A Case of TMI:
Improving Usability with LibAnswers and the A-Z Database List

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This presentation...

- Intro to iterative web design process at MSU Libraries (MSUL)
- Crash course in the basics of card sort usability testing;
- (Not so) small steps to improve usability of MSUL’s website:
  - LibAnswers: Elements of progressive disclosure and basics of FAQ
  - A-Z Database List (LibGuides v2 CMS) as a streamlined electronic resources portal
- Word(s) of advice for improving usability
• Designed by librarians for librarians (10 years ago)
• Complex navigation menu
• Essential, relevant information buried 2-3 levels into navigation
• Inconsistent labeling and naming of information
• TMI...information overload!
How Do We Fix It?

- Redesign? NO!
- Lack of time and staff in Web Services
- Iterative, evidence-based design had made small improvements, but had not addressed navigation menu
- User Experience...let’s ask the users to tell us how to make it better!
What’s A Card Sort?

- Usability test on information architecture of a website
- How do users mentally model content presented on the libraries’ website?
- How do users categorize information?
- What are users’ expectations for locating information?
Our Card Sort Activity

Our Goals:

- Evaluate the layout and navigation
- Test the degree of user comprehension of terms used on the website
- Understand how users ranked various pieces of information
- Identify problems needing immediate attention
- Identify areas for greatest opportunit(ies) for improvement
Our Card Sort Activity

- Physical, open card sort: Users allowed to create own categories

Focus:
- Navigation menu
- Links on Home page
- Labeling on electronic resources launching page
Our (Open) Card Sort Activity

- 12 participants
- 126 cards
  - Each link listed on the home page and the electronic resources’ landing page was put on a notecard
  - Each item listed in navigation menu put on a notecard
  - Labeled with words, terms, phrases from website
Our (Open) Card Sort Activity

- Participants organize cards into piles, grouping cards with relationships or similarities together
- Encouraged to talk/think aloud during sorting process (qualitative element)
- May discard any card due to lack of understanding or irrelevance
- May rearrange piles up to 3 times
- Participants creates category names for each of their piles (written on colored index card)
- 3 Green stickers to identify “Most Important” pieces of information
Categories (minus “Library”)
Card Sort: Agreement Per Category

- Standardize user-created categories using words most often used by participants
- Number of cards assigned to each category measured the level of agreement between participants
  - High occurrence => Clear agreement on card placement
  - Low occurrence => Conflict; Little or no agreement on card placement

- Our results: Very low occurrence overall
  - 8 cards (6%) placed in fewer than 3 categories;
  - 61 cards (48%) placed in more than 6 categories
Card Sort: Agreement Within Category

- Determined by ratio of total cards to different cards in each category
- Identify broadly versus tightly defined categories
- Our Top 5 Categories:
  - Catalog
  - Libraries & Collections
  - Find
  - Home Page
  - Resources
If ratio of total cards to different cards is close to the total number of participants, then the category is strongly and consistently defined by the participants.

Our highest agreement categories: Social Media, Libraries & Collections, and Pages.

However, the ratios in these categories are not close to 12 (number of participants.

Categories are not clearly defined by participants, OR participants do not strongly agree on the content for these categories.
Card Sort: Commonly Discarded

- Participants were allowed to discard any card they felt was irrelevant or was something they didn’t understand.

- Helps identify areas of potential confusion and/or re-evaluate the relevance of that piece of information on the website.

- Our most commonly discarded cards:
  - Mobile Site - irrelevant
  - Espresso Book Machine – lack of meaning
  - EndNote – lack of meaning
Card Sort: Green Sticker Test

- Participants were allowed to place a green sticker on the 3 cards representing the most important information on the website

- Our Top Green Stickers:
  - Resources
  - Your Library Account
  - Library Catalog
  - Find e-journals by ISSN or Title
Card Sort: Green Sticker Test

And a number of different terms essentially representing the same concept or information:

- Find It
- Databases
- Find Articles
- Electronic Resources
- Indexes and Databases
- Articles
Don’tForgettheQualitativeStuff...

Design and navigation of website should not be based solely on numeric results of a card sort.

Comments by participants provide context for mental modeling.
“What is article retrieval service exactly?”
“What does citation guides mean?”
“Difference between E-Resources and Electronic Resources?”
“Are subject librarians for a collection or a service?”
“Data and Statistics – is this information about the library or information available in databases?”
“Is Espresso Book Machine and Espresso Book Printing the same thing?”
What Did the Card Sort Tell Us?

- Participants think about concepts presented on our website in different ways
- Participants do not understand the terms and phrases used
- Participants seek standardization of terms
- Website presents an overload of information that is difficult for users to categorize.

Our recommendations:
- Standardize terms and phrases
- Use natural language instead of library jargon:
  - Borrow from other libraries instead of InterLibrary Loan
- Continue testing: Another card sort? Closed card sort with fewer cards!
Quandary...How Do We Fix This?

Users want features/options to handle their information needs, BUT...
Users also crave simplicity.

Too many options cause confusion!
Interaction design: balancing power with simplicity?

Remember...Redesign is not a practical option!
Progressive Disclosure

- Deferment of secondary or advanced features to a secondary screen
- Show a few of the most important options initially...
- Then offer a larger set of specialized information based on user’s request or actions
  - Simplifies the interface
  - Reduces learnability
  - Improves efficiency
FAQ: Progressive Disclosure

- Pieces of information assembled around a user’s specific need or question

- Query-based presentation of information:
  - Type a question or search term
  - Find a short answer with options for additional information
  -Provide supplemental information based on a user’s search
Main Library FAQ

Frequently Asked Questions About the MSU Libraries

- General Information
- Off Campus Access
- Using the Library
- Using Computers in the Library

- Library Services
- Print, Plot, Scan, Copy, and Fax
- Visiting the Main Library

General Information

How many libraries does MSU have?

Michigan State University has a number of different libraries on campus, including the Main Library and branch libraries such as the Business Library and the Math Library. You should also be aware that within the Main Library there are a number of special libraries and collections for particular subjects, such as the Fine Arts Library and the Map Library.

What are the Main Library’s hours? Branch Libraries?

During the Fall and Spring semesters, when MSU classes are in session, the Main Library building is open 24 hours a day from Sunday at 10 a.m. to Friday at 10 p.m. We are open from 10 a.m. to 6 p.m on Saturdays. See all hours here: http://www.lib.msu.edu/hours/.

Library hours vary during the summer, holidays and between terms; call (517) 432-6123 ext. 4 for a recording of current Library hours. Or, check the Library Hours page to find hours for Library departments and branches, including special hours for break periods. To see a list of library branches, visit our Branch Libraries’ page.

How many books do the MSU Libraries own?

The Libraries have books and much, much more! Our collection includes over 4,500,000 volumes, 33,000 magazine and journal subscriptions, 200,000 maps, 40,000 sound recordings, plus access to hundreds of electronic resources.

What is Remote Storage?

Remote Storage is an off-site storage facility. Requested materials are picked up daily Monday through Friday by library staff. Items with the location of Remote Storage in the library catalog can be requested by filling out the online request form or at the Circulation Desk. Items will be held for pickup at the Main Library Circulation Desk.
LibAnswers as an FAQ?

- Progressive disclosure: Provide information based on user’s query
  ...rather than force users to find their way through the maze of navigation
- Opportunity for users to submit question if answer not in FAQ
- Ticket system: serves as a reference service point
- Topics, Keywords – categorization and findability
- Query Spy: What are users asking? Watch trends in information seeking; create new FAQ entries
- Valuable supplement to website
- Reduces learnability; improved usability
# LibAnswers as FAQ

## Frequently Asked Questions about the MSU Libraries

### Browse by Topic
- About Us
- Accessibility
- Account Access
- Articles
- Ask a Librarian
- Branch Libraries
- Business Library
- Check Out a Book
- Circulation
- Collaborative Technology Labs (CTLs)
- Collections
- Community Borrower
- Computers
- Copy Center
- Course Reserves
- Current Periodicals
- Current Periodicals and Microforms
- Cyber Cafe
- Donations
- E-Resouces
- View All Topics

### Most Frequently Asked Questions (and Answers)

<table>
<thead>
<tr>
<th>Question</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a current salary list for MSU faculty and staff?</td>
<td>MSU Faculty Salaries, General</td>
</tr>
<tr>
<td>What type of ID do I need to get a library card?</td>
<td>Library Account, Community Borrower</td>
</tr>
<tr>
<td>How many books can I borrow at one time? Is there a limit?</td>
<td></td>
</tr>
<tr>
<td>How do I check out a book or item from the MSU library?</td>
<td>Circulation, Library Policies</td>
</tr>
<tr>
<td>Does the Main Library have GRE, GMAT, TOEFL, MCAT, or LSAT practice exams? Can a librarian proctor them?</td>
<td></td>
</tr>
</tbody>
</table>
Distance Learning Services’ (DLS) Reports...
The real FAQ’s

- Review Distance Learning Services’ (DLS) daily transaction logs
- Record frequency of each question to identify trends:
  - Top 2 questions asked:
    - Library Hours
    - Finding known title (book, journal)
  - Top 2 displayed prominently on library’s home page:
    - People are not aware of the library website
    - People do not understand the tools available on the library’s website
    - People prefer to call rather than use a complex website
Tags and Topics

- Card Sort showed need to standardize language and labeling
- Categorize questions using Topics in LibAnswers
- Topics created based on IA of library’s website using same language and labeling
- No limit on number of Topics since users showed difficulty in categorizing information
- Keywords bridge the gap between words used by librarians and words used by users in describing a service or resource
The Reality of an FAQ

- An effective FAQ is dynamic...not static
- Consistent review to maintain currency of information
- Questions live and die based on frequency; answers need to be updated

Our reality:
- Still building FAQ in LibAnswers
- Quality control
- Adding Topics and Keywords
Erasmus – Electronic Resources portal: YIKES!

- Dinosaur…created in-house when electronic resources were just emerging into the library landscape
- Never developed to handle large amounts of diverse data (unwieldy mess of >2,000 records!)
- Clunky, outdated look…a separate silo of information...
- Usability issues: language and labeling; too many search boxes
- Separate silo of information housing descriptions and URL’s to proprietary databases and free websites
A-Z Database List (LibGuides v2 CMS)

• Offers features recommended by Erasmus Redesign Task Force with minimal loss in functionality
• Subject Associations
• Categorization by Database Type...plus sort by Database Vendor
• Advantage: Librarians already familiar with LibGuides’ functionality
• Improves usability by streamlining multiple systems on library’s website
• Improves productivity because librarians no longer need to maintain Erasmus!
The “New” Erasmus

- Electronic Resources launching pages created in LibGuides using Group function
- Seamless integration into library’s website with same look and feel
- Enhances the findability of resources on the library’s website
- Best Bets pages provide good starting point for research:
  - Highlights subject-specific databases
  - Provides contact information for subject librarian
  - Highlights guides with additional research tips
“New” Erasmus: A-Z Database List

Electronic Resources: Databases

Databases

Find Databases by Title

Databases allow you to search the content of scholarly journals, magazines and other materials. Most include summary abstracts describing article content, and some provide the full text of articles. Many cover specific disciplines or areas of study; while others are general or cross-disciplinary.

Browse the Database List by Subject, Title or Vendor.

License Restrictions

Terms of Use for Electronic Journals and other Electronic Resources
Commercial Use Restrictions

Commonly Used Electronic Resources

- Academic OneFile
- Ebscohost
- EBSCOhost eBook Collection
- Gale PowerSearch
- Gale Virtual Reference Library
- JSTOR
- LexisNexis Academic
- Opposing Viewpoints in Context
- Periodicals Archive Online
- Project Muse
- ProQuest (All databases)
- PubMed (Medline)
- SAGE Knowledge Encyclopedias and Handbooks
- SciFinder
Best Bets

Database List: Nursing
Find the best library databases for your research.

Databases

Nursing
All Database Types
All Vendors / Providers

Best Bets!

CINAHL Plus with Full Text (EBSCO)
1937 -
CINAHL is the online version of the Cumulative Index to Nursing and Allied Health Literature. It provides indexing for over 3,000 nursing, allied health, biomedical, and consumer health journals. Additional items indexed include nursing dissertations, selected conference proceedings, standards of practice, educational software, audiocasts, and book chapters. Evidence-Based Care Sheets and Quick Lessons are also included.

PubMed (Medline)
1966 -
MEDLINE is the National Library of Medicine's premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and the preclinical sciences.

Nursing Experts

Jessica Sender

Nursing Guides

- Collection Development Policy Statement: Nursing
- DNP/PhD Resources
- Finding Practice Guidelines
- Health Sciences Videos
Word(s) of Website Advice

- Conduct usability testing to find out how users mentally model the information presented on your library’s website
- Make simple, iterative, user-centric changes to resolve usability issues
- Reduce “learnability” factor for users
- Design by librarians for librarians is not allowed!
- The library’s website is not the only point of contact!
- Avoid information overload
- Use FAQ to enhance progressive disclosure as a design element
Thank You!

Questions? Comments?

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