

**Usability Testing  
by  
Rashmi Chhetri  
ICS 616  
Information Architecture & Web Design  
Inst: Luz. M. Quiroga  
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University of Hawaii at Manoa**

## Usability Test Plan

### 1. Project/Website Name:

Hawaii State Public Library System (HSPLS)

### 2. Website URL:

<http://www.librarieshawaii.org>

### 3. Goals/Objective: What are you going to test?

Ease and effectiveness of navigation - The simple need for a user in this site is to find books they would like to read and borrow. So this first goal is to test how easy it is for the user to find what they need and if the links are labeled with terms that make sense to the user within the context.

Usefulness of content - One of the most important information that a user would want from this site is to know how and when he/she can start borrowing books from the Library. What is the process and how to create an account. So the content layout and organization of content on each page decreases the accessibility time for the information.

Effectiveness of presentation - Visual Design is one of the important elements in helping users identify common and repetitive tasks. So does the graphic design, fonts, font color, colors of links help the users by making the site easier to use?

Task success rate - Were the users able to accomplish the key task they needed/wanted to accomplish, in this case:

- To find a book that the user needs/likes by the title of the book or by the name of the author
- How to create an account and then how to access my account in the Library system.

If they were able to complete these tasks, did they feel satisfied, neutral or angry and frustrated?

### 4. User Group: Who will you test? Where/how will you recruit them? what are the criteria for selecting your participation?

Since one user will be used for the test there will not be user groups.

Who - The user that will be used to test the site will be a person who already has an account in the Library but has never used this online system to browse for books and to check accounts. The user is aware of the Library rules and some services the Library

provides.

Where/How - The user will be notified via email about the test. A call will also be placed to the user to confirm their attendance for the testing.

What - Criteria for selecting the user for this testing are -

- a common user who wants to avail the Library services
- already is a user or knows about the public library and wants to be a user
- has some experience with general computer, internet and website operation

#### 5. **Location: Where will the test take place?**

The location for this test will be given in one of the study area of the Main Library in Punch Bowl. The user will be given a functioning laptop and a mouse.

#### 6. **Equipment: What items will you need for your test? (laptop, camera, pad & pencil, facilitator script, etc.)**

Items needed for this test -

- A laptop (with mouse)
- Pad & pencil to take anecdotal notes and
- Facilitator script

**The Script -**

Welcome -

Hello {Everyone}

A warm welcome to you {all}. The basket to the table on your left contains some refreshment. Please help yourself whenever you feel like. The bathroom is on the ground floor past the desk counter and the central hall on the left.

My name is {.....}

Welcome to the test on the usability of the online website of the Hawaii State Public Library System. I am conducting this test for a project for a course that I am taking in UH Manoa. I would like to take this opportunity to thank you for your agreement to take the test.

Have you taken a usability test before {note the answer down} This is an easy and fun task and will require only about 10 - 20 min of your time. **I'd like to stress that we are testing the product (HSPLS website) and not your abilities.**

As you use the HSPLS web site I will be observing to take some anecdotal notes. If you have any questions please do not hesitate to ask. I will be here to answer them.

Agenda -

Let me outline the main things that you will be doing for the usability test today.

- sign a waiver form to show your willingness to participate
- fill a set of few simple demographic questions
- then you will have to complete two simple tasks on the online HSPLS site and
- lastly, a general feedback on how you like the site

Entry questions -

Before we start the process I would like you to fill out this short anonymous survey.

{Time given for short survey. Once they finish proceed to next step}

Introduce Equipment -

This is the computer {point out the computer and other details} that you will be using.

{The computer will be open with the home page of HSPLS open in the browser}

{Ask questions and provide any additional guidance they need before hand}

Process -

I will request you to think out loud i.e, speak out your thoughts about the website and how you feel when you are trying to do the two tasks for the usability test. Do not hesitate to speak out even the smallest things you experience. **It will help me to better understand what problems we have in the website.**

Introduction to Tasks -

We have a total number of two (2) tasks that you will be given one at a time. Both the tasks will be conducted on the HSPLS website.

- Since you already have an account, try to access your account and see if you can check the number of books you have borrowed and what is due
- Find a book that you want to or would like to borrow from the library and add it to your account to borrow.

Task completion -

- Thank you. That completes the tasks assigned for this test
- Please fill out this short questionnaire. It is anonymous and the data is for our use only. {After questionnaire is complete}
- Once again thank you for your participation
- Do you have any questions, comments or concern?

## Usability Evaluation Report

### Introduction

The usability evaluation was conducted on 4 May, 2011 at the Hawaii State Public Library at Punchbowl. The name and location of the website are given below"

- **Project/Website Name:**  
Hawaii State Public Library System (HSPLS)
- **Website URL:**  
<http://www.librarieshawaii.org>

The site is intended for general public use to borrow books, check accounts and avail services and information given by the library. It is a state owned public library site for Hawaii.

According to the website the mission of the site is quoted below:

"The mission of the Hawaii State Public Library System is to provide Hawaii's residents, in all walks of life, and at each stage of their lives, with access to education, information, programs and services, and to teach and nurture the love of reading and the habit of life-long learning. "

For the purpose of this usability test the basic purpose of the site to be tested are given below:

- To search for information on how to create an account and how to access my account (if I have one) in the Library system.
- To find a book that the user needs/likes by the title of the book or by the name of the author

The report presents findings and recommendations based on the analysis of results of the usability test to perform the two tasks mentioned above.

The reviewer spent approximately 12 min to complete the two tasks stated above, using the HSPLS site. The first task was the difficult one and time consuming but the user finally succeeded. The second task was relatively easy compared to the first one.

## Summary

In general, the website is well presented and has a professional appearance. The mission statement is clearly visible on the first page. The major buttons and links on the site are distinct and working. The basic layout and structure of the site is simple to look at, learn and follow. The website also contains the necessary information the user was looking for.

However, there are some basic usability issues that need to be addressed to achieve the goals and objectives of the basic tasks a user performs in this site.

The primary issues identified were:-

- The text font, color and size makes it difficult to read information presented on the site.
- The sub-menu navigation under the main menu/tabs is clumsy and hard to see and use
- The search bar for the site is not visible in all the known browsers used today. It works well only in Internet Explorer

Each issue is discussed in detail in this report in the following sections and recommendations are made for addressing these issues.

## Recommendations

There is not any major re-design involved for the site regarding the issues mentioned above. Recommendations for issues mentioned are given below:

- The font, size and color of the text has to be changed to make it clearly visible to the users
- The sub-menu within the main menu navigation should be changed to a better accessible design like pulldown or clearly visible sub-menu that stays visible once the user clicks on the main menu
- The website design should be supported and visible in current major browsers like Mozilla Firefox and Google Chrome.
- Broken links in the site should be fixed and brief paragraphs with 'white spaces' between them should also be considered for readability.

In addition, it is strongly suggested that after the recommendations have been applied to the site a usability testing be undertaken, since no other form of evaluation is as effective at uncovering problems encountered by actual users. Such usability testing need not be an expensive, time-consuming or difficult undertaking, and will be likely to provide additional data which will aid in improving the site.

## Detailed Findings

The details recommendations presented in this area is based on the feedback received through the usability evaluation checklist given below. A severity rating has been assigned to each issue, depending on the probable impact on users. The consent form used in this test is also provided in the Appendix.

The user found the first task difficult compared to the second one. It was because the user kept fumbling with the sub-menu navigation under the main menu. The user got frustrated and tried to look for a search box but could not find one as she was using Mozilla Firefox. Later when she started looking at the site she figured the left pane navigation was similar to main main navigation and so finally she found the link that help her start the first task. The user also found that the content presented on the pages were not well paragraphed, clumsy and so it was not easy to read.

<b>Navigation</b>		
<b>Issue</b>	<b>Recommendation</b>	<b>Severity</b>
The current location (Where am I?) is not clearly visible & consistent	Using breadcrumbs to show 'where am I' is recommended	Medium
Search bar not visible in other browsers	Design CSS to support major browsers like Mozilla Firefox, Google Chrome	High
<b>Function &amp; Labeling</b>		
<b>Issue</b>	<b>Recommendation</b>	<b>Severity</b>
Standard colors for links and visited links are not used	Even if standard colors are not used there has to be a distinct color for links to distinguish it from rest of the text	High
Some of the links and buttons take you to another site. Probably links to the old site	Even through the site is within the library site the layout is different. All pages should have same header and main navigation bars	Medium
<b>Content &amp; Visual</b>		
<b>Issue</b>	<b>Recommendation</b>	<b>Severity</b>
Content is clumsy & crowded to read	Brief Paragraphs separated by sufficient 'white space'	High

## Checklist

This checklist was used to help in the evaluation of the Usability testing process. The 'Entry Questions' were designed to gather demographic data of the user. The 'Task Based Questions' were designed to break down the two objectives/tasks into simpler questions the user could understand. The 'Exit Questions' were designed to gather general feedback from the user regarding the tasks and the site as a whole.

- **Entry Questions**

Age (select one)	<ul style="list-style-type: none"> <li>• Under 18</li> <li>• <b>18-25 (answer)</b></li> <li>• 26-35</li> <li>• 36-45</li> <li>• 46-55</li> <li>• Over 55</li> </ul>
Gender	<ul style="list-style-type: none"> <li>• Male</li> <li>• <b>Female (answer)</b></li> </ul>
What is your occupation?	student at UH Manoa
Length of time in current occupation	<ul style="list-style-type: none"> <li>• less than 6 months</li> <li>• 6 months to 1 year</li> <li>• <b>1 year to 3 years (answer)</b></li> <li>• 3 years to 7 years</li> </ul>
Highest Educational Level	<ul style="list-style-type: none"> <li>• Primary</li> <li>• Middle School</li> <li>• High School</li> <li>• Undergrad</li> <li>• Masters</li> <li>• <b>PhD</b></li> </ul>
How often do you use the internet?	<ul style="list-style-type: none"> <li>• <b>Everyday (answer)</b></li> <li>• At least five times each week</li> <li>• About once each week</li> <li>• About once each month</li> <li>• Never</li> </ul>

- **Task Based Questions**

<b>Navigation</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>	<b>Notes</b>
The current location is always clear ('Where am I?')		x		Although the info is there sometimes it is not clearly visible
There is always a clear link to the Home page	x			
All major parts of the site are accessible from the Home page	x			
If necessary, a site map is available	x			
If necessary, an easy-to-use Search function is available			x	I could not find the general search bar
The site structure is simple	x			
<b>Functionality &amp; Labeling</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>	<b>Notes</b>
All necessary functionality is available without leaving the site		x		some of the buttons & links take me to another page
All functionality is clearly labeled	x			
The buttons have clear labels	x			
Major links in the site are working	x			
Standard colors are used for links			x	It was very difficult to know/find links
Terminology is consistent with general web usage and context	x			
<b>Content &amp; Feedback</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>	<b>Notes</b>
If necessary, help section is available 'Ask a Librarian'	x			
The site supports the user's work flow		x		When sent to external pages, its frustrating
Language is simple	x			
<b>Visual Clarity</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>	<b>Notes</b>
The layout is clear	x			
Texts are easy to read			x	very hard to read text
There is enough 'white/wide space'		x		the announcement area

- **Exit Questions**

How often do you use the online HSPLS website?	<ul style="list-style-type: none"> <li>• Daily</li> <li>• Weekly</li> <li>• Monthly</li> <li>• Less often than monthly</li> <li>• <b>Never (answer)</b></li> </ul>				
<b>Please indicate your level of agreement or disagreement to the statements below</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
HSPLS is easy to use		x			
I always know where I am in HSPLS				x	
It's easy to get lost			x		
HSPLS is difficult to learn			x		
If there were three things you could change in HSPLS, what would they be?	<ul style="list-style-type: none"> <li>• The navigation sub menu on the top panel is very distracting and not easy to use. If that could be made into a pull-down menu.</li> <li>• The text on the site is not in contrast with the background color so its very hard to read. It was very difficult to figure out if the texts were links or just texts so that should be changed. There some broken links too.</li> <li>• Somehow the website links to many other pages outside the site. If somehow this could be avoided at least for the services that the library provides.</li> </ul>				
Do you have any comments or suggestions?	<p>Overall the site is beautiful and pleasing but some very basic stuff has gone wrong like the text and top panel navigation. When finding the info for the joining library I was looking for a search bar but I could not find one. The home page looks good at first sight but when you scroll to see the content its very jumbled up and difficult to read.</p>				

## Appendix

### Consent Form

#### Purpose -

The purpose of this test is to test the basic functionality and usability of the Hawaii State Public Library System (HSPLS) site. For this test your demographic and attitudinal information will be collected to provide better evaluation for the site. The information gathered in this test will not be disclosed to anyone and will be destroyed after its use has been met. Please sign below if you agree to take part in this test and share your information.

#### Consent -

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_