Embedding Metalib in Database Webpages: Usability Issues

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Overview

- I hope to leave you with a better understanding of
  - How simple design decisions for database pages and MetaLib affect usability
  - How to conduct and Usability Scenarios and interpret the results
  - How usability scenario results can feed into design decisions
- I will talk about:
  - UCF's design choices for database and MetaLib pages
  - The Usability Scenario study and results
  - Design changes made or planned based on results

Usability Scenario's in a Nutshell

- Ask users to try to try to complete tasks using your site or system
- Record the efforts and whether the task could be completed.
- UCF's Usability Scenario
  - Used Camtasia to recorded the screens as students tried to use the web and our database pages to find articles on a topic
  - Ask students about their level of satisfaction with the process and results for each task
  - Analyzed the recordings to see the choices students made, what worked, what problems were encountered
  - Made design changes

UCF's Database Page Choices

- Easy Access v. Authentication
  - Access will be as open as possible - no login needed to see our title lists, easy to link to, findable in web search engines
- Site Integration v. Distinctive Look and Navigation
  - Pages will integrate into our overall website with consistent graphical elements and navigation
- Flexibility v. Controlled Content and Organization
  - Pages will include any resources in whatever order and organization is appropriate
- Embed Functionality v. Linking
  - Highly used functionality should be immediately available on the pages, i.e. catalog search, online journal title search, and database search
- Quick view of UCF's database pages prior to the study

UCF's MetaLib Choices

- Access and Privacy v. Identification and Personalization
Login should not be required unless user decides to personalize the account

- Power and Functions v. Consistent Interface
  - Federated searching prevents access to specialized options and retrieval sets may not include the most relevant hits
- Design Flexibility, Control v. Single Database Discovery Site
  - Maintain Database discovery pages on our website and deemphasize MetaLib Find Database
- Consistent Result Options v. Inclusiveness of Databases
  - Focus on titles that are fully functional in MetaLib
- Speedy and Focused v. Comprehensive Searching
  - Keep search sets small, using a few sources for each subject.

Realities of UCF's Database Pages and MetaLib

- Do not have much staff time to dedicate to database pages (a fraction of my time)
- Consortial MetaLib installation hosted by FCLA
- MetaLib was purchased at the same time as Aleph, so not specifically chosen by UCF for functionality
- Do not have much staff time to dedicate to MetaLib (a fraction of Ying's time)
- Very little interface customization in v.3

Database Page Stats

- Database pages are heavily used: 281,607 visitors in 2006
QuickSearch and MetaLib Stats

- Quick Search is used much more than any other MetaLib service

![QuickSearch v. MetaSearch Use 2006](image)

Purpose of the Usability Project

- Find out what students try first when given a research task
- Get an overall picture of how students use the database pages
- See if and how students were interacting with MetaLib search forms
- Determine which options on the database pages lead to the most success and user satisfaction

Methodology: Usability Scenarios

- Collaborated with Meg Scharf, Associate Director for Public Services, and Karla Kitalong, UCF professor usability researcher
- Wrote scenarios - brief tasks that users will try to complete
- Beta tested the scenarios with the help of a graduate student
- Created web pages for a demographic survey and scenario instructions
- Employed an undergraduate student, Jodi, to serve as recruiter and interviewer
- Took a laptop into student areas to recruit participants and record each session
  - [How to use Camtasia](6K) in Quicktime

Usability Tasks

- Starting from four different points on the web: Find articles or other resources on the career benefits of internships for college students.
- Tasks start points are:
  - Blank page
  - Database page main area
  - Database page side menu
  - Detailed Subject Resource Guides
- Users were not specifically steer users to MetaLib

Sample Task Description and Satisfaction Survey

**Task A**

What do you typically do when you need to find references to use for a paper or project?
Find articles or other resources on the career benefits of internships for college students.

**Begin Task A**

Don't forget to talk about the web pages, your search, and the results!

---

<table>
<thead>
<tr>
<th>How satisfied are you with the <strong>results</strong> of your search for Task A?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
</tr>
<tr>
<td>○</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall, how satisfied are you with the <strong>process</strong> you used for Task A?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
</tr>
<tr>
<td>○</td>
</tr>
</tbody>
</table>

---

**Sample Recordings: in Quicktime and How**

- Demographic and Task Satisfaction Surveys - 3K
- Task A - use the information source of your choice. - 1.6 K
- Task B - use the main portion of the database page - 2.3K
- Task C - use the side menu on the database page - 1.6K
- Task D - use the Research Guides page

**Evaluation of the Usability Scenario Process**

- Focus on one or two Tasks - 4 was too many
- Beta test to work out unclear wording, awkward transitions, starting and stopping recording
- The interviewer may have to coax verbal comments out of participants
- Each interaction takes 20-40 minutes
- Provides very rich information source

**Data Gathering Process**

- Demographic survey and satisfaction ratings were captured into CSV files
- Screens and voices were recorded for entire scenarios
- Jodi wrote "reflections" of her observations for each interaction.
- We reviewed each recording, entered data for search options chosen and the search terms used

**Behavior Observations**

- Students usually entered the topic exactly as we gave it - none used synonyms
- Students often don't relate specific terms or topics with broader concepts
- Students report high satisfaction if words on the web site exactly match their concept
- Students tend to use a search box before browsing subject or alphabetical database lists
- Students click on what comes up fastest rather than waiting for full results to load
- Off-campus login process often hindered use of the embedded form
- Prior instruction influenced student search behavior
Digging into the Data: Demographics

How often do you use the library?
How often do you use the library website?

Have you had library instruction?
How many library assignments?

Digging into the Results: Resource Chosen and Full Text Found

<table>
<thead>
<tr>
<th>Resource chosen from Database Page</th>
<th>Times Chosen</th>
<th>Full text found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Search Premier</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Professional Collection</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>QuickSearch</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource chosen from Side menu</th>
<th>Times Chosen</th>
<th>Full text found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Search Premier</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Ask a Librarian</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Business Dateline</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Catalog</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>QuickSearch</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>
Chart of Resources Chosen Task B and C

<table>
<thead>
<tr>
<th>Resource Chosen</th>
<th>Times Chosen</th>
<th>Process Satisfaction</th>
<th>Results Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuickSearch</td>
<td>9</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Academic Search Premier</td>
<td>9</td>
<td>4.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Business Dateline</td>
<td>1</td>
<td>3.0</td>
<td>4.0</td>
</tr>
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<td>5.0</td>
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<td>1</td>
<td>4.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Other Data Analysis Possibilities

- Path taken per task
- Time taken per task and per resource selected
- Relationship between full text found and satisfaction
- Relationship between prior library experience and satisfaction
- And much, much, more!

Design Concerns Revealed And Potential Fixes

- MetaLib form attracts users who don't know what it does
  - Reduce the prominence of the MetaLib form
  - Add explanation of what MetaLib searches do
- Duplication of MetaLib form (in the main area and in the side menu of the database page confused users)
  - Remove form from side menu
- SFX was ignored - students did not know what it does
  - Add explanations of SFX on the database page
  - Add explanations of SFX on MetaLib results pages
Design Concerns Revealed Continued

• Students don't login to EZproxy before using the forms
  ◦ Redesign the consortial QuickSearch screen
  ◦ Make login form more noticeable
  ◦ Figure out how to make embedded forms use the proxy
• Students try to use the back button to return to the database pages after using MetaLib
  ◦ Open MetaLib search results in a new window
  ◦ Add warning that they are leaving Library web site
  ◦ Add obvious navigation back to the Database page
  ◦ Hope MetaLib 4 works with the back button
• Students do not know what to do after reaching a MetaLib result record
  ◦ Add help on the results screen explaining how to check for full text, search the catalog, etc.
  ◦ Add a research steps guide on the database pages that reveals what to do after getting a citation

Database Page Changes
MetaLib Changes Planned or Desired: Retrieval Screen

MetaLib Changes Planned or Desired: Results Screen
MetaLib Changes Planned or Desired: Record View

More MetaLib Changes Coming in v4

- Recreate embedded forms
- Use the improved CSS to better implement UCF's style in MetaLib
- Customize help screens
- Add facets and match the look of our Endeca catalog as much as possible

Thank you!