Usability Testing In the Academic Library: A LibGuides Case Study

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Agenda

- Introduction to usability testing.
- Conduct a test of a library website.
- Conduct a test of Metropolitan State’s LibGuides.
- Usability and LibGuides briefing.
- Questions.
How do people use the Web?

(Krug, 2006)
Something is “usable” if it is...

- Learnable.
- Efficient.
- Memorable.
- Satisfying.
- Less prone to errors / recoverable.

(Nielsen, 2003)
They leave!

• If a site is difficult to use...
• If users get lost...
• If a site doesn’t answer a user’s question...

(Nielsen, 2003)
How to measure usability?

• Don’t listen to what people say.
• Watch what they do.

(Nielsen, 2001)
A site should be designed around common tasks.
How to study a site’s usability?

• Find a handful of representative users.
• Ask them to perform typical tasks.
• Observe what they do.

(Nielsen, 2003)
Then what?

• Introduce small changes suggested by the test.
• Test the changes iteratively.
• Make iterative improvements.
• Repeat.
Measuring success

• Conduct a usability test.
• Measure the percentage of tasks correctly completed.

(Nielsen, 2001)
How many users to test?

- Only 5 of each representative group.
- Testing with more yields marginally fewer insights.
- Conduct more tests, rather than find more testers.

(Nielsen, 2000)
Challenge

• Recruiting users is not as challenging as convincing your colleagues of your findings!
Resources

• Jakob Nielsen’s AlertBox:
  http://www.useit.com/alertbox/

• Books by Steve Krug:
  http://www.sensible.com/
Mechanics

- Decide what to test.
- Prepare a script.
- Acquire incentives.
- Choose a location.
- Recruit users.
- Conduct a test.
- Debrief.
Decide what to test

Determine the focus of the tests.

For example:
• Your library’s current site.
• Page designs and/or working prototypes or similar for a re-designed site.
• Another library’s site.

(Krug, 2010)
Decide what to test

Create a list of key tasks for your site.

From this list, identify the tasks to test:
• Most critical tasks.
• Tasks related to known problem areas.
• Tasks related to potential problem areas.

(Krug, 2010)
Prepare a script

Turn your tasks into scenarios:
• Allows you to create a script to follow.
• Explains what you want the user to do.
• Provides context and necessary information.

(Krug, 2010)
Prepare a script

In the script:

• Include initial questions to set the tone and put users at ease.
• Remind users that you are testing the site and not them.

(Krug, 2010)
Incentives and Location

Acquire incentives to compensate/thank users:
- Gift cards, book bags, tchotchkes, etc.

Choose a location:
- Quiet space with table or desk and chairs.
- Computer, mouse, keyboard, internet access.
- Dual monitor for observation.

(Krug, 2010)
Recruit users

• Try to recruit users who reflect your audience, but don’t obsess about it.

• How many?
  – Krug recommends three.
  – Nielson recommends five.

(Krug, 2010)
(Nielsen, 2000)
Conduct a test

Roles:
• Facilitator.
• Observer(s).
• User.

Print your scenarios:
• One per sheet, for users.
• A copy for you and observers.

Follow your script; read it exactly as written.
• Explanation/overview.
• Initial questions.
• Tasks/scenarios.  

(Krug, 2010)
Conduct a test

Record what users do.
• Note anything interesting, especially points of confusion.

Wrap up:
• Questions.
• Thank users.
• Distribute incentives.

(Krug, 2010)
Debrief

• Debrief as soon as possible.
• Focus on the most serious problems.
• Prioritize in terms of which you will address/fix first.
• Summarize in short email, document, or internal wiki.

(Krug, 2010)
Sample Tasks and Scenarios

**Task:** From the library website, do students understand where to go to find articles from subscribed library databases?

**Scenario:** You are taking a criminal justice course and need to find an article about community policing. Where would you go to find full-text articles on this topic?
Sample Tasks and Scenarios

**Task:** From the library website, do students know how to locate course materials available through electronic reserves?

**Scenario:** Your Anthropology 200 instructor has put course readings on electronic reserve. How do you find the reserve materials for your class?
Sample Tasks and Scenarios

**Task**: From the library website, do students know where to go to find books and videos?

**Scenario**: You are interested in finding a video about the civil rights movement. Where would you go to find this video? What about a book?
Sample Tasks and Scenarios

**Task:** From the library website, do students know where to find subject guides and understand the purpose of the guides?

**Scenario:** You need to find a variety of information about the behavioral psychologist BF Skinner for a presentation you are doing in a psychology class. You have never done research in psychology before. Where would you go to find out where to start?
Time to Test!

In your small group, conduct a usability test of the Metropolitan State University LibGuides using the distributed script.

You may want to take turns in the roles of facilitator, observer, and user.
Debrief

• Based on your testing experience, do you have a recommendation about a possible change to the Metropolitan State University LibGuides?
• What did you find challenging?
• What was the most interesting or revealing discovery?
• Comments? Questions?
Time to Test!

In your small group, conduct a usability test of a library website of your choice. Identify two tasks and create two corresponding scenarios.

You may want to take turns in the roles of facilitator, observer, and user.

Having trouble coming up with a site? Try one of these:
Grand Valley State University [http://libguides.gvsu.edu/home](http://libguides.gvsu.edu/home)
University of Michigan [http://guides.lib.umich.edu/](http://guides.lib.umich.edu/)
Georgia Tech [http://libguides.gatech.edu/](http://libguides.gatech.edu/)
Arizona State [http://libguides.asu.edu/](http://libguides.asu.edu/)
Debrief

• What did you find challenging?
• What was the most interesting or revealing discovery?
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Literature review

Others usability studies of LibGuides
How many libraries?

• Over 2,000 libraries use LibGuides and have created over 125,000 guides. (Springshare, 2011)
• Librarians continue to be enthusiastic about guides.
Literature Review

- Grand Valley State University - Slideshow
- University of Michigan – Final Report
- MIT – Results, Best Practices Guide
- Latrobe – Report
- University of Washington - Report
- Georgia Tech – Survey
- Concordia University of Alberta – Interviews with 11 students
Themes from all of the studies

- Less is more. Most of the studies identified problems with clutter, redundancy, too many links, tabs, boxes, and images that overwhelmed users.
- Don’t order lists alphabetically.
- Don’t use subtabs or rollover text.
- Do use brief, meaningful descriptions.
- Do be consistent in naming & labeling (encyclopedias/ ref sources).
- Do create more narrowly focused guides.
Some contradictions...

• Usefulness and visibility of tabs.
• Usefulness of how-to information at point of need.
Weaknesses of these studies

• Many studies seem to have been done once with no apparent follow up.
• Interpretation of results is subjective and institutions have different populations.
• The libraries don’t seem to have implemented many of the recommendations.
Our Usability Testing

Our Tests and Results
Our testing

• Grew out of a usability test of the library site & recommendation of team to investigate further.

• Students were asked to locate an article on the topic of computer science. LibGuides was identified as a large part of the high failure rate.
Round One: Problems identified

• Students wanted a search box, expected it to behave like a discovery tool.
• Students found tab names inconsistent or unclear (Citing Sources vs. MLA).
• Students used Full Text Journal Finder search at the wrong times, and never at the right times.
Round One: Problems (continued)

• Students ended up overwhelmed or going down the wrong path (e.g., websites tab).
• Students didn’t understand social media links on librarian profile boxes, or where email went.
• Students didn’t understand that guides were discipline-specific.
• Students don’t understand disciplinary terms and boundaries (socialism).
Round Two

• Implemented some fixes.
• Results were mixed. Some success, but in some cases, failure rate increased. 😞
  – Small population? Complex tasks?
    Misinterpretation of “results”?
• Implemented additional changes.
Michelle Filkins

Contact Info
Send Email

Links:
Profile & Guides
Full Text Journal Finder (AtoZ)

Find journals and magazines online by title or ISSN:

Title begins with ↯ Search

If you already have a citation and want full text, try Citation Linker.

Search Google Scholar

Be sure to visit Scholar Preferences and set your "Library Links" to Metropolitan State. If you need help, Ask a Librarian or view our video tutorial.

Article Databases, Discipline-specific

Use library databases to search scholarly and professional literature on a topic of your choice.

- **America: History & Life (EBSCO)**
  AH&L is a database covering scholarly literature in the history of North America, including the U.S. and Canada. Articles are abstracted from more than 2,400 journals. For similar coverage of non-U.S. and non-Canadian history, please see the following.

- **Historical Abstracts (EBSCO)**
  Historical Abstracts covers the world's scholarly literature on the history of U.S. and Canada -- for works on U.S. and Canadian history.
  Includes abstracts and citations of articles, books, and dissertation abstracts.

- **African American Studies Center**
  Combines major reference works, articles, primary sources, and images related to African American history and culture.

- **LGBT Life with Full Text**
  LGBT Life with Full Text contains the abstracts for journal articles, plus full text for more than 120 of the most important and highly-cited journals, magazines, and regional newspapers.

- **Women and Social Movements in the United States**
  Primary sources and documents, many full-text, related to women's history, social movements, and social change in the U.S.
Use library databases to search scholarly and professional journals and magazines on a topic of your choice.

- **Historical Abstracts (EBSCO)**
  Scholarly articles on **World History** (outside of the US and Canada).

- **Academic Search Premier**
  A good starting place for articles - both scholarly journals and magazines are included.

- **JSTOR**
  Scholarly articles in many disciplines. It is an archival source, meaning the full text goes back to the first issue (sometimes 100 years ago!) but it does not include the most recent 3-5 years of articles.

- **New York Times Historical Database**
  The New York Times (1851-2007) offers full page and article images with searchable full-text back to its first issue.

- **LexisNexis Academic**
In this library guide for business and management:

**Database Articles**
- Journal databases to discover SWOT analyses, and industry

**Books & Films**
- Catalog to find books, videos,
- Catalog to find books to borrow
- Ebooks to read online or on any device
- Streaming films

**Encyclopedias**
- Online academic encyclopedias, business and management topics

**News Sources**
- Databases to find regional, national, and international news

**APA Style**
- Handouts and websites for APA
- RefWorks, a bibliographic citation management tool
Long Term Needs

- Create new task oriented tabs, like Company Profiles.
- Create a LibGuide style guide for authors.
- Improve / shorten descriptions for every database.
- Test and improve Full Text Journal Finder.
- Implement a discovery tool (e.g., Summon).
Lessons learned

• LibGuides should focus on meeting a user's information needs and be constructed around these needs whenever possible, NOT information "types".

• Each guide should have as few tabs as possible and highlight only the most frequently used or helpful sources. (Save the time of the reader).

• Database tabs should include in their names/labels the words "articles" or "journals" to help students better connect with these resources. Whether "articles" or "journals" is a better word to use is subject to further testing.
Lessons learned (cont.)

• A table-of-contents-style splash page for subject guides provides a reasonable compromise.

• Be as specific as possible in naming tabs.

• Focus source selection on electronic resources, not print items or physical objects.

• Sort sources by usefulness or relevance, not by alphabetical or numerical order.
Lessons learned (cont.)

• Consider placing search widgets at the top of pages above long lists of links. Searchers tend to get frustrated by long lists of sources, not taking the time to browse the choices.

• Ask Springshare for help! They are extremely helpful and responsive.

• Realize the limitations to guides. This will not replace need for discovery layer.