

# Project Cover Sheet

Project	<p><b>Library Gateway Navigation Menu</b></p> <p><i>Guerilla Test of Library Gateway Navigation Menu</i></p> <p>The University of Michigan Library Gateway pages and selected libraries have a top-level horizontal navigation menu that allows users quick access to menu items provided on the Gateway.</p>
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Objectives	<p>The goal of this test was to determine if users understood the functionality and menu items of the global navigation menu on the Gateway. Specifically, we wanted to learn if users understood that the menu provided access to global library information as opposed to local (specific) library information. In addition, we also asked users about their preferences on how specific library web pages should be listed when they click on the MLibraries menu option.</p>
Methodology	<p>Method – Informal “Guerilla” User Tests</p> <p>21 participants</p> <p>Dates of study: October 2007</p>
Results & Analysis	<ul style="list-style-type: none"><li>• Four out of 11 participants correctly chose the global navigation menu to find a list of MLibrary workshops.</li><li>• Four out of 9 participants used the global navigation menu to access a list of libraries.</li></ul>
Recommendations	<ul style="list-style-type: none"><li>• Redesign the MLibraries label.</li><li>• Continue to use the fly-out menu to display links to specific MLibraries.</li><li>• Make color &amp; fonts within global navigation more consistent.</li><li>• Add the global navigation menu to the Library Gateway.</li></ul>

## Introduction

The University of Michigan Library Gateway page and participating libraries all contain the global navigation menu that gives users access to the links provided on the Library Gateway. A quick “guerilla” usability test was performed in order to evaluate if users understand:

- The global navigation menu is used to access global library information.
- The groupings of sub-menu items and their corresponding menu titles.

The guerilla test also asked users how they preferred the list of MLibraries to be displayed and how they usually access specific library webpages. The figure below is a screenshot of the current global navigation menu as it appears on the Social Work Library homepage.



Figure 1: The global navigation menu on the Social Work Library homepage.

## Methodology

Participants were recruited on the 1<sup>st</sup> and 4<sup>th</sup> floors of the Shapiro Undergraduate Library, the Duderstadt Center and the Michigan Union. Of the 28 people approached, 20 agreed to participate while eight participants declined. Each guerilla test took three to five minutes to complete.

For this study, the guerilla tests were divided into three sections. This was done in order to control for learning effects since prior experience using the global navigation menu on the first questions of the test could affect responses for later portions of the test.

The first section, Part A, tested if participants understood that the global navigation menu was used for global library information. Eleven of the 20 participants were given two search tasks that required them to differentiate between local library information and global library information.

The second section, Part B, tested if participants understood the MLibrary terminology and how they prefer the MLibraries list to be displayed. Nine out of the 20 participants completed Part B. All 20 participants completed Part C, in which they were asked how they usually navigated to a specific library homepage. *A complete listing of all of the questions asked during the guerilla test can be found in Appendix A.*

## Results

### *Understanding Global versus Local Navigation*

Part A of the guerilla test was designed to gauge users' understanding of how global and local information is represented on lower-level Library webpages.

Question 1 tested participants' understanding of how to use global information on the Social Work Library homepage. To successfully complete the task, participants needed to identify and use the global navigation menu above the Social Work Library banner.

The results from Part A, Question 1 showed that:

- Four of 11 participants identified and chose the global navigation menu.
- Three of those 4 correctly chose the menu category labeled MLibrary Services.
- Seven participants selected links under the Social Work Library banner, where local rather than global information appears.

Overall, these results show that nearly 2/3 of participants did not understand how to use global information on the page.

Question 2 tested participants' understanding of how local information is represented on lower-level pages.

- Eleven of 11 participants correctly chose local rather than global navigation options.
- One participant chose a local link to global information, the Campus Quick Links drop-down menu. The participant indicated that it would lead to the UM Online Directory where contact information could be found. While this is a global feature in that it appears on other UM webpages and leads to global information, it is not part of the global navigation menu, so, for the purpose of this test, it is considered a local link. This raises questions on how / whether global navigation should be placed in the main content areas of lower-level pages.

Question 3a asked participants who had not chosen the global navigation menu in their responses to the first two questions (7 of 11 participants) whether they noticed the menu.

- Only 2 of the 7 participants indicated that they had not noticed the menu.
- Participants may have been reluctant to admit that they did not see the menu. The range of responses to Question 1 proves that users are confused about the menu. It is possible that participants saw the menu but did not know what to use it for.

Finally, all seven participants who were asked Question 3a were also asked when they would use the global navigation menu.

- Two of 7 responded that they would use the global navigation menu when trying to navigate to libraries or resources in subjects other than Social Work.
- Two others indicated they would use the global navigation menu to learn more about the University Library.
- These results indicate that about half the participants indicate an understanding of the global nature of the menu.

Overall, for Part A:

- The difference in results between Question 1 and Question 2 shows that participants better understand how to use local information than global information on lower-level pages.
- Eight of 11 participants demonstrated an understanding of the global nature of the global navigation menu.

### *Understanding MLibraries*

Part B of the test was designed to test whether or not participants could accurately locate and understand the MLibraries label on the global navigation menu (displayed below).

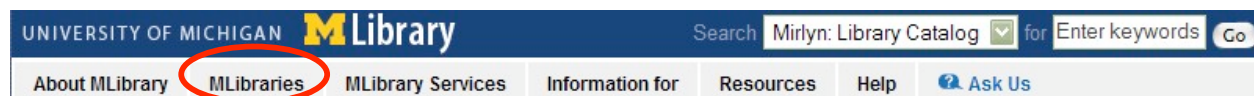
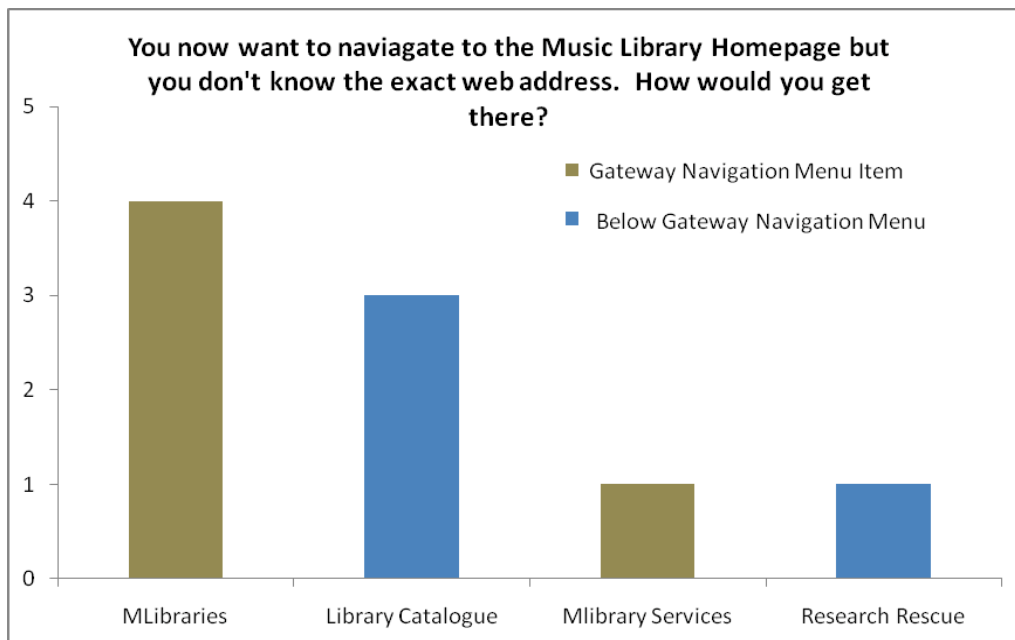


Figure 2: The MLibraries label on the global navigation menu.

The results from Part B of the test showed that:

- Four out of 9 participants correctly selected the MLibraries label on the global navigation menu.
- Of the 5 participants who did not select MLibraries, three of them selected the Mirlyn Library Catalog link and “Research Rescue: Tips” which are both located below the global navigation menu. One participant selected the MLibrary Services link which is on the global navigation menu.
- All 9 participants expected to see a list of libraries at the University of Michigan when they activated the MLibraries label.



**Figure 3: Participant selections when trying to find a list of libraries. The correct response for this question was MLibraries.**

Results from this test demonstrate that users had some difficulty finding a list of libraries on the global navigation menu. Recommendations for enhancing the visibility of the MLibraries label as well as other elements of the global navigation menu are discussed in the Recommendations section.

### *MLibraries List Display Preferences*

In Part B, we also wanted to get an idea of participant preferences on how they prefer to interact with the list of MLibraries that will be displayed once they activate the MLibraries menu on the global navigation menu. Currently, the global navigation menu displays a fly-out list when a user hovers over MLibraries. In a heuristic evaluation conducted prior to the test, it was found that the flyout list displays too many items, which results in the list being larger than the screen size on several standard-sized monitors. A quick solution to this would be to use HTML that

displayed the list of libraries, however, before suggesting this we wanted to get user input. The results from our 9 participants are displayed below.

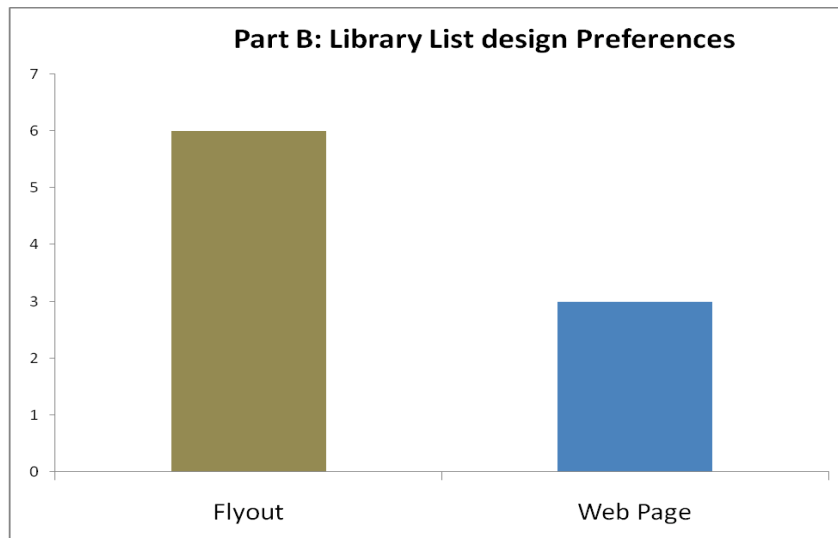


Figure 4: Six out of nine participants preferred the Flyout Menu

Clearly, a majority of users prefer the fly-out menu display. The reasons for why they selected the fly-out were due to aesthetics (two participants) or that “it seems more efficient” (four participants).

#### *Navigation to a Specific Library Homepage*

Finally, all participants from Parts A and B (20 participants) were asked how they normally get to specific UM libraries’ homepages. This question sought to gauge how many people view the Library Gateway before viewing specific libraries’ homepages. This would assess the importance of adding the global navigation menu to the Library Gateway to facilitate users’ understanding of the global nature of the menu.

- Seventeen of 20 participants view the Library Gateway before viewing specific libraries’ homepages.

Overall, results from this portion of the test show that because users so often view the Library Gateway, the inclusion of the global navigation menu on the page could help users understand its global nature.

## Current Recommendations

- **Match elements of the design of the global navigation menu** -- such as background color, font color, or font -- to the upper, blue portion of the global header (see screenshot below). Results from Part A demonstrate that users are unsure how to use the menu. Greater consistency of elements within the header could help users understand that the gray menu and the blue bar above it comprise a single global navigation that is distinct from local elements.



- **Redesign the MLibraries label.** In Part B, when users were asked “You want to navigate to the Music Library Homepage but you do not know the exact web address, how would you get there based on the items on this page?” several participants select the Mirlyn Library Catalog. Participants may have selected this hyperlink instead of the MLibraries menu due to the word “Library” being more visible in the Mirlyn Library Catalog hyperlink compared to the MLibraries label. Moreover, participants may have been looking for an item with the word “Libraries” in it. Since the ‘M’ in MLibraries is so close to the word “Libraries”, users may overlook the MLibraries menu. One way of redesigning the label is to differentiate the color of the ‘M’ and ‘Libraries’ in MLibraries so that the word “Libraries” is more visible. In addition, this could serve to make the global navigation menu more noticeable.
- **Continue to use the fly-out menu to display links to specific MLibraries.** The results showed that users preferred the fly-out menu over the html page. One of the original reasons why we tested the fly-out menu was that there were too many menu items under the MLibraries heading. Thus, while it is recommended to continue to use fly-out menu, a new design should be made that minimizes the number of menu items. Currently, the size of the menu can exceed the browser window when being viewed on an 800x600 screen.
- **Consider adding the global navigation menu to the Library Gateway.** Deploying the menu globally -- including on the homepage -- could help users who start at the Gateway differentiate between local and global navigation elements on lower-level pages. Results from Part C of the guerilla test indicate that most users navigate to specific UM libraries’ homepages from the Gateway. Because they see the Gateway first, without the global navigation menu, they may not understand that the menu is global.
- **Links that direct users outside a local library page should be restricted to the global navigation menu.** It was observed that in the Campus Quick Links and Forms section of the Social Work Library homepage there are several links that duplicate the role of the global navigation menu. In order to provide a consistent experience to the user, it is recommended that links that take the user to another section of Library Gateway should only be located in

the global navigation menu. Doing so will allow users to understand that links in the main content area of a webpage allow them to navigate *within* a specific library while links above the main content area allow users to navigate *between* library web pages.

## Recommendations for Future Tests

- **Test the global navigation menu on Library pages that have local navigation located on different areas of the page.** The current test only used the Social Work Library homepage to test the usability of the global navigation menu. Local navigation on the Social Work Library homepage is located in a section in the main content area (including the left and right panels) where all links are displayed in a vertical list. Other library homepages may use a different local navigation styles that may or may not hinder the usability of the global navigation menu. In order to discover how different local navigation styles affect the usability of the global navigation menu, tests on other library pages should be conducted.
- **Test departmental pages.** The current test only tested the global navigation menu in the context in which our users were students looking to navigate to other library homepages. Because we focused on a limited user set, the results of this test can only be generalized to students. Moreover, the global navigation menu will also be displayed on several departmental pages that are listed in the Library Gateway. Users who use departmental pages may have different goals when navigating throughout the Gateway and may interpret several of the global navigation menu items differently.
- **Re-test the global navigation menu when modified.** As always, it is important to test modifications made as a result of recommendations to see if the users can use the changes effectively. It may also be worthwhile to test the fly-out menu live instead of via screenshots to note if actually using the fly-out changes user minds as to whether fly-out or HTML is more useful.



## Appendix A: Test Script

### Greet the participant

Hi, my name is \_\_\_\_\_. Would you be willing to participate in a brief study about Library Webpages? It will take about 5 minutes of your time. (Yes/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 me before we begin?

### Begin Test

Preliminary Question: What is your affiliation with the University?

#### Part A: *(half of participants)*

1. Using a paper-prototype, tell the user, “You want to take a workshop on how to use the Library Catalog. How would you navigate to find a list of workshops?”

Record their response.

2. Using the same paper-prototype, tell the user, “You now want to meet with a librarian specializing in Social Work. How would you navigate to set up an appointment?”

Record their response.

3. Follow-up questions:

(a) (If the user did not use the flyout menus) Did you notice the menu options near the top of the screen?

Record their response.

(b) When would you use that navigation bar?

Record their response.

#### Part B: *(half of participants)*

1. Using the paper-prototype, tell the user, “You now want to navigate to the Music Library Homepage but you don’t know the exact web address. How would you get there?”

***If the user DID NOT select an item in the 2nd Level Navigation Menu, record their response and direct the user to the Global Navigation. Ask the user, “Based on the***

*selections available on this page which item would you select to get to the Music Library Homepage.*

Now ask the user what do they expect to see when they select the MLibraries Menu?

2. Show the user the two possible layouts for the list of libraries and mention the ways in which they access them (i.e. the flyout is accessed through mouse hovering while the List of Libraries webpage is accessed by a mouse click). Ask the user which method they would prefer to navigate to another library.

**Part C: (all participants)**

Multiple choice: How do you normally get to UM libraries' homepages?

- (a) I have them bookmarked
- (b) I know/type in the URLs
- (c) I use Google or another web search
- (d) I navigate from the UM Library Gateway
- (e) I navigate from the University Homepage then to the UM Library Gateway then to the specific library.
- (f) Other: \_\_\_\_\_

**Test Ends**

## Paper Prototypes

### Part A



Figure 1: Homepage of the Social Work Library with the global navigation menu

Part B



Figure 2: Fly-out list of libraries

UNIVERSITY OF MICHIGAN MLibrary
Search  for

[About MLibrary](#) | [MLibraries](#) | [MLibrary Services](#) | [Information for](#) | [Resources](#) | [Help](#) | [Ask Us](#)

## Alphabetical List of All UM Libraries

Below is a list of [University Library system libraries](#) and [major independent libraries](#) affiliated with the University of Michigan. A separate list of smaller, [independent departmental libraries and resource centers](#) on the U-M Ann Arbor campus is also available. Please also see the [maps and directions](#) page.

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**University Library system libraries:**

- ◆ [Area Programs](#)
  - ◇ [Near East Division of the Graduate Library](#)
  - ◇ [Slavic and East European Division of the Graduate Library](#)
  - ◇ [South Asia Division of the Graduate Library](#)
  - ◇ [Southeast Asia Division of the Graduate Library](#)
- ◆ [Art, Architecture & Engineering Library](#)
- ◆ [Asia Library](#)
- ◆ [Askwith Media Library](#)
- ◆ [Biological Station Library \(Pellston, MI\)](#)
- ◆ [Buhr Remote Shelving Facility](#)
- ◆ [Dentistry Library](#)
- ◆ [Digital Library Production Service Collections](#)
- ◆ [Fine Arts Library](#)
- ◆ [Sumner and Laura Foster Library](#)
- ◆ [Government Documents Center](#)
- ◆ [Harlan Hatcher Graduate Library](#)
- ◆ [Map Library](#)
- ◆ [Museums Library](#)
- ◆ [Music Library](#)
- ◆ [Papyrology Collection](#)
- ◆ [Public Health Library & Informatics](#)
- ◆ [Shapiro Science Library](#)
- ◆ [Shapiro Undergraduate Library](#)
- ◆ [Social Work Library](#)
- ◆ [Special Collections Library](#)
- ◆ [Taubman Medical Library](#)
- ◆ [Towsley Reading Room \(Ford School of Public Policy, Weill Hall\)](#)

**Independent Libraries:**

- ◆ [Bentley Historical Library](#)
- ◆ [Clements Library](#)
- ◆ [Gerald R. Ford Library and Museum](#)
- ◆ [Kresge Business Administration Library](#)
- ◆ [Law Library](#)
- ◆ [Mardigian Library \(Dearborn Campus\)](#)
- ◆ [Population Studies Center Library](#)
- ◆ [Thompson Library \(Flint Campus\)](#)
- ◆ [Transportation Research Institute Library](#)

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Figure 3: HTML webpage list of libraries

**Appendix B: Full Results**

**Part A**

	Affiliation	Question 1		Question 2		Question 3	
		Item selected to get to list of workshops (global task)	Global or local	Item selected to meet with Social Work Librarian	Global or local	Was global menu seen?	When global menu would be used
1	Undergrad	MLibrary Services	global	social.work.library@umich.edu	local	Yes	N/A
2	Undergrad	Social Work Databases (Search Tools)	local	Campus Quick Links (drop-down menu)	local	Yes	To navigate to other libraries, such as the Engineering Library
3	Undergrad	Research Help	local	Contact Information	local	No	When trying to look for other resources than Social Work
4	Undergrad	Resources (global menu)	global	Contact Information	local	Yes	N/A
5	Undergrad	More link under Social Work Online Resources	local	social.work.library@umich.edu	local	Yes	To see more options
6	Grad	Mirlyn: Library Catalog (link under Social Work Online Resources)	local	Contact Information	local	Yes	Especially to learn more about the Library; when exploring for the first time; also, when I'm more familiar with the site I would use it more; "Services" appears in two places
7	Grad	Research Rescue Tips and Aids	local	Individual Research Consultation	local	No	To get to one of the links quickly or if I were curious
8	Undergrad	MLibrary Services	global	Contact Information	local	Yes	N/A
9	Undergrad	Services	local	Individual	local	Yes	When something

		(under About the Social Work Library)		Research Consultation			wasn't down here (pointing to local navigation). I expect there would be more choices.
10	Undergrad	MLibrary Services	global	Services (under About the Social Work Library)	local	Yes	N/A
11	Undergrad	Research Rescue Tips and Aids	local	Social Work Online Reference	local	Yes	To find out what the Library offers

**Part B**

#	Affiliation	Question 1			Question 2	
		Item selected to get to list of libraries	Redirected Selection	What do you expect to see?	Flyout vs. HTML page	Reason for selection
1	Undergrad	Mirlyn Library Catalog	MLibraries	List of all Libraries	Flyout	If she doesn't like any of the available options she doesn't have to click back to return to the page that she was on.
2	Undergrad	MLibraries		List of all Libraries	Flyout	Aesthetically it looks better
3	Undergrad	MLibraries		List of all Libraries	Flyout	It seems to be more efficient
4	Undergrad	Mirlyn Library Catalog	MLibraries	List of all Libraries	Flyout	It looks more professional
5	Grad	MLibrary Services		List of all Libraries	HTML Page	The flyout has too many items on it
6	Grad	MLibraries		List of all Libraries	Flyout	Finds the HTML page to be too unwieldy. Doesn't want to move back and forth between pages.
7	Undergrad	Mirlyn Library Catalog	MLibraries	List of all Libraries	Flyout	It's easier for me
8	Undergrad	Research Rescue Tips and Aids	MLibraries	List of all Libraries	HTML Page	His laptop has a tendency to random clicks things he

						doesn't want. The HTML webpage would reduce this type of error
9	Undergrad	MLibraries		List of all Libraries	HTML Page	It easier to use the mouse on the HTML web page.

**Part C**

	Affiliation	Question 1: How do you normally get to specific UM libraries' homepages?					
		I have them bookmarked	I know/type in the URLs	I use Google or another web search	I navigate from the UM Library Gateway	I navigate from the University Homepage and then to the UM library Gateway	Other
1	Undergrad					1	
2	Undergrad					1	
3	Undergrad		1				
4	Undergrad			1			
5	Grad				1		
6	Grad				1		
7	Undergrad					1	
8	Undergrad				1		
9	Undergrad					1	
10	Undergrad	1					UM Gateway and search "library"
11	Undergrad			1			
12	Undergrad						Professors give us the links in class.
13	Undergrad				1		
14	Undergrad					1	
15	Grad			1	1	1	



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16	Grad	1		1	1		
17	Undergrad	1			1		
18	Undergrad				1	1	
19	Undergrad					1	
20	Undergrad		1			1	