

2005-07

# Search Tools - Formal User Test

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*Downloaded from Deep Blue, University of Michigan's institutional repository*

# Project Cover Sheet

Project	<p><b>Search Tools</b></p> <p><i>Formal User Test</i></p> <p>Search Tools provides end-users with a quick, easy, and personalized interface which can metasearch (search simultaneously) for information in a variety of information resources, such as catalogs, reference resources, digital repositories, or subject-based Web gateways. Search Tools provides the ability to save references in My Shelf, to disk, send via email, or use "Find It!" to find out UM availability.</p>
Committee & Members	<p><b>Usability Working Group</b></p> <p>Kat Hagedorn (chair), Karen Downing, Suzanne Gray, Jennifer Nardine, Gurpreet Rana, Robert Tolliver</p> <p>Cathy Lu (librarian), Kavitha Reddy (student intern)</p>
Report Info	<p>Report Author(s): Cathy Lu, Kavitha Reddy</p> <p>Contact Information: <a href="mailto:ul-usability@umich.edu">ul-usability@umich.edu</a></p> <p>Report Date: July 2005; Last Revised: December 2006</p> <p>Date Submitted to PARC: August 2005</p>
Objectives	<p>The purpose of this testing was to collect user data on the functionality and usability of Search Tools, specifically the Quick Search, e-Resources, and e-Journals interfaces, in order to determine how they should be modified to best meet the needs of the university community.</p>
Methodology	<p>Method – Formal User Test</p> <p>11 participants</p> <p>Dates of study: June-July 2005</p>
Results & Analysis	<p>See recommendations.</p>

## Recommendations

- "E-resources" is "jargony" and should be changed to more descriptive terminology, such as "e-Databases".
- The SFX icon needs to change, either to the standard SFX icon or to an even more obvious label such as "full text here".
- The use of gray on gray in various pages makes it more difficult to identify active links and challenging to identify different functions (the "help" link, most specifically).
- How to get back to the list of results from within a record is not intuitive at all.
- Change the "Table View" label to a clearer label like "Back to search results".
- Make the advantages for logging in more apparent.
- Make the search box on the Quick Search page more visible.
- Some users found multiple windows opening quite confusing.

## Search Tools Evaluation Executive Summary

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### Test Goals

The purpose of this evaluation was to collect user data on the functionality and usability of Search Tools, specifically the Quick Search, e-Resources, and e-Journals interfaces, in order to determine how they should be modified to best meet the needs of the university community. The study measured users' ability to complete tasks involving the application's labeling and navigation as well as the various types of searches available.

### Participants

A total of 11 individuals were tested: 6 undergraduate students, 3 graduate students, and 2 faculty members. They come from a variety of disciplines, represent a wide range of skill levels in terms of online research, and have varying degrees of exposure to Search Tools. *See Appendix A, B and C for the test script.*

### Preliminary Analysis and Recommendations

The following table identifies the most common issues in order of severity and lists possible solutions:

Issue	Evidence	Recommendation
Confusion over e-Resources	11/11 participants	<ul style="list-style-type: none"> <li>• Change name to e-Databases (suggested by 2 participants)</li> <li>• Make Category default start page</li> <li>• Include highly visible explanation of purpose</li> </ul>
SFX icon	7/11 participants	<ul style="list-style-type: none"> <li>• Change to more visible button with more obvious label like 'Get full text'</li> </ul>
Using browser's Back button to return to search results	6/11 participants	<ul style="list-style-type: none"> <li>• Change from 'Table View' to a clearer label like 'Back to search results'</li> <li>• Include notice that users should minimize use of browser navigation</li> </ul>
Logging in	2/11 participants: One didn't realize she had to login to use many ST features (connecting from outside UM network) and another was confused when she was asked to login after clicking on a resource title (connecting using UM network)	
'i' icon	4/11 participants	
Didn't notice or use search box on Quick Search page	2/11 participants	<ul style="list-style-type: none"> <li>• Make text box more visible</li> <li>• Explain purpose of the search box</li> </ul>
Confusion/irritation over multiple windows opening	5/11 participants	

## **Conclusion**

While this preliminary report provides evidence of Search Tools interface issues and makes recommendations that should go some way toward resolving them, further analysis—one that incorporates the results from the expert evaluations and assesses the viability of participants' suggestions for improvement—should be undertaken to obtain the most complete picture of the application. Finally, it should be noted that despite the problems many encountered in completing the tasks, most of the participants came away from the test with positive feelings about Search Tools and indicated a willingness to use it again in the future.

## Appendix A: Pre-test Questionnaire

1. What is your role at the University?

Undergraduate student  Graduate student  Faculty  Staff

2. On a scale of 1-5, with 1 being complete novice and 5 being expert, how would you rate your research-focused searching skills on line?

1  2  3  4  5

3. How often have you used each of the following?

	Never	Rarely	Sometimes	Regularly	Frequently
Mirlyn					
UM Library's Networked Electronic Resources					
UM Library's Electronic Journals & Newspapers					
Google Scholar					
Others (Please list if any)					

4. How often have you used Search Tools?

- Never (**Please go to Question 6**)  
 Once or twice  
 A few times a semester  
 A few times a month  
 A few times a week  
 Once a day  
 Several times a day

5. What features of Search Tools have you used?

Quick Search  Find e-Journals  Find e-Resources  Power Search  My Search Tools

6. What are the interface features and functionalities do you expect from a scholarly search engine such as Search Tools , for instance, browsing and navigation, results display, access to full text copy, results management, and etc.?

## Appendix B: Test Script

Hi. Thanks for coming today and agreeing to take part in this. My name's \_\_\_\_\_ and this is \_\_\_\_\_. Please have a seat. **[Take seats]** We're working for the Search Tools Usability Working Group to evaluate Search Tools, a new search engine available through the University Library's website in a beta version. We've been asked to identify the application's problem areas, which is where you come in. To get user feedback on Search Tools, we're going to ask you to complete a few simple tasks using the system while we record how you perform those tasks. Then we'll ask for your opinions of Search Tools. I'll be facilitating the test and \_\_\_\_\_ will be observing and taking notes.

Before we start the test, there's some paperwork I'm going to ask you to fill out. **[Hand subject 2 copies of consent form]** The first is a consent form that basically says we're not going to publish the information from this test. And when we submit our report, all identifying information will be removed. We have 2 copies of the form here—one for you to keep and one for our records. I'll give you some time to read that and sign it. **[Take signed copy]**

Thanks. **[Hand subject pre-test questionnaire]** Now I have a short questionnaire that I'd like you to fill out. Basically, it's for us to get some demographic information and find out about your experience using various on line research tools. **[Take completed questionnaire]**

Now that we've gotten the paperwork out the way, do you have any questions before I explain how this is going to work? **[Pause for questions]**

Great. As you've probably already noticed, I'm going to be reading from my script here because there are a lot of things I need to cover, and I want to get everything exactly right. This test session will probably last about 30 minutes. It will consist of 4 tasks I'll ask you to complete using Search Tools on the laptop in front of you. Each task should take about 7-10 minutes. Your screen movements and comments will be recorded by a software program. \_\_\_\_\_ will also be taking notes on the process you use to complete the tasks.

One point that I can't emphasize enough is that we're testing Search Tools—not you. If you have any problems completing any of the tasks, don't get stressed out—it's not your fault. If you feel something is confusing, difficult, or wrong, let me know. If you run into some difficulties or have uncertainty about some choices, , please try to work through the problems as best you can. We would be only able to answer a few questions during the session.

Finally, please talk out loud while you're doing the tasks. Basically, we want to know what you think of the system while you're using it. please say what you're doing, why you decided to make a particular choice, what you think of the interface, things like that. Feel free to be completely candid.

Do you have any questions before we begin? **[Pause for questions]** Okay, then, let's get started

**[Start Camtasia.]**

I'll give you a written description of the four tasks. Please let us know if you need more explanation.

... (after post-test questionnaire) That's great! Thanks again for participating in our study. As a token of appreciation we'd like to offer you a gift certificate to Zingerman's.

## Appendix C: Post-test Questionnaire

Thank you again for taking the time to help us with our evaluation. Before we let you go, we'd like to ask you a few brief questions about the tasks you've just completed.

What is your overall impression of the system after doing this test?

What aspects of the system did you find particularly easy to use?

What aspects of the system did you find particularly difficult to use?

*Please rate the following statements on a scale from Strongly disagree to Strongly agree*  
The interface—which includes the menus, organization, and overall look—was designed well to help me perform the tasks.

Strongly disagree     Disagree     Neutral     Agree     Strongly Agree

It was easy to understand what the various labels meant.

Strongly disagree     Disagree     Neutral     Agree     Strongly Agree

I am likely to use Search Tools when I need to research something in the future.

Strongly disagree     Disagree     Neutral     Agree     Strongly Agree

Do you have any suggestion to improve the system with regard to interface, such as icons, navigation, labels, display, and help info?

Are there any other comments you want to add?