

Usability Testing: How Effective is Your Library's Web Site?

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In recent years, librarians have invested great effort in developing their library web sites yet it has been difficult for librarians to find the time to test the effectiveness of these same sites. However, testing the usability of a library web site is becoming more important as our reliance on our web sites as the main portals to library resources and services grows. Usability testing, which is based on the theories of User Centered Design¹, allows us to analyze the interaction between our patrons and our web sites and to improve the designs of our sites based on our observations of this interaction. There are many methods available for testing the usability of a web site, including:

- Formal Usability Testing
- Focus Groups
- Site Usage Logs
- Cognitive Walkthrough
- Card Sort
- Category Membership Expectation
- Questionnaire

In our tests of the WSUV Library's web site, we used the three methods listed in the column on the right. Since we had limited staff time and budget to spend on usability testing, we chose these three because they are easy to construct, easy to schedule and their results quickly ascertained. We also thought that using three methods would be better since each would give a different perspective to the testing.

Once we had our test methods, we decided what groups of library users should participate in our testing (students, faculty and library reference staff), we designed each test, and we developed a screening survey to help us distinguish between novice and expert users. Finally, we put out the call for participants by advertising in the campus paper and by distributing flyers throughout the campus. The testing itself was done between the Thanksgiving and Christmas breaks.

After we gathered the data from all of the usability tests, we needed to analyze it to look for the strengths and weaknesses of our site. Our research into usability testing found that analysis of the data could range from a simple "eyeballing" technique to complex, statistical analysis. As neither of us are statisticians, we leaned towards simple analysis techniques. We each spent time "eyeballing" the results for any trends, similarities or problems. In the end, we found that the category membership expectation and the questionnaire were easy to eyeball for trends. The card sort methodology, on the other hand, proved to be difficult to simply scan for trends. This methodology works better using some sort of statistical package or, as we did, some sort of scripting for statistical analysis.

Once our analysis was complete, we needed to implement the results. This involved taking information gleaned during the testing and actually putting it to use by redesigning the site. To do this, we created a list of things that needed to be changed on the site and mapped out a way for each of these changes to be accomplished. For example, the results showed that users felt it took too many clicks to get from the main web page to the list of databases. To change this, we redesigned the site's layout to add more access points to the databases. The summer of 1999 was spent in the actual redesign of the site. It went live just in time for fall semester at the end of August.

Overall, usability testing has proved to be an effective and useful process. Not only were we able to create a better web site, but we also learned more about our users. We are continuing to look for ways to test the usability of our site and hope to continue to improve its design so that it is an effective gateway to our library's services..

For more information about usability testing, including presentation slides, a full bibliography and examples of our testing instruments, see:

<http://www.vancouver.wsu.edu/fac/diller/usability/website.htm>

¹For more discussion of this, see the [Handbook of Usability Testing](#) by Jeffrey Rubin.