

Purpose of a Usability Study

- ∞ Find out what your users are really looking for
- ∞ Determine your web site's "potholes" or trouble spots
- ∞ Test out new features on your web site
- ∞ Check accessibility for a wide range of users
- ∞ See how users "use" your web site
- ∞ Used in conjunction with other research methodologies such as focus groups, online surveys, and card sorts
- ∞ Review either a part of your web site or the web site as a whole

A Usability Study should not

- ∞ Be used as the only determinant when deciding on how to restructure your web site
- ∞ Look at individual responses separately

When to perform a Usability Study

- ∞ It should be administered continually, throughout the redesign process!!!
- ∞ Before the redesign – to be used as a benchmark to gauge what your audience wants
- ∞ During the redesign – to make sure that you are on the right track
- ∞ After the redesign – to confirm that you've hit your mark

Your web site is worth all of the fuss!

Who is the best person to conduct the Usability Study?

The most important thing to remember is –

the person who designed the web site should NOT administer the test!!!

Who should the Usability Study be performed on?

- ∞ Your target audience [students, faculty, staff] – key people using the site
- ∞ Incorporate a broad range of users because they all have different needs

Potential problems with choosing participants

- ∞ Select more users for the study than are needed
 - some could cancel or forget about the appointment
- ∞ Could be shy or afraid to speak up
- ∞ Might be uncomfortable being observed
- ∞ May not want to sign the release form
- ∞ Lack of compensation may lead to lack of participation

Helpful hints on what to tell the participants

- ∞ Approaching them -- “We would like your help with some web site research”
- ∞ Be general – do not give the specific web site away!
- ∞ By being general and not giving exact URL, you prevent them from “cheating” and reviewing the web site ahead of time which could skew your results
- ∞ Having the person sign a release form before proceeding with the usability study that explains the anonymity of results is often key to making them feel comfortable expressing their opinion freely about the given website

IRB [Institutional Review Board] approval

- ∞ Be patient – it may take several iterations before you get final approval
- ∞ Make sure to provide PLENTY of time for adjustments in the application before setting your testing dates
- ∞ State specific details about your study– actual test questions and release forms

How to perform a Usability Study

Technology Options

- ∞ PC versus MAC – let the end-user choose what they are most comfortable with
- ∞ Adaptive/Assistive Technology – such as screen readers, dynamic Braille displays
- ∞ Usability Software – eye tracking software and screen capturing software
- ∞ Mobile Devices – test for small screen readability

Budget

- ∞ The “Shoe string” budget – one person, piece of paper, a pen
- ∞ The “Sky’s the limit” budget – eye tracking software, video recording, special observation room, multiple observers, compensation for participant...etc, etc, etc

Scheduling

- ∞ Choose a convenient location that’s quiet, so the test will not be interrupted
- ∞ Work with the participant’s schedule
- ∞ Set a time limit for the length of the usability study
- ∞ Give a “thank you” gift in exchange for their time and input

The Usability Study

Types of questions

- ∞ Task oriented questions should be designated as “closed questions” with the goal of finding the correct location on the web site [“Find out about financial support opportunities for chemistry graduate students”]
- ∞ Opinion questions [typically asked before and after the task questions – “Have you seen the website before? If so, what do you think of it?”] should be open ended with no incorrect answers
- ∞ The format should be 1 - 2 short open ended questions at the beginning, followed next by 5 - 6 task questions [find x, y, and z], then 2 - 3 open-ended follow up questions
- ∞ Try to avoid using key words in your questions – these may strongly influence the end user when they are being tested and may skew your results

Do's and Don'ts

- ∞ Do
 - Give them the option to end the study at any time if they are not comfortable
 - Watch the end-users' non-verbal communication
 - Take notes on observations, not just their “path traveled”
 - Let the individual know that there is no right or wrong answer, you are only interested in their answer
 - Say “let's move on to the next question” if the person takes too long on one task
- ∞ Don't
 - Forget to have them sign the release form [IRB]
 - Audio or video record the participant if they do not give their permission
 - Let the person know if they are right or wrong
 - Set an exact time limit for each task, but verbally nudge them to move on if they struggle for a period of time
 - Talk while they are trying to complete a task, let the participant show and tell you how they are working their way through the web site

Analyzing the Results of a Usability Study

1. Separate each user group out and create a pile for it – if you studied graduate, undergraduate and faculty, then three piles should be created
2. Then, break each group's survey into "parts" – placing all of the "task" questions into found/not found piles [creating a spreadsheet for this part can be helpful when tallying the results]
 - If not found, note where the end user went instead
3. Create a separate MS Word file listing all of the general open-ended questions and answers, highlighting important end user comments or concerns expressed
4. Produce a one to two page executive summary of the key findings, focusing on what your end users couldn't find on the site so that the web team can see what areas of their web site need modification
 - You can create a longer, more detailed report if extensive record keeping is necessary

Usability Study Resources and References

As part of the “Usability 101” poster presented by Renee Cerullo and Christine Kowalski

Websites

5. A List Apart [User Science Topic: Usability]
<http://www.alistapart.com/topics/userscience/usability/>
6. Usability.gov <http://www.usability.gov/>
7. UsabilityNet: usability resources for practitioners and managers
<http://www.usabilitynet.org/home.htm>
8. The Usability Professional’s Association <http://www.upassoc.org/>

Books

9. *Don’t Make Me Think* by Steve Krug
10. *Designing Web Usability* by Jacob Nielsen

Magazines and Journals

- ∞ *Journal of Usability Studies* http://www.upassoc.org/upa_publications/jus/index.html
- ∞ *User Experience Magazine* http://www.upassoc.org/upa_publications/user_experience/index.html
- ∞ *The Voice* [a bi-monthly newsletter published by the UPA]
http://www.upassoc.org/upa_publications/upa_voice/index.html

Reports

11. “Usability Return on Investment” by the Nielsen Norman Group
<http://www.nngroup.com/reports/roi/>
12. “230 Tips and Tricks for Better Usability Testing” by the Nielsen Norman Group
<http://www.nngroup.com/reports/tips/usertest/>
13. “How to Conduct Usability Evaluations for Accessibility” by the Nielsen Norman Group
[Methodology Guidelines for Testing Websites and Intranets With Users Who Use Assistive
Technology] <http://www.nngroup.com/reports/accessibility/testing/>
14. “233 Tips and Tricks for Recruiting Users as Participants in Usability Studies” by the Nielsen
Norman Group <http://www.nngroup.com/reports/tips/recruiting/>

Conferences

15. HighEdWeb -- <http://www.highedweb.com/>
16. The User Experience Conference -- <http://www.nngroup.com/events/>
17. User Interface Conference -- <http://www.uie.com/events/>
18. Web Design World -- <http://www.ftponline.com/conferences/webdesignworld/>