Learning from Our Users: 
Usability Testing of WebPacs & Web Sites

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Discussion Overview

- Why test
- Usability Testing
- Methodologies
- Planning
- Analysis
- Implementation of Results
- Costs of Testing
- Conclusions
Why Test?

- More design options in WebPacs
- Increased reliance on Library Web Sites
- Lack of agreement amongst Librarians
- Desire for User Centered Design

Usability Testing

- Based on User Centered Design
  - Early focus on users and tasks
  - Behavioral measurement of product usage
  - Iterative design
- Analyzes interaction between product and user
- Includes many methodologies
WSU Testing Overview

- Jan - Sep 1998 - WebPac at Pullman and Vancouver
- Summer 1998 - More WebPac at Pullman
- Nov 1998 - Web Site at Vancouver
- Summer 1999 - Web Site at Pullman
- Oct 1999- Feb 2000 - Web Site at Vancouver

Methodologies

- Formal/Informal Usability Testing
- Focus Groups
- Site Usage Logs
- Cognitive Walkthrough
- Card Sort
- Category Membership Expectation
- Questionnaire/Survey
Methodologies: Formal Usability Testing

- Observers watch participants perform actual tasks in the WebPac or Web Site and record successes, failures, comments
- Can be very informal and inexpensive
- Works better with WebPacs

Methodologies: Focus Groups

- A small group of individuals discuss their opinions and ideas about a defined topic or set of topics.
- Requires independent and skilled discussion leader
Methodologies:
Site Usage Logs

- Need access to the server.
- Good for determining patterns of movement and use.

Methodologies:
Card Sort

Tests the structure of a Web site or application using index cards, each representing an individual concept or Web page. Participants arrange the cards in an order or structure that makes sense to them.
Methodologies:
Cognitive Walkthrough

- Product designers try to predict users’ movements and actions by doing actual tasks themselves.
- Good for early design phase.
- Most designers will behave differently than novice users.

Methodologies:
Category Membership Expectation

- Tests the participants’ understanding of various categories including what they think should be in each category and what the category should be named.
- Can be exhaustive for participants.
- Good for small sites.
Methodologies: Questionnaire/Survey

- A set of questions designed to collect responses and opinions from users on a topic.
- Easy to analyze results.

Planning

- Literature Search
- Purpose Statement
- Task Lists
- Human Subjects Review Board
- Participants
- Incentive
- Script
Analysis:
Formal Usability Testing

- There was no problem navigating between search types - author, title, etc.
- Most participants could do basic title and author searches

- 8 of 10 participants could not locate an entire periodical or current issue of a periodical
- 6 of 10 could not do a corporate author or a call number search correctly

Analysis:
Card Sort

- 7 of 8 participants thought there should be a faculty resources category
- Majority of participants wanted help documentation grouped with specific databases
- 4 of 8 participants wanted the Request forms to be near the databases
Analysis: Category Membership

- What should be added to the Web site
  - Pictures of the staff
  - Links to email account information
  - Checkout periods
- What is confusing about the current site
  - Subject Trees
  - Best of Lists
  - Library Reserves

Analysis: Questionnaire

- What is best about the current site
- What is worst about the current site
- What should be within 2 clicks of the home page
Analysis:
Focus Group

- Easy to use and easy to navigate
- Liked the simplicity of layout and colors
- Difficulty to distinguish between databases, library catalogs and the web
- Library jargon is confusing

Analysis:
Site Usage Logs

- NC add info here.....
Implementation:
WebPac Usability

- Prepare a list of problem areas
- Assign responsibility for solution - Web group, Vendor, Instruction group
- Work on solution/re-design
- Implement
- Test again

Implementation:
WebPac Redesign

- **Problem:** Hard to find periodicals
- **Action:** Add a periodical title search option with results “scoped” to periodicals only
- **Problem:** Six different kinds of call numbers
- **Action:** Add a number search button with a page of examples and explanations
- **Problem:** Emailing selected results
- **Action:** Vendor improved email screen
Implementation: Old and New

- Old

- New

Implementation: Journal search screen
Implementation:
Web Site Redesign

- **Problem:** Several “Reserves” pages
  - Action: Reorganize and rename pages

- **Problem:** Request forms are too far from databases
  - Action: Add more links to forms

- **Problem:** Too many clicks to key resources
  - Action: Added links to the Library’s home page

Implementation:
Old and new
Costs of Usability Testing

- Can be very inexpensive
- Costs
  - Staff Hours
    - Preparation of test materials
    - Testing, Analysis and Implementation
  - Incentives for Participants
  - Office Supplies

Conclusions

- Costs were low, while amount of information gained was high
- Creation of test instruments was worthwhile
- Good PR for the Libraries
- Focus on *Users*
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Presentation, testing instruments and bibliography available at:

http://www.vancouver.wsu.edu/fac/diller/usability/iil/iil.html