a student could be heard to say, “Why are we doing this? Why did we ask this question? What is the purpose of this anyway?”

2. The way in which the information acquired through the interview will be used should also be articulated, shared and agreed upon.

Students wondered throughout this exercise what the information acquired would be used for. Some of it was rather mundane or even irrelevant; some of it was possibly embarrassing or even humiliating.

3. It is often easier to start with general, non-threatening, or even vague questions in order to work your way up to more difficult, personal or complicated questions.
Building trust and rapport takes time. If you jump right in going after sensitive information without establishing trust and rapport, it is often far more difficult for some people to share that information. It would have been interesting to see the students' responses if they had asked the questions in reverse order!

4. **There is more to interviewing than just asking questions.**

Interpersonal communication is both a rich and complex process. Far more than the words are involved during the communication process. This process is hard work. Noticing non-verbal feedback and watching and listening for other clues and cues takes a lot of work, but provides rich feedback on the communication process. Watching the students through the interview process provided insight into how well they were getting along and how comfortable they were as the different questions were being asked.

5. **You need to be prepared to conduct an interview.**

In this case the questions were provided. Yet coming up with right questions, in the right order and asking for the right level of detail, is a very difficult task, one that takes considerable preparation time and effort. It is also important to be prepared to answer questions about what is being asked, as well as being prepared to follow-up questions that may lead down a path that has not been anticipated. There is also a lot of effort to conduct the actual interview and follow up afterwards. It is particularly important to follow-up to fill in missing pieces of information and to secure additional information as needed.

6. **It is good to understand what it takes to interview as well as what it feels like to be interviewed.**

It is always important to try and understand an issue from both sides, to try to see another's perspective to the same problem, or in this case, to feel what it is like to ask questions, be asked questions, answer questions, wonder about the purpose of the question and how, ultimately, the information would be used.

4. **APPLICATION TO SYSTEMS DEVELOPMENT**

While a general discussion was interesting, the points to be driven further home dealt with the role of the interviewing process, and interpersonal communication overall, in the systems development process. Systems development is a communications process, including interactions between users and IS personnel as well as the interactions among IS personnel. A tremendous amount of information must be accurately elicited, documented and shared throughout a project if that project is to be successful. Systems development projects often fail for non-technical reasons. Miscommunication is a common reason for failure. Therefore, a systems analyst, or any participant in this process, must learn to effectively and efficiently communicate with others.

Further, systems analysts must understand not only the nature of the communication process, but also the impact that this communication process will have on the person providing the information. In many organizations users are suspicious of IS and therefore, by default, IS people. Often promises have been made that have not been delivered upon; jobs have been lost to technological advancements. Suspicion in many cases leads to fear. If an analyst is to elicit the information they need they must first develop a trusting relationship with the person they are interviewing. Jumping right into a question and answer process can further intimidate and scare the user.

An analyst must explain the process that they will go through with the user. They should explain what the goal is they are trying to attain. They should explain why they are asking the questions they are asking and how the information provided will be used. They need to develop, cultivate and nurture an effective, trusting relationship by sharing this information first, by getting to know the person and what they do and how their work fits into the overall scheme of things in the organization. While this takes time, it is an investment. An investment in the ability to secure the
necessary information to provide the type and level of technological support required. To meet the needs of the users, it is to the advantage of the users to cooperate. In the long run more time may be spent up front, but that can save a tremendous amount of time in the long run and will most likely lead to a more successful project.

While these are certainly not all the issues future analysts need to understand about interviewing and interpersonal communication, they provided the bridge between the exercise the students had participated in and this course. There would be more time later in the semester devoted to these topics, but their curiosity had been aroused, some expectations met and yet other set, as well as some time spent getting to know those with whom this journey would be spent.

5. CONCLUDING REMARKS

As the students proceeded through this opening class day exercise a number of goals were met:

1. Students and the instructor were able to learn more about the students in the class.
2. Students were actively involved in an exercise from the beginning, a way to introduce and model an active learning process, one in which a learning experience occurs, it is discussed and its application explored together.
3. Students were involved in a cooperative venture, working with and learning from one another.
4. Students learned about a critical element of the course, about the importance of interpersonal communication and the interviewing process for systems development.
5. Students had their curiosity peaked about interviewing, interpersonal communication, and the systems development process.
6. Some of the students were stretched out of their comfort zones, yet were reassured that the more sensitive information would not be divulged.
7. Students now had some expectations about the course, the types of material to be covered, activities used, classroom climate and cooperative atmosphere set.
8. Finally, students had some fun! For many students today it is critical to establish and maintain a relaxed, non-threatening environment for learning to effectively take place.

Overall this was a positive learning experience for both the students and the instructor. Each had different expectations, each had different outcomes. But this exercise managed to bridge both and set the semester in motion in a positive manner.

AUTHOR BIOGRAPHY

Jack Fellers is an Associate Professor of Information Systems in the College of Business and Public Administration at Drake University, where he earned his BSBA in Computer Information Systems Management. He also earned his MBA and PhD from Indiana University in Management Information Systems. His interests include innovations in learning, ethical issues and leadership.

Appendix 1 – The Great IS 44 Scavenger Hunt

<table>
<thead>
<tr>
<th>Item</th>
<th>Name</th>
<th>Home Town</th>
<th>College/Major</th>
<th>Hobby/Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has taken swimming lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Has lived in Iowa all of his/her life</td>
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<tr>
<td>Really likes the food at Drake (at least so far)</td>
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<tr>
<td>Read more than three novels over the summer</td>
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<tr>
<td>Knows the name of the Drake mascots</td>
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<tr>
<td>Remembers the flood of ’93</td>
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<tr>
<td>Has never downloaded an MP3 file</td>
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<tr>
<td>Has their own Home Page on the Internet</td>
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<tr>
<td>Likes being a student</td>
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<tr>
<td>Knows how many “ones” there are on a dollar bill</td>
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</table>
Appendix 2 – IS 151 Interview Questions

1. Name
2. Current Occupation
3. Hometown
4. Hobbies/Outside Interests
5. Favorite Movie
6. Favorite Book
7. Favorite Dessert
8. Favorite kind of Pizza
9. Why are you taking this course?
10. What goals/objectives do you have for this course?
11. What are your career goals, both short term (1-3 years) and long term (10+) years?
12. What is something about you that no one else in this room knows?
13. What is the most embarrassing experience you have ever had?
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