Executive Summary

Goals for the Report

The purpose of this report is to convey key findings encountered during the course of user testing by team Grizzled Bears. User testing was performed in order to view live human users and monitor their interactions with Oakland University's Kresge Library's Web site. This testing created specific and directly observable information concerning users' interaction with the site. Testing also provided substantial concrete evidence about usability issues from which the team developed a set of recommendations.

Methodology

In order to best observe the interactions of users with the Kresge site, the team decided to recruit non-Oakland University students/users. This decision was made to avoid testing the personal quirks or workarounds found by frequent users. Using team social networks and on-the-spot recruiting at the University of Michigan Duderstadt Center we found a set of users.

Though the site is designed for students, staff, and faculty, we decided to concentrate on undergraduate students. This decision was made because undergraduates make up the majority of the population of Oakland University and of the Kresge site, yet their needs have been the least researched by the site designers. Additionally, we aimed to conduct the usability tests on demographics similar to the respondents in our earlier survey evaluation.

The team conducted six separate tests. Of the six participants four were undergraduates, one was a recent graduate, and one was a PhD candidate, all at the University of Michigan. Each user was given four tasks to complete with no time limit. The tasks were designed to be representative of some of the interactions that a user might complete when conducting research on the library's site. Each user was also given pre-test and post-test questionnaires, followed by debriefing questions. During each session, there was always one moderator and two observers. Also, the users' spoken dialogue, screen actions and facial reactions were digitally recorded for later review and analysis.

Findings

Our findings revealed no major problems with the site needing immediate attention. From previous surveys and questionnaires, we found current Oakland University students, faculty, and staff are content with the site as it currently is designed. These tests with non-OU students confirmed these findings, as participating students were able to find the information in reasonable amount of time. However, these tests also showed noticeable levels of frustration among our users, primarily with navigation and labeling issues. Most of these issues are easily fixable and will not require a total overhaul of the site. Several solutions are can be implemented immediately.

Usability Testing Report

Overview

The Kresge Library website is promoted as the primary research portal for faculty, staff and students at Oakland University. However in today's information arena, it faces steep competition. The OU library administration differentiates Kresge Library's site by defining its mission on the principle of "information literacy." Traditionally, information literacy is extended to the role of librarians in guiding users through the morass of information during face-to-face or individual interactions. However, the sources that were once solely available in the library are now embedded in the classroom, the home and throughout the research process. Therefore, it is important to consider how the site functions with regard to new expectations and how it can be developed as a tool to foster information literacy.

As users become increasingly independent in their information seeking behavior, it is critical for them to not only be proficient at using individual tools, but also skilled at determining and finding the tools that they need. From our research it is clear that library websites need to not only provide access to tools, but also present way-finding assistance and encourage exploratory interaction. Our team, Grizzled Bears, has been charged with assessing how the site coincides with and meets the users' expectations and needs with a special attention paid to the improvement of student information literacy.

Function

The Kresge site provides research tools and services for the Oakland University community. Given the breadth of material held by Kresge, the challenge is making a great deal of information available while maintaining a balance on presentation, ease of navigation, and the ability to find relevant material. The librarians of Kresge Library, in their role as site designers and maintainers have attempted to address these issues in a variety of ways. The navigational elements of the site have been designed to showcase the tools that librarians consider most useful to users in the site's foreground. The main navigation toolbar presents users with an obvious indication of tasks and resources that can be pursued through the site. The major site areas described in this toolbar contain further elements to guide users to the possible sources for their information needs. The site includes an online library catalog, links to many database search products, and informational pages created by library staff to assist students in understanding and using the Library and the tools provided.

Audience

The primary audience of the Kresge site is the student body at Oakland University but also includes staff and faculty. Non-Oakland University members can also use the site remotely, though they would find themselves limited at certain sections. The main purpose for all of these users to visit the site is to conduct research for personal or class projects.

Though there is a small resident community, Oakland University is primarily a commuter campus. Therefore, OU and Kresge, are compelled to make tools and services available on their site for people who may not be able to go to the main campus where the physical library is located.

Novices, intermediate and experts users use the Library site. Presenting a very simple design would frustrate experienced users, while anything too in-depth and complicated would overwhelm beginner users. The site's design elements attempt to balance these expectations by having popular tools available on the home page and task bar, with additional tools to be found deeper into the site.

Goals

The goal of this exercise was to observe, first-hand, a novice user's initial interactions with the Kresge Library Web site. While surveys and questionnaires were useful in developing recommendations for the library staff, they could not give us the complete story of what did and did not work well during actual use. With user testing, we sought to view the real steps taken and reactions expressed by people when using the site.

As our earlier data collection had demonstrated overall positive feelings about the site we also wished to see if this was due to an actual pleasant user experience or an artifact of simply having no other choice for research needs. By gathering information about real initial interactions, how first-time users coped with the site that they had not been trained in using, we hoped for an unbiased assessment of the site's design and capabilities.

Tools & Methods

In order to properly gauge the usability of the Kresge Library Web site, team Grizzled Bears needed to observe usage of the site first hand. Our own level of familiarity with the site would preclude us from being objective. Likewise, Oakland University students, staff, and faculty, because of their own usage of the site, would also present a biased observation. Their familiarity (limited or otherwise) with the site would influence choice-making when seeking information. We considered the OU community to be experienced users, and not helpful for our purposes.

We focused on University of Michigan students, primarily undergraduates. We felt UM students would not have used the Kresge site; this was later confirmed during each usability test. University of Michigan students were considered to be similar in age, educational background and research experience to be useful as substitutes for Oakland University students.

Before testing began, we had to prepare. The team wrote a script that was to be shared with each user, including a description and purpose for the test (Appendix I). The team also had a pre- and post-test questionnaire for each participant to complete (Appendix II). Most importantly, the team devised a set of tasks for each user to complete for us to best study the site's usage, layout and flow. Four tasks were written including a preamble which provided the context for each task (Appendix III). The four tasks were designed to allow users sufficient opportunity to navigate various sections of the site, and to test the primary functions of the Kresge Library site while still allowing for creative solutions or exploration.

We had 6 users participate in our test process. Recruitment took several different forms. For users 1 and 2, a recent graduate and an undergraduate, respectively, a team member utilized her social network. They were each promised cookies and brownies for their participation. Users 3 and 4 were randomly solicited from the population of students at the Duderstadt Center on North Campus at UM on a Sunday afternoon. Team members canvassed the Center, asked people if they were undergraduates, and if they had 20-30 minutes to assist with Web site testing. We found two willing undergraduates

who were compensated with cookies and an extra $5. Finally, another team member recruited users 5 and 6 from their workplace. One was an undergraduate, and the other was a graduate student. The graduate student was included to compare the interaction of an advanced versus novice researcher. Each user completed the test individually. Further, there were no simultaneous instances of tests.

After recruitment, each user was seated at a computer terminal equipped with a microphone and Camtasia®, screen capturing software that also recorded audio. For all but one user, a Web cam was also used to capture facial expressions. One team member was the moderator, describing the purpose of the test and guiding the user through the tasks but without giving any help. The other members were observers and data loggers.

Before beginning the tasks, users were asked to fill out a questionnaire that would give us some background information about the user and their prior experience and knowledge. Before the tasks began a scenario was set – users were asked to imagine they had been given a class assignment and instructed to write a report on nationalism and perceptions of race. The actual class (number, title, and department) was not specified to provide the user with more latitude in interaction. After reading the scenario the user continued with Task 1. After the user felt they had completed the first task, they moved on to the second task, and so on until Task 4 was completed. There were no time limits. As they went through the tasks, the observers sat behind the user noting actions and preparing questions for the debriefing portion.

After Task 4 was complete, the user filled out a post-test questionnaire asking about their experience with the site and the tasks. If a user's responses or choices needed further clarification, the team would ask follow up questions during a debriefing session before dismissing the user and thanking them for their time.

Next, the team collated all their notes, rendered the files from Camtasia® and shared them with the team. Analysis of each user occurred immediately after two sets of tests (two on a Saturday, two on a Sunday, and two on the following Wednesday). Trends and recurring issues were noted and compiled.

Results & Analysis

Of the six users recruited, we had two 19-year olds, two 20-year olds, one 27-year old, and one 31-year old. Of the six, five were female. Four were undergraduates (all females), one was a recent graduate (male), and the last was a PhD candidate (female). Two of our participants were archaeology majors, one was in engineering, one considering a major in public policy, one science major, and one political science. All were primarily PC users, with only a few noting any experience with Macs. One user had visited the Kresge site once before, though it was determined that this visit had been before more recent design changes. However, all others had visited other university library sites before, and were in general familiar with the services such a site offered. Each had had their own experiences and difficulties when conducting research (navigating through databases, overflow of information, narrowing focus).

All users understood the requirements of the test, including the think aloud request, and initially nobody expressed any confusion with the instructions.

Task 1

Task one asked the users to find an available book on the topic, and then find how long they could keep that book. This required users to go to the "Find Book" section, and then the "Library Information" section. The second part of the task threw off several people. Most users, nearly all, felt that the information on how long they could check the book out for was to be found on the same record page that they found the book information. Several users spent quite a bit of time looking for the information, scrolling up and down and exploring visible links without leaving the page. They clicked on "Make a Request" or "My Account," links mostly irrelevant to the task, to no avail. Finally, they decided to go back to the home page, and once there, they used the drop down menus from the tabs and navigated to the "Library Information" section where the information was found after some further selections within the information links.

Most users were able to complete the task in five minutes or less (one user took ten minutes). We felt this was an easy task, one that shouldn't have taken this long and were surprised with the results. We attribute this to several factors, issues with method or test design will be discussed here and usability issues will be presented in a following section of findings.

Analysis

There may have been task design mistakes made on Task 1. After performing the tests it was clear that this could easily have been split into two minor tasks, rather than have it as one. Because of this, users may have thought that since we were asking for this information together, the information would be presented together. Also, the team discussed the possibility that, library patrons don't generally look to find how long they can check books out for. Instead, they wait to hear the due date when they check the book out.

Users were confused about when they were on Kresge's site and when they were on a third-party page. The catalogue, though designed to look like it is part of the Kresge site, has very different functions and services. However, whereas the home page and other Kresge pages have the menu at top, the catalogue does not. Among the choices that were available to the participants, "Make a Request" and "My Account" seemed like the best choices possible.

Once users navigated away from the item record page and found the "Library Information" section, they were overwhelmed by all the text and options available. The number of categories and links were too much to wade through. Even when they were able to find the "borrowing" link, there was still substantial text to go through before they found the actual duration time for checking out books.

Task 2

Task 2 asked users to find help in differentiating between scholarly journals and popular magazines (or scholarly vs. popular articles). This task was designed to be slightly harder than Task 1 but most users did not have undue difficulty. Our expected interaction would be for users to go to the "Tutorials" tab from the menu and select "Scholarly vs. Popular Sources." One user managed to find this quickly, in about 10 seconds. Others, however, took longer. Again, most users accomplished the task in less than five minutes (save for the student who quit).

Analysis

The results of this test were mostly in line with our expectations, with some exceptions. The team was unaware of the secondary options found by two users, on the Research Guides page but considered it a fully acceptable completion of the tasks. A few went to the "Find Articles" section, navigating through there for a while. Several users spent time mousing over the main navigation tabs multiple times trying to find this information. One user quit the search after unsuccessfully working for ten minutes.

The difficulty experienced by some users may have been due to different starting points for the task. Some users restarted at the library home page when starting a new task while others began from the final page of Task 1. Though they weren't instructed to use the home page, the users who did navigate through it did complete the task more rapidly. The implications for this for the usability of the site will be discussed below.

A somewhat surprising strategy taken by one student was the use of the search box at the top of the page. This student typed in several keywords and keyword combinations in her attempt to complete the task. Each time the results brought back nothing useful. While unexpected, this was valuable information that the team hopes to use to suggest improvements for the site.

A map of Task 2's user interactions can be seen below (Figure 1). On the map is should be noted that U01, U03 and U05 all navigate through the home page while on a short path to the solution. Users 06 and 04 also found appropriate information rapidly, using the main navigation toolbar to arrive at the "Find Articles" page. U01 had a great deal of difficulty, including the viewing of several pages outside of the library site, and terminated the task before its completion.
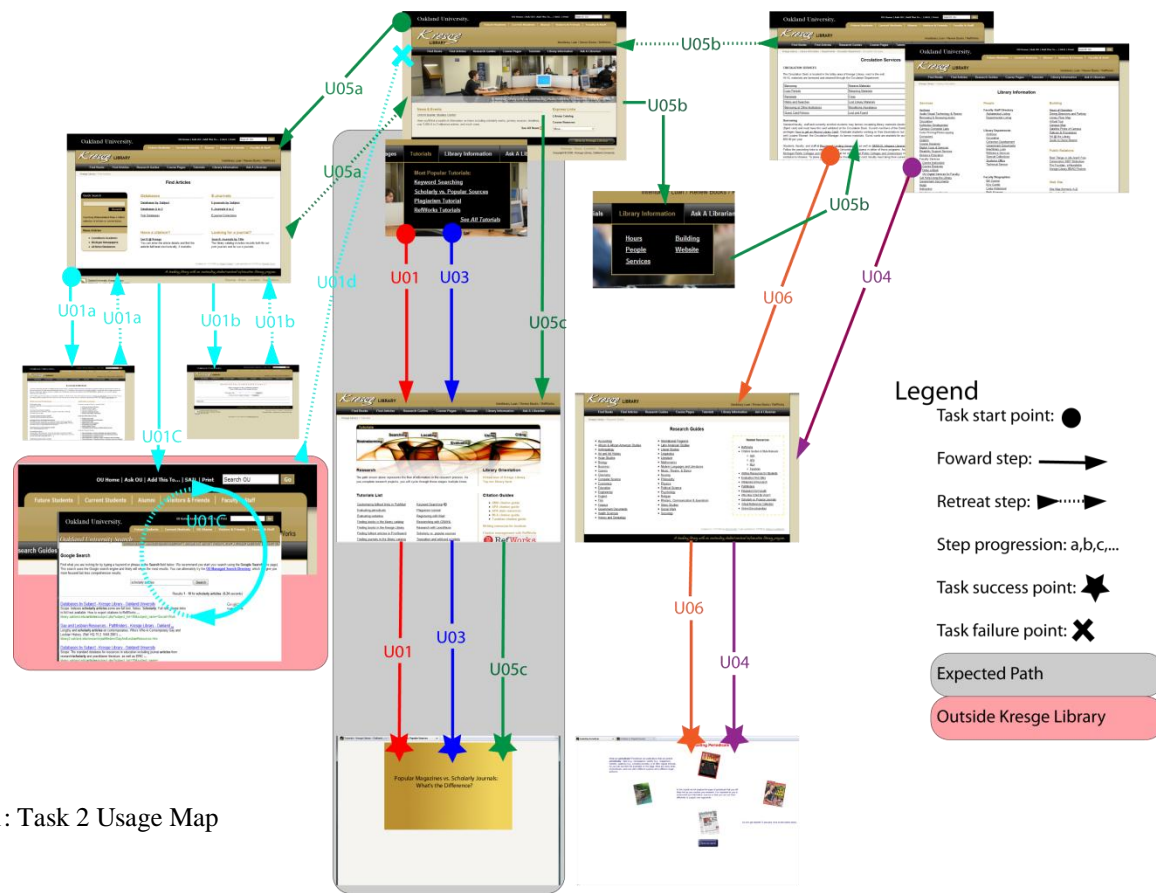
Figure 1: Task 2 Usage Map

Task 3

For Task 3, our participants were asked to do an article search on the same topic as the book search. No user had any difficulty going to the "Find Articles" section. However, once there, they all took different approaches to finding an article. Several clicked through the options, navigated back and forth, all seemingly looking for a journal or database that contained a specific key word or words from the scenario in the database title. One user tried to do a search by keyword in the "E-Journals by Subject" page, though the search box here states the search will look for keywords in the title of the journal.

After clicking back-and-forth multiple times, going to the subjects trying to find something that may help, several of our users gravitated towards the prominent "Quick Search" box. Here they did perform a search that resulted in articles they deemed appropriate. One student decided to go to a tool they were familiar with in the database listing and chose JSTOR.

Analysis

This task also proceeded in an expected manner with most users starting the task effectively and without issue. Difficulties were apparent in choosing a database and the determining the relevance of data sources. Though this is not necessarily an aspect of the interface it does bear a great deal of the usability of site and strategies for improving user experience will be discussed below.

Task 4

Finally, Task 4 was handed to the user. This task stated that a friend found, on the Kresge site, a list of resources that would be good for research projects. The expected course of action was to either go to "Research Guides" or select something they considered appropriate for their research needs or to go to "Course Pages" and select a class that might also contain useful information.

Right away there was confusion with the task. The students weren't clear what was being asked of them. For four users, the moderator had to further explain that they were looking for a single page that had a list of resources that might help them with their research. Even with this knowledge, our users struggled.

Participants moused over the menu bar and around the screen multiple times before deciding a course of action. The team observed several students reveal the information we had hoped them to find, only to see them navigate away from the page because they thought they hadn't found the right page. Two users mentioned that after several minutes of searching with no luck, they would be inclined to either ask a librarian (using the contact information on the site) or to contact their friend who made the suggestion.

Eventually the users did find one page they felt was adequate. One student who had found the page and went away only to return later said she had steered away because she was not sure if the list had been created by a librarian or was just a random list of links and resources.

Analysis
Blame for confusion about this task lies solely with the team writing the task. In reviewing user test sessions and debriefings it was clear that the word "resource" stuck with the users. They were intent on finding something that had the word "resource" in it to the exclusion of other options. However, at the time of writing, we felt we couldn't be more descriptive with the task without giving away too much. Perhaps a solution would be to word the task in a way an actual friend would have worded it. Instead of asking for a "page of resources," we should have said the friend had found a "page of stuff" that would be helpful. Despite the difficulties in formulating the task the searching and exploration methods of the users were revealed and we learned a significant amount from the difficulty of the situation.

Ultimately, aside from one user, all our participants managed to finish all the tasks in less than twenty minutes. Only two tasks ended with a result we were not expecting (found the wrong page or quit before completion). The post-test questionnaires revealed that all users found the site helpful and well-designed, even after finding some frustration with finding what they were looking for. One user said she would be better at the tasks if she had more time to become familiar with the site, and that all sites required some learning curve. She felt this is indicative of this learning experience, and was not a reflection on the Kresge site. Other users put the blame for their struggles on their own shoulders, stating it was their inability/slowness that led to difficulty. All said they would return to the site in the future.

Findings & Themes

Our analysis found some recurring themes running through the usability tests. No user was alone in their experiences. Many shared realizations, frustrations, difficulties, and features they enjoyed on the Kresge site.

Design & Navigation

Overall design of the site was very well received. All of the tested users appreciated the relative simplicity of the layout and the presentation of several pieces of vital information, such as "Find Books" or "Find Articles" in prominent locations on the home page. The mouse-over menus on the homepage navigation bar for quick resource access further enhanced this feeling of immediate accessibility. Consistent navigation through this toolbar was also a noted benefit though some were dismayed that pop-up menu did not appear on sub-pages other than the homepage. Other smaller elements that users noted as improving their ability to use the site were: the green check icons on the book search result pages indicating a book's availability. The use of green against the mostly "gold" backgrounds really made this feature stand out, be easily seen and was noted by multiple users as an improvement over sites they usually use.

Though users considered site navigation a strength, debriefings and review of the test data revealed several instances of users becoming stuck in certain areas of the site. In reviewing we noticed that the Kresge site did not have clear navigation and exit strategies for many of their pages. It was unclear to many users upon loading a variety of pages the best method to leave the page or restart on the homepage. Though the browser "back" button worked it was often an inconvenient option and did not necessarily move the user away from the page causing them difficulty. This was readily apparent in the use of the library catalog for Task 1. Most users seemed unaware that they were no longer using the main Kresge site and their navigation out of the catalog and back to the library homepage was often labored. Users had. This difficulty differentiating between the catalog and the rest of the site resulted in frustrating attempts to navigate using catalog-based links to site-based locations.

A different instance of this problem occurs in the presentation of tutorials. Tutorials, while considered helpful by our users, often completely remove all navigation elements. When moving between tutorials or upon their completion many users were at somewhat of a loss about where they were in reference to the site and how to return to a more central point for navigation. One user actually mistook the opening of the Tutorial for a pop-up ad and expressed a very negative reaction to using the tutorial thereafter.

Users seem to consider the library site, the catalog and all other linked resources as one contiguous whole. They expected easier navigation between all parts of the site and a consistent appearance of links and locations. This was apparent in the shock of lack of navigation options in the tutorials. While the site does make use of a breadcrumbs feature, it is not available everywhere and was never noticed by our users. Also when encountering 3rd party software pages in the databases, some users continued to use links as if they were part of the library site such as clicking "home," expecting a return to the library page and reaching the database's home page instead.

Related to this notion is users' expectation for unified and omnipresent searching abilities. Particularly when they were stuck, users gravitated to the search boxes to complete a task. From users' approaches to the search forms it was clear they considered any search to be comprehensive of all information

available on a site. This included the use of the Oakland University site search and the Quick Search made available by the Library on the database pages. These participants felt very comfortable performing searches, though it was never a first option for anyone.

Labeling

Another important theme from our testing was the dependence of users on the specific and explicit appearance of key terms to validate their navigation and resource choices. A great deal of time was spent in many tasks as users attempted to discern the ambiguous meanings of some of the links and options on the site. While "Find Books" and "Find Articles" were immediately used for their related tasks, when expected to use "Library Information" and especially "Tutorials" or "Research Guides" users had much greater difficulty. Users frequently passed over the most valuable links, sometimes multiple times, and did not notice that helpful information could be reached through that link. As one student mentioned when speaking about "Tutorials" after completing the task, "[I] would not have guessed it was there." A different instance of this occurred in the search for book loan period information. Users, when confronted with large blocks of undifferentiated text on the Library Information page, expressed confusion or frustration when searching for their required information.

User Expectations

Connected to this need for specificity was difficulty in determining the relevance and appropriateness of research tools. Users complained about the lack of options for sorting and searching databases beyond a departmental-style breakdown. Some users did not attempt to abstract their research needs into a wider subject and expressed frustration at the lack of higher levels of granularity in database categories. The overarching subjects were not helpful for the users, particularly since this was a topic many did not work on before. Many users were also expecting to be able to search for a database that would be helpful using their own keywords. Still others were hoping for descriptions about the options available, as they did not know where the links would take them once clicked.

Surprisingly, no one made any indication about seeing the information icon next to the databases (an 'i' within a square). Only after some prodding during debriefing did one user mention it, and even then felt that the 'i' had something to do with a similar 'i' icon for RefWorks on the same screen. Users saw little to prompt them into understanding about the resources available or where to make the best choices and expressed their frustration. While they often relied on their own previous experience and were able to use the tools, a higher level of confusion was observed than should be considered acceptable for research tasks.

Recommendations

Based on the findings and themes discussed above, we have several recommendations for the Kresge staff.

Navigation

As it has been shown to be the most essential element for users' interaction with the site we would suggest improvements to the main navigational tool bar of the site. While no user disliked the tab menu available on most pages on the Kresge site tests seemed to demonstrate that it was underused. Not all tabs were obvious to the students. While they saw the different tabs, they were not inviting to

the user. The labels on each tab can be worded differently to express more clearly what the student will find under that category. Our participants had no issue going to the "Find a Book" or "Find an Article" or "Ask a Librarian" sections, but had qualms with the "Course Pages," "Research Guides," and "Tutorials" tabs. Our recommendation here is to be consistent with tab labels. The clear tabs are those that have command verbs in the label, such as "Find a Book." Not all tabs need to be about finding something, but they should use more demonstrative words.

A further easy fix to the navigation on the site is to decrease the sensitivity of the rollover menus. Currently, the drops down menus on the home page disappear quickly or easily, especially when trying to use the "Find a Book" search box. We found frustration teeming when students tried to use this feature, having to aim perfectly over and over to get it right. But they still liked the drop down feature, and wanted to see it appear elsewhere on the site, not just the home page. While it may be redundant to have the drop down for a section a user is already in, all other tab drop downs should be available from all pages on the Kresge site.

Users also expressed the desire to see the pop-up menus appear elsewhere on the site, not just the home page. While it may be redundant to have the drop down for a section a user is already in, all other tab drop downs should be available from all pages on the site.

Branding
Another important set of improvements should be focused on easing users' understanding of their position within, and outside of, the Kresge Library web site. While the consistency of the site themes and design impressed the users it should be fully extended to all Kresge pages. There were too many pages that appeared different, as if the students had left the Kresge completely. The complete application of the Kresge colors, logos and templates throughout the site will reduce these difficulties significantly. We also recommend the investigation of a mechanism to clearly indicate when someone is leaving the areas of library site controlled by librarians for one provided by a third party. Different colors or themes could be used before exit or perhaps even open non-Kresge sites in a different tab or window.

Clear Exits
We also feel the Kresge needs to have clearer options throughout the site. Students should not rely on the back button on the browser to get elsewhere on the site. Making full use of the breadcrumbs options everywhere, and making its presence very obvious, would ease in this dilemma. This is particularly true on the tutorials, where all navigation disappeared and the pages resembled nothing else on the Kresge site. Flash movies can be embedded into a page without having to take over the entire page. By doing this, designers can insert the global Kresge navigation and themes to all pages so that users will always know where they are, and have a means to return to the rest of the library site.

Tutorial Standards
The Tutorials section of the site in particular could see significant benefits through navigational standards improvements. First, when watching these tutorials, students shouldn't be forced to sit through the entire video if they accidentally click the back button. All videos should be able to fast forward or rewind as needed. Also, several users expressed dismay that the tutorials were forced videos or games, when all they wanted was some quick answers in text or bullet point format. Our

team does not recommend in removing all movies and tutorials. Instead, the videos should be coupled with text. We feel this will be useful for a variety of reasons. One, this will placate students (and staff and faculty) who do not want to sit through an entire movie. Two, the text can be a starting point for research, and those who feel they need further clarification can then watch the videos. Three, the tutorials are difficult to find when doing a search. Having text associated with a tutorial will improve the tools search engine performance - increasing the likelihood of it being found.

Reducing Cognitive Load

Opportunities to increase the usability of the site can also be realized through reorganization and new presentations of useful information. The Library Information page, while helpful, was overburdened with text, which makes finding information difficult. This section needs to be parsed out and include only that information that is most relevant to the regular users of the site, particularly the students. Alternatively, a limited selection of popular pages could be "bubbled up" to the top of the page and placed in a color block to draw attention. While all this data can be somewhere on the site and available, it need not be all on the front page of Library Information. Much of this could be hidden in accordion menus, for example.

Increase Granularity

Presenting deeper levels of detail about resources will immediately assist students in their use of the library site. As was seen in task three, the search for articles, many users felt apprehensive about navigating too far out to see what lay beyond the links. In order to remedy this, a nested navigation feature can be implemented to show what narrower categories might be covered by the databases. In this example, the list was derived from the departments. See Figure 2 below.

Figure 2: Nested navigation
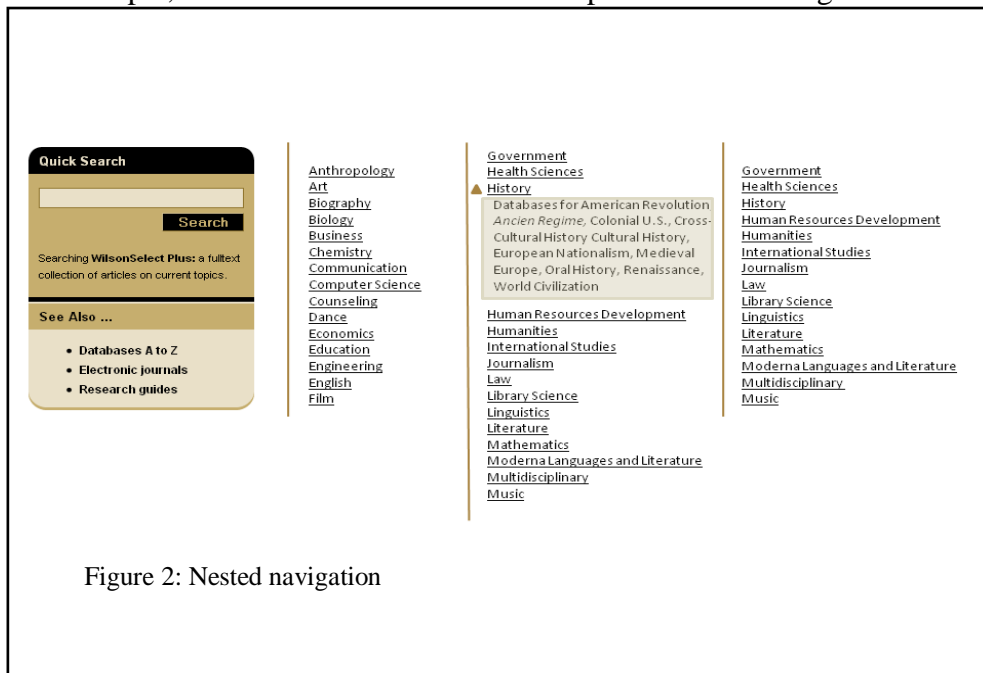
These changes should also be made in conjunction with improvements to the information icons on the database choosing pages. Though the 'i' icon already exists, we suggest greater explanation to instruct users what they will find within each before clicking. An arrow or other graphic element directing the user's eye to the "i" will alleviate the feelings of insufficient information about the available databases.

Within the descriptions, a set of keywords could be listed to better guide students. For subjects, an explanation of the discipline itself would be useful.

Search

Finally, though there is a sense of apprehension on the part of librarians to have simple search boxes on a library site, users rely on it when they are confused. For rudimentary searches and determining the landscape of their research, users consider it a useful tool. Other university libraries make use of search boxes, and even have it prominently featured on their home page. The Kresge can have something similar, but go further by having explicitly brief directions on how to make a good, fruitful search. Perhaps links to tutorials on constructing strong searches could be linked beneath. Tips can include on how to search only within a certain site, or only sites that end in ".edu."

Conclusion

Overall, the Kresge is not doing anything wrong warranting an immediate overhaul of the site. In fact, the participants of this testing showed that information can be found and can be found easily using the existing tools on the library site. And with enough practice with the site, their level of familiarity will rise to a point where they can do most anything with the tools available.

It is clear from our findings though that there are some areas of the site's architecture, nomenclature, and functionality that posed problems for these students. We had expected to have some levels of difficulty and confusion due to the lack of consistency from page to page, and our findings did support that. We also see that without prior training, novice users of the site can get lost. A library site should be obvious to use for a variety of users, from experienced researchers to first-year students to inexperienced computer users.

Based on our findings, we feel Kresge does not have a lot of work to do to get the site to a point where any student, faculty or staff can quickly and easily get started with little trouble. Some cosmetic enhancements and terminology fixes can help solve some of the confusion and frustration currently encountered by students.

Appendix I: Moderator Script

<u>Introduction</u>
Welcome, (name). My name is (first name). Thank you for coming in and helping us with this software evaluation test.

Before we begin, may I offer you a drink or a snack?

The reason we are here is to perform a usability test. A usability test is where we test a system in order to see how a user interacts with it, where its strengths and weaknesses are, and where there are snags we can look to improve upon. In this case, we are going to test Oakland University's Kresge Library site. To do this we have a few tasks written out which we would like to see you perform. These tasks are written in a specific order and I will share these with you when we are ready to begin.

We ask that you please perform these tasks to the best of your ability, giving them the same attention that you would if you need to use the site for a course project. There is no time limit, and no hurry to finish them quickly. There are no right or wrong answers or steps here.

Before we begin, I'd like to share some things with you.

First, I must stress that we are here to evaluate the Library site, not you. Your abilities and expertise are not in question here, and any difficulties you have will not count against you or be judged. If you feel uncomfortable at any point during this process please let me know, the test will stop immediately and you will be free to go.

Second, for our purposes, I will note that the test will be monitored. I have some members of my group here to take first-hand notes on any issues or difficulties that arise out of this Kresge site test. We also have a camera set up to help us review this test later. This will act as a tool for our evaluation of the system and difficulties it gives you, not for us to rate you. May we proceed with the recording of this test?

Third, I will be here acting as a moderator. My instructions will be at a minimum, and I am not to answer any specific questions about the site or give you any directions or guidance. Since we are testing the system, I cannot give clues as to what to do, where to go, or how to do it. We want to see how well the site works for real users so we need the test to be as unbiased as possible.

Fourth, at the end of the tasks, I will ask you to fill out a questionnaire with a few questions rating your experience and overall feelings about the tasks and the Kresge site interface, and my partners may have a few other remaining questions for you.

Finally, as you go through the tasks, we would appreciate it if you could think out loud. That is, say out loud the thoughts behind the actions you are undertaking, the questions that come up that usually remain in your head, or the frustrations you face.

At this point, do you have any questions for me?

We hope that these tasks will take no more than 20 minutes to complete, followed by 10 minutes for the questionnaire and a quick wrap up discussion. However, please work at the pace you find most comfortable, there is no correct time to complete the tasks. If you need more time please take it and also do not hesitate to let us know if you finish the task in a shorter time as well. Again, we are focusing on the system, not you. What is important for our test is what happens while you are working, not the time it takes.

Thank you again for your assistance, we will now proceed with the rest of the test...

Pre-test questionnaire/forms

We will begin by having you answer a few questions (see pre-task questions).

Hand out Task #1

At completion of Task #1, hand out Task #2

At completion of Task #2, hand out Task #3

At completion of Task #3, hand out Task #4

Follow-up Questionnaire

As I mentioned, we now have a quick questionnaire we would like for you to answer so we can learn more about your experience with the Library site, more than we learned by observing you and listening to what you had to say (see post-task questions).

Debriefing

Again, I'd like to thank you for assisting us with this usability test for this site. Your work here has helped us tremendously. We will take the data from this test and analyze it to see what improvements Kresge can make to its site, to better server users like yourself in the future.

Do you have any final questions for us?

At this point, I am going to pass this along to (name). S/he will ask you some brief questions about your experience here.

Again, thank you so much for joining us today and helping us with our testing.

Debrief questions.

Appendix II: Questionnaires

--Pre Task--

How old are you?

User:_____

What is your academic standing?

Date:_____

How long have you been using computers?

Which operating system/systems are you comfortable with?

Have you used Oakland University's Kresge Library Web site before?

    If yes, how long have you been using the site?

    How frequently do you use the site currently?

Have you used another university's library Web site before?

Do you know what kinds of tasks someone would use a library site for?

    If yes, can you please list some of those tasks?

How easy is it to conduct research?

What do you find difficult about conducting research?

---Post Task--

How comfortable were you in performing the tasks?

Very Comfortable   Neutral   Not Comfortable

Somewhat Comfortable   Frustrated

How well do you think you completed the tasks?

Perfectly   Neither well nor poorly   Not so well

Very well   Poorly

If you hadn't used the Kresge site before, how would you describe the ability to find what you were looking for?

Very easy   Neutral   Difficult

Somewhat easy   Very difficult

Did you feel the Kresge site was well-laid out?

Yes   No

Are the Kresge site buttons and links descriptive enough?

Yes   No

Now that you have tried the Kresge site, would you return to it to do future research?

Yes   No

Which of the tasks were particularly frustrating?

Task 1   Task 2

Task 3   Task 4

Is there anything that you feel would make it easier for using the Kresge site?

Is there anything else you'd like to add?

Appendix III: Tasks

You've been assigned a paper on nationality and perceptions of race identity. You need 5 primary sources that must include 1 book and 1 scholarly article. You may only use tools available through Kresge Library's site to find these sources.

Task 1
Look for a book that is not checked out, that meets your research needs. Find out how long you can keep this book.

Task 2
Using the library's site, find out what qualifies as a scholarly article.

Task 3
Perform a search for articles on nationality and perceptions of race identity. Identify one article or citation that fits the requirements of the assignment mentioned above. This task will end when you've selected a tool and found at least 1 result

Task 4
One of your friends mentioned that she'd found a page of resources that librarians had chosen for students. On the Kresge Library site, find a page that lists resources that are specifically suited for your research needs.

Appendix IV: Logging Form

Date: _____   User: _____   Observer: _____

Event Types *(Observation is a description of "because" for event)*
Start - user starts task
Frustration - user expresses frustration
Confusion - user is confused
Surprise - user is surprised
Other - as required
End - user finishes or abandons task (specify which)

Task number	Time (*hh:mm:ss*)	Event	Observation

Follow-up questions
What worked well for you?

Did the site do the things you expected it to do? If not, what did it do?

What did you find interesting?