CS 315 – Intro to Human Computer Interaction (HCI)

Field Notes

Field Notes

- Transcribed notes derived from data collected during interviews
- Descriptive or Reflective
- Should be written as soon as possible after the interview

Characteristics of Field Notes

- Accurate
- Detailed
- Extensive to permit the reader to understand the situation described
- Observer should do more than just record a setting

Descriptive

- Describe the setting. This may include pencil drawings of the space and furniture arrangement.
- Describe the activities that took place in that setting.
 Reproduce the sequence of actions and behaviors.
- Describe the people who took part in the activities and their roles in the activities.
- Describe the meaning of what was observed from the perspective of the participants.
- Record exact quotes or close approximations of comments that relate directly to the observation activity.
- Describe any impact you might have had on the situation you observed.

Reflective

- Include sentences and paragraphs that are subjective.
 These include a more personal description of what you observed.
- Emphasizes ideas, hunches, impressions, etc.
- Includes unanswered questions that have arisen from reflecting on the observation data as well as ideas for future action.
- Clarify points and correct mistakes and misunderstandings in other parts of field notes.
- Include insights or speculation about what you are observing.

Format

- Include a first page on which you include information on the observation, such as: name of observer, location of observation, date, and time.
- A short title can be helpful in identifying the purpose of the observation.
- Number individual sets of field notes if there will be follow-up observations at this site.

Formats

- Save content part of field notes and reflective part of field notes in separate files.
- Use two columns. The column on the right contains the content portion of field notes, with reflective comments relating to particular parts of the content part, written in the left column.
- Use wide left margin. Body of file contains content part, with the observer's comments written in parentheses and indented under related paragraphs.

Questionnaires

Data gathering for requirements

Questionnaires:

- A series of questions designed to elicit specific information
- Questions may require different kinds of answers:
 - YES/NO, choice of pre-supplied answers, comment
- Often used in conjunction with other techniques
- Can give quantitative or qualitative data
- Good for answering specific questions from a large, dispersed group of people

Questionnaires

- Questions can be closed or open
- Closed questions are easier to analyze, and may be done by computer
- Can be administered to large populations
- Paper, email and the web used for dissemination
- Sampling can be a problem when the size of a population is unknown as is common online

Questionnaire design

- The impact of a question can be influenced by question order.
- Do you need different versions of the questionnaire for different populations?
- Provide clear instructions on how to complete the questionnaire.
- Strike a balance between using white space and keeping the questionnaire compact.
- Decide on whether phrases will all be positive, all negative or mixed.

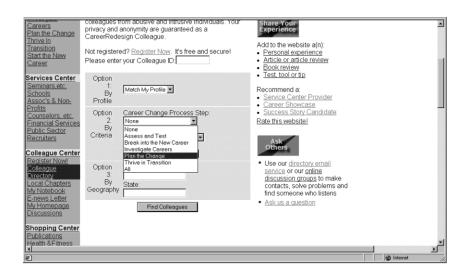
Question and response format

- 'Yes' and 'No' checkboxes
- Checkboxes that offer many options
- Use ranges, for example for ages
- Rating scales
 - Likert scales
 - semantic scales
 - 3, 5, 7 or more points?
- Open-ended responses

Encouraging a good response

- Make sure purpose of study is clear
- Promise anonymity
- Ensure questionnaire is well designed
- Offer a short version for those who do not have time to complete a long questionnaire
- If mailed, include a stamped addressed envelope
- Follow-up with emails, phone calls, letters
- Provide an incentive
- 40% response rate is high, 20% is often acceptable

Advantages of online questionnaires



- Responses are usually received quickly
- No copying and postage costs
- Data can be collected in database for analysis
- Time required for data analysis is reduced
- Errors can be corrected easily

Spot four poorly designed features

| State your age in years | |
|---|--------------------------------------|
| How long have you used the Internet? (check one only) | <1 year 1-3 years 3-5 years >5 years |
| 4. Do you use the Web to: | |
| purchase goods send e-mail visit chatrooms use bulletin boards find information read the news | |
| 5. How useful is the Internet to you? | |
| | |

Beware of Loaded Words

- "Do you think that the US should allow public speeches about democracy?
 - 21% in favor of free speech
- "Do you think that the US should forbid public speeches about democracy?
 - 39% in favor of free speech

Problems with online questionnaires

- Sampling is problematic if population size is unknown
- Preventing individuals from responding more than once
- Individuals have also been known to change questions in email questionnaires

Questionnaire for Grocery Checkout

 http://www.questionpro.com/a/showSurveyLibrary. do?surveyID=362050

Sample Questionnaires

- http://oldwww.acm.org/perlman/question.html
- http://it.toolbox.com/blogs/enterprisesolutions/sample-application-usability-testquestionnaire-17827
- http://www.lap.umd.edu/QUIS/index.html
- http://sumi.ucc.ie/whatis.html
- http://www.measuringusability.com/sus.php