Project Cover Sheet

Project	**UM Library Gateway** *New Gateway Design - Paper Mockup Test* As part of a redesign of the Library's gateway page (www.lib.umich.edu), user input was solicited to inform labeling and placement changes.
Committee & Members	Usability Working Group Kat Hagedorn (chair), Suzanne Chapman, Karen Downing, Anne Karle-Zenith, Shana Kimball, Gurpreet Rana, Robert Tolliver Cathy Lu (Web Services), Natasha Sant (student intern)
Report Info	Report Author(s): Cathy Lu, Natasha Sant Contact Information: ul-usability@umich.edu Report Date: March 2007 Last Revised: April 2007
Objectives	The goal of this test was to determine user opinions of gateway page section labels, their ordering, and the Ask Us service.
Methodology	Method – Informal "Guerilla" User Test using a Paper Prototype 12 participants Dates of study: March 2007
Results & Analysis	Test results revealed no strong consensus about labeling or ordering of content, however results informed recommendations.
Recommendations	▪ Add Ask Us as a link in the Help area, and on the Subject Specialists page. Add descriptive text, e.g., "Ask Us (Ask a Reference Librarian)" to the link. Consider some method of making the section bigger, more obvious, or containing explanatory text on the gateway page. ▪ The General Search box should go above the Find Articles box. Add grayed-in 'Enter keyword here' hint and search examples to the Find Articles area. ▪ Order the main content sections as follows: Research Tools category on the upper right, About the Library on the upper left, Library Services on the bottom left, and Information For on the bottom right. ▪ Re-label Research Tools as Resources. ▪ Re-label "Books" and "Articles from journals, newspapers, magazines" links in Shortcuts section. Add "Inter-library Loan (ILL)" and "Document Delivery" links.

Executive Summary

In March 2007 Cathy Lu from Library Web Services and Natasha Sant from School of Information conducted usability tests for a proposed redesign of the UM library gateway website (www.lib.umich.edu). The new design, created by Library Communications Specialist Liene Karels, was currently in development at the time of the tests so a paper prototype based on this design was used. Twelve usability tests were conducted over a period of three days.

The table below presents the major usability findings of the user tests as well as recommendations from the Library Usability Working Group (UWG).

Finding	Criticality Rating	Recommendation
None of the 6 participants chose the Ask Us area when they were asked to contact a reference librarian	10.0	Add an Ask Us link in the Help section, and another link on the Subject Specialists page. In these areas, help users understand what this link is by adding some more text, e.g., "Ask Us (Ask a Reference Librarian)" to the link. Consider some method of making the section bigger, more obvious, or containing explanatory text on the gateway page.
Of the 12 participants, 3/4 chose the General Search to go above Find Articles. Additionally, there were suggestions to add examples to the Find Articles area like there are for the General Search area, and to add a grayed-in search hint in the search box, which then disappears when the user clicks in the box.	7.5	General Search should go above Find Articles. Grayed-in example and search hints should be implemented.
There is no real trend for positioning the four main categories of links in the center of the page, however 1/3 participants wanted the About category in the upper left and 1/2 wanted the Research Tools category in the upper right.	5.0	Order the main gateway page as such: Research Tools in upper right, About in upper left, Library Services in bottom left, Information For in bottom right.
About 1/3 of the participants wanted the label Resources instead of Research Tools. The label for the audience category is more problematic. Users labeled this category: Affiliations, Library Users, Patrons and People.	3.3	Re-label Research Tools as Resources. Leave "Information For" as is for now.

Testing Methods

When developing the test tasks, the usability working group and the testers decided to focus on testing section labels, their ordering, and the Ask Us service on the gateway page. To eliminate influence from the design prototype on the test participants, the testers cut out the sections to be tested from the paper prototype and removed the center section labels (see Appendix B for the paper prototype after the labels were removed and before the middle of the page was cut).

The 12 testing sessions were all conducted in informal settings due to the urgent timeline of the project. The participants included 4 undergraduate students, 4 graduate students, 1 library staff member, 1 librarian, 1 faculty member, and 1 lecturer. These participants were not recruited in advance, but were chosen by the testers at random. They represented the wide range of audience on campus that the library gateway page faces.

Data Analysis

Question 1: (*Participants were shown the four list of links without header labels.*)

How would you label each of these lists?

For this question, answers tended to vary among participants and it was observed that a good number of participants had difficulty coming up with labels to generalize all the sections. There were two participants who were unable to provide section labels for all the groups of links.

Although the answers differ greatly among the participants, the testers were still able to locate one general trend for labeling one particular section. Six of the participants chose a section label of 'Resources' for the list of links formerly labeled 'Research Tools.' For the other sections, alternative labels appeared from participants' answers but no single label was named by more than 25% of participants. In this case, the testers decided the other alternatives could not be counted as a unanimous choice of labeling and therefore didn't adopt any of the other labels given by the participants.

Additionally, by comparing the test results, the testers noticed the majority of participants named section labels based on the content of sub-headings in the section although two participants used a particular question-answer approach: for the 'Information For' section, one participant came up with 'Which type of user are you?'; one lecturer participant had 'What do you want to do … ?' and 'Are you a … ?' for the 'Library Services' and 'Information For' sections respectively. Despite only a small number of people using this approach for labeling, the testers found it effective in creating a stronger interaction between the page and the audience. It would be worthwhile testing these question-like labels in another round of usability testing to see if the audience can locate what they are looking for more quickly with these labels.

Question 2: (*Participants were shown the two search boxes, the 'Shortcuts' section, and the 'Campus Quick Link' box, one at a time.*)

Do you think this label correctly describes this section?

The test results for this question show the labels of the tested titles were in general descriptive and helpful to the audience. Most participants thought all the labels described their sections correctly. Specifically, the 'Shortcut' label gained very positive comments: 'good,' 'enticing,' 'a good idea,' 'okay,' 'makes sense,' and 'a good label.'

Most people understood 'Campus Quick Links' as quick links to popular university web tools just as the label was intended. On the other hand, two people thought this dropdown box would take the user to other University Library locations. Because the latter group was relatively small, the testers decided that 'Campus Quick Links' is an effective label.

In addition, two other participants' feedback on this question offered the testers good insights on making improvements to the design. One graduate student would like to see ILL linked from the Shortcuts section, which confirmed an earlier idea from some members of the Usability Working Group. One lecturer and one faculty member would like to see the 'enter keyword' hint in the search field and search examples below the 'Find Article' search box the same way as for the 'General Search' search box. The testers thought this suggestion very helpful in making the search boxes more consistent with each other and easier to understand.

Question 3:

This question was split into two parts because the testers wanted to see a) whether the participants would understand the labels of the sections correctly, and b) whether the participants would go to Ask Us when they have a question to ask a librarian. These two questions serve the same purpose in identifying if the design of the library reference Ask Us section would prompt users to use one of the most important services the library provides to the university community.

a. (*1/2 of participants*) (*Participants were pointed to the Ask Us section.*)

- What do you think this section is for?

- What do you think the links "email", "chat/IM", and "phone" do?

All 6 participants who were asked this question told the testers that this would lead to a web page where they could ask questions. They seemed to understand the use of the section well and considered it 'straightforward.' Based on these test results, the testers expected the remaining half of the participants would respond well and chose to click on Ask Us.

b. (*Other 1/2 of participants*) **Where would you go on this page if you would like to contact a reference librarian?**

Unexpectedly, none of the rest of participants chose Ask Us. All of them suggested that they would either click on the 'Subject Librarian' link in the center area, and three out of 6 would also look for a link in the Help section. Though these are indeed correct paths, it is interesting that no one chose the graphic dedicated to promoting these services. When told eventually that the 'expected' section was Ask Us, one participant commented that the section on the upper left corner was 'not intuitive, too small, and not obvious.' The participant librarian who didn't choose Ask Us had the following comments, 'If I didn't work here, I probably would not realize (what Ask Us is).'

The test results from this question made the testers realize that the design and location of the Ask Us section is not effective at promoting and drawing attention to the Ask Us services. There are multiple reasons causing the issue: today's web users are used to finding the contact info in the help section of a site, given most of the websites they visit are e-commerce sites; the design of the Ask Us section presented was small, not obvious, and was placed at the upper left corner which some people found unexpected – they were expecting it to be at the upper right corner which is another 'convention' of today's e-commerce sites. Last but not least, the way this question was constructed with the words 'reference librarian' may be arguably misleading – it may subtly indicate to people to choose Subject Specialist as the answer, since doubtfully many people can tell these two titles apart. A further test on a question 'where would you go on this page if you would like to contact the library' could be a good comparison to see if some participants would locate Ask Us this time instead.

Question 4: (*Participants were shown the two search box cutouts and the four middle column cutouts.*)

- In which order would you place the search box cutouts?

- In which order would you like to see these four areas in the middle of the page?

For the first part of the question, nine out of the 12 participants chose the 'General Search' box to be above the 'Find Articles' search box. The result confirmed the decision made in the prototype.

For the second part of the question, the answers varied from person to person and nearly no repeating order appeared. The testers used the majority vote on the four sections for each area. It turns out that the 'About the Library' section would be on the upper left area (chosen by 5 participants), 'Research Tools' section the upper right area (chosen by 7 participants), 'Library Services' section the lower left area (chosen by 3 participants), and 'Information For' section the lower right area (chosen by 3 participants).

Recommendations and Usability Testing Summary

• The Ask Us section proved the most problematic with users. None of the 6 users asked question 3b) chose Ask Us to ask their questions.

  RECOMMENDATION: Add Ask Us as a link in the Help area, and a link on the Subject Specialists page. In these areas, help users understand what this link is by adding some more text, e.g., "Ask Us (Ask a Reference Librarian)" to the link. Consider some method of making the section bigger, more obvious, or containing explanatory text on the gateway page.

• Nine out of the 12 participants chose to place the General Search search box on top of the Find Article search box. Additionally, there were suggestions to add examples to the Find Articles area such as there are for the General Search area, with one person suggesting adding a 'Enter keyword here' hint in the search field, which then disappears when the user clicks in the box.

RECOMMENDATION: The General Search box should go above the Find Articles box. A grayed-in 'Enter keyword here' hint and search examples should be added to the Find Articles area.

- There is no majority-agreed order for positioning the four main categories of links in the middle of the gateway page, however 1/3 of the participants wanted the About the Library category on the upper left and 1/2 wanted the Research Tools category on the upper right.

  RECOMMENDATION: Ordering the gateway page as such: 'Research Tools' category on the upper right, 'About the Library' on the upper left, 'Library Services' on the bottom left, and 'Information For' on the bottom right.

- About 1/3 of the users wanted the label 'Resources' instead of 'Research Tools.'

  RECOMMENDATION: Re-label 'Research Tools' as 'Resources.' Leave the other middle category labels as is for now.

- Users had no trouble with Shortcuts and Campus Quick Links as labels. However, there was a suggestion to re-word the "Books" and "Articles from journals, newspapers, magazines" links. These labels were confusing to users. Additionally, there was an original suggestion (from PARC and UWG) to add "Inter-library Loan (ILL)" and "Document Delivery" links to the Shortcuts area. UWG recommends doing this at the same time as these other changes are made.

  RECOMMENDATION: Re-word "Books" and "Articles from journals, newspapers, magazines" links in Shortcuts. Add "Inter-library Loan (ILL)" and "Document Delivery" links.

Overall this usability testing assisted the library web services and UWG on section labeling, section positioning, and identifying other content and feature issues within the website redesign prototype. It also pointed to more possibilities for further iterations of testing on the website template, such as labeling sections with question-like headings to promote a stronger sense of interaction, or testing alternative designs of the Ask Us section using different questions to see if people would use it for contacting library staff.

Appendix A: Test Script

Greet the participant

Hi, my name is Cathy/Natasha. Would you be willing to participate in a brief study about the library's website homepage? It will only take 15 minutes of your time. *(Yes or No)*

Pre-test procedure

We need you to sign a consent form for our IRB (behavioral study) records. Thanks! Do you have any questions for us before we begin?

Begin Test

Step 1:

First I'd like to ask you a preliminary question:

- What is your affiliation with the University? (*If this is a student, ask what his/her year in school is.)*

Step 2:

1. (*Present the paper cutouts of each group of sub-headings, 4 total.*)

How would you label each of these lists?

2. (*Point to the two search boxes, the 'Shortcuts' section, and the 'Campus Quick Link' box. Do each of the four one at a time.*)

Do you think this label correctly describes this section?

3a. (*1/2 of participants*) (*Point to the Ask Us section.*)

- What do you think this section is for?

- What do you think the links "email", "chat/IM", and "phone" do?

3b. (*Other 1/2 of participants*) Where would you go on this page if you would like to contact a reference librarian?

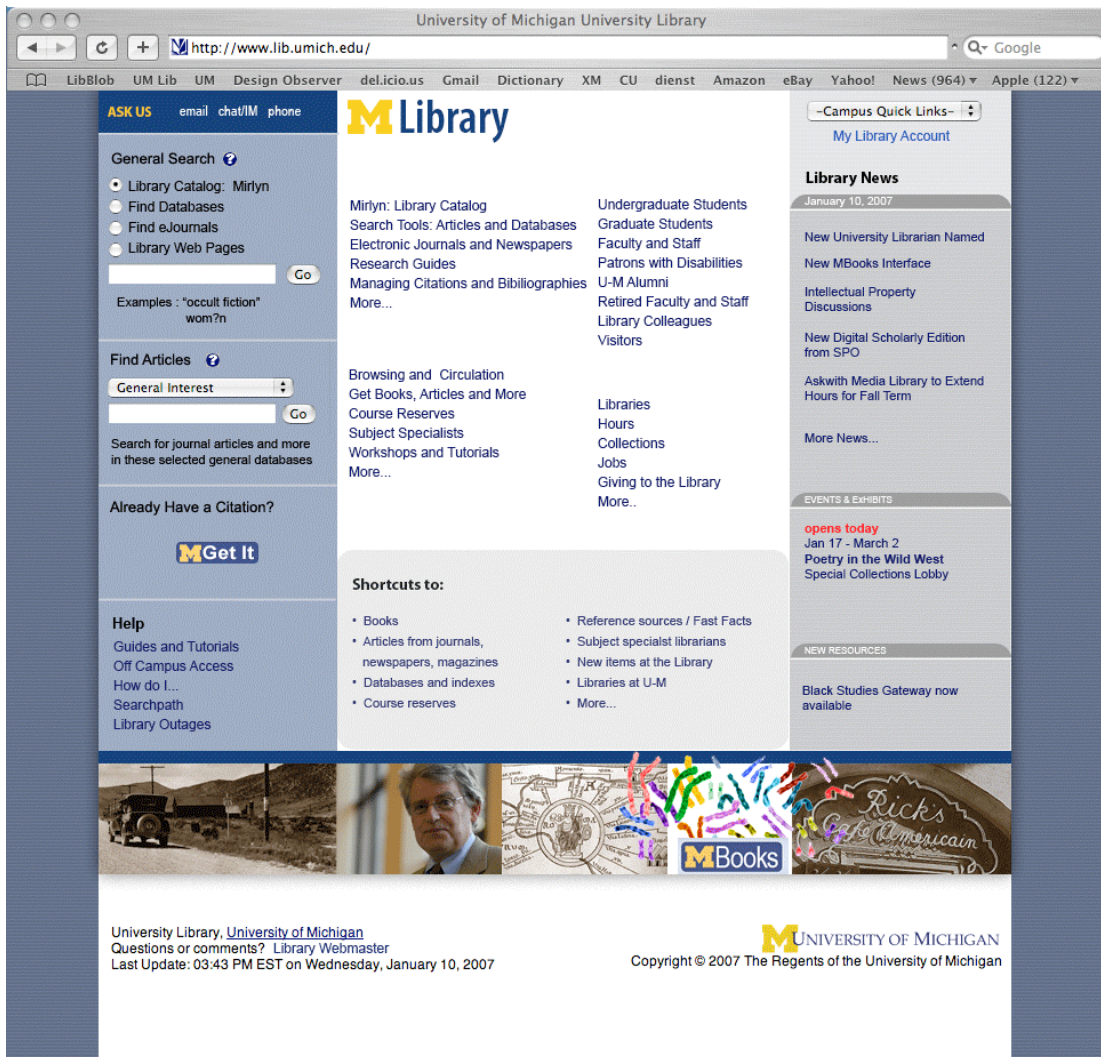4. (*Show the two search box cutouts and the 4 middle column cutouts.*)

- In which order would you place the search box cutouts? (*Show them both ways.*)

- In which order would you like to see these four areas in the middle of the page? (*Let them move the cutouts around.*)

Test Ends

Thank you very much for your time and input. Have a great day!

Appendix B: Test Prototype Image

Appendix C: Test Results Data

(See accompanying Excel document.)