Project Evaluation

Evaluation Plan

One aspect of the project involves redesign of the HCI course. In the Fall 2000 semester, formative evaluation instruments were used to identify strengths of the HCI course redesign and changes to be made to the course for the Spring 2001 semester. The instruments used in this formative evaluation included both likert-scale and open-ended questionnaires, student interviews, evaluation of student-produced videotapes and work models, and observation of classroom exercises. This formative evaluation of the course redesign is continuing this semester.

The project looks at two general questions with respect to the HCI students:

- 1. How well do the course material and lab experiences translate to an understanding of design principles and practices?
- 2. How well does the HCI students' understanding of design principles and practices relate to their actual design practices.

The evaluation plan that addresses these questions includes the following components:

- Students in the HCI course respond to a questionnaire focusing on their attitudes towards
 and understanding of design principles and practices at the beginning of the course. The
 students will complete the same questionnaire at the end of the course. Data gathered as
 part of the formative evaluation of the course will provide additional data on how well
 the course materials and lab experiences translate to an understanding of design
 principles and practices.
- Students currently in the second semester of the two semester senior project will be interviewed to determine how they approached the design phase of their project. None of these students were enrolled in the Fall 2000 HCI course.
- Students currently in the first semester of the two semester senior project course will be studied to see if differences exist in ways students from Fall 2000 HCI course and those not from Fall 2000 HCI course approach project design. The instruments that will be used for this study include questionnaires, interviews, videotapes made by students, videotapes of students working in usability lab, and project director's weekly reports.

Some Observations from Fall 2000

Data gathered from students enrolled in the Fall 2000 HCI course led to several observations. Following each observation is one or more student comments that support the observation.

Students rated ethnographic skills activities as very useful.

- "I don't feel I would have understood interviewing or field notes without doing them in class."
- "The interview material changed my attitude towards interviews. I used to suggest to people by giving an example and ask them is this what you want instead of asking what *they* wanted."

Some students with work experience in computing reported viewing their jobs differently after the course.

- "I made the transition a year ago [at work] from being a software engineer to a software designer. I didn't know there was a difference between the two job titles. Now I do."
- "I had an internship and all I did was sit in a cubicle and code all day. They kept telling me that that was all there was to it sit in a cubicle and code, and I was really disappointed. So, when I got to this class, it was a relief to me because I realized that's not all there is to it. I had hoped there was a way you could work with people but I had no idea it was so intense with the interviews and all."
- [This course] has increased my frustration level [at work], but at least I have identified the source of my frustration. I am being told to write requirements but have nothing to go on. At least now I know what kind of questions to ask. I feel like I have learned a lot about how to approach that better through learning how to interview [users], how to glean information out of them."

Traditional students reported no previous experience with a group project in computing courses, and exhibited discomfort at the prospect of a group project.

• "At the beginning of the semester, I was pretty scared at the thought of a group project. I didn't think everyone would do their share. After my experience [in this course], I think you should definitely keep the group project."

Traditional students reported this was their first experience with the design phase of a project.

• "In previous courses, the instructor tended to specify completely all aspects of the project design and all we did was the coding."