Library Usability: Tools for usability testing in the library

Abstract
Usability testing is a way to be responsive to the needs of patrons by systematically evaluating their behavior in a controlled environment. Through this paper we hope to encourage libraries to use simple and inexpensive usability testing to enhance services for library patrons. Usability testing allows libraries to identify potential small changes in website interfaces, online tools, and other library services that could positively affect the user experience. In addition to surveys, which are commonly used in libraries, we will discuss other methods including paper prototyping, and video and screen capture. We will illustrate these concepts using the results of the Texas Tech University (TTU) Libraries’ usability initiatives over the past year. We will include recommendations for best practices within the library environment based on our training and experience with usability testing.

Introduction
Nearly a year ago, the TTU Libraries administration formed the Usability Task Force. The purpose was to inform, facilitate, and promote usability initiatives for services by providing guidance and coordination for usability activities. Melanie Clark, Esther De-Leon, Lynne Edgar, and Joy Perrin have pursued this initiative, first by performing a usability test on the TTU Libraries’ instance of Primo, an Ex Libris discover tool; and second, by testing the current library website home page for usability.

Why Usability?
We all have those nagging feelings in the back of our minds: “Our website is terrible”, or “this database is so difficult to use”. When it comes to our own resources or services, while we often recognize that there is a problem, we may have a difficult time identifying precisely why something is “terrible” or “so difficult to use”. If we had an efficient way to identify specific problems, we would be one step closer to making all our resources better, easier to use, and more intuitive. That is the need that usability testing is designed to fulfill.

Usability is how easy it is for a user to interact with a product. Usability is distinctly different from accessibility, which concerns the needs of users with disabilities. It is broader than simple tools such as feedback surveys. Usability is a systematic model for observing how users behave when using resources, analyzing that use, and making changes to improve the user experience. In the words of Aaron Schmidt and Amanda Etches-Johnson, usability means “Watch people use your stuff” (Schmidt and Etches-Johnson, 2012).

Usability is less about the functionality of a tool than it is about how intuitive the design is. Design controls how a user interacts with an interface. No matter how well a tool such as a database or website works or the extent of information it offers, it will be of little use to a user who cannot figure out quickly and intuitively where to find what they need. Designing for usability can be as simple as changing one word, moving a link from one side of the page to another, or adding a bit of instruction to a form. It can mean changing colors so that specific things stand out more. Observing real world behavior through usability testing
allows us to identify major problems so that they can be improved with design modification or addressed with targeted instruction.

Usability testing can be used for more than websites; physical objects, services, and other user experiences can also be evaluated. For the purpose of clarity, anything being tested for usability will be referred to as a “tool” for the duration of this paper. The key aspects of usability testing are observation and analysis. As long as you can observe someone using a tool, you can do usability testing on it. Your library may get a new document scanner, for example, and you want to see how best to train people to use it. You watch patrons use the scanner and with either a video recording or copious written notes you analyze the user patterns to find common stumbling blocks. Finally, you create signage to address any major issues you find.

Another example is the acquisition of a new online subscription database. Although the database vendor may have already performed usability testing on their product, you can do further usability testing to see how well it fulfills the needs of your users. Even when you have limited or no power to change a resource for your users’ needs, you can adjust your training or instruction to address any difficulties they encounter.

Usability is an often-overlooked part of developing or installing a new tool, but it is one of the easiest and cheapest ways to make your library respond better to patrons’ needs. When dealing with a tool developed within your organization, such as a website, usability testing may be the only way to reach an objective consensus about its problems. With usability testing you can figure out both what is most important to the patrons and why they are or are not able to do the things they want to do easily. You can then look at how best to fix those problems objectively and from the user’s point of view. The usability testing process can be as cheap or expensive and as brief or time intensive as you choose. Each library should decide on the time and funds they should expend to yield the optimum return. This paper will address several usability methods, as well as our own experience with a major usability test.

**Usability Methods**

There are numerous methods that you might use for usability testing. Each yields a different type of information. The most common of these methods are paper prototyping, surveys, and task observation. For the most complete results, different usability methods should be used together.

**Paper Prototyping**

Paper prototyping is the easiest and least expensive method of usability testing. It is an effective method for web design and product design development, particularly at the beginning of the design process or development. The method is simple. The participant is given blank paper or a whiteboard and writing utensils. The facilitator asks the participant to draw what they would expect the tool to look like, what they would expect to see on it, or what potential changes could be made to make the product better. The participant’s response is in the form of a sketch or other visual representation. This is an excellent method to find out user expectations and in the case of a website, their top priorities. It encourages designers to think outside of their usual boxes. Despite its low cost,
organizations rarely include this method in their testing agenda because testing tends to be done only later in the design process.

**Surveys**

Surveys are another simple, low cost method of usability testing. Surveys can be used to gather demographic information and general attitudes about a tool. They might be distributed on paper or with an online service such as SurveyMonkey.com. SurveyMonkey is easy to learn and a limited functionality account is free of cost.

An industry standard survey such as the System Usability Scale (SUS) can be a reliable measure of perceived usability of a system or website. The SUS survey measures user satisfaction of online systems. It is a ten-item Likert-type scale with questions such as “I thought the system was easy to use” and “I thought there was too much inconsistency in this system.” With answers ranging on a scale from 1-5 between the extremes of “Strongly disagree” and “Strongly agree”, the compiled SUS responses create a score between 0 and 100 for the system. The average SUS score is 68 (Sauro), but a satisfying system or website should be at least in the 70 range. The final score is a good representation of the collected user reaction to a system, and can be compared to the scores of other systems (Sauro 2011).

The SUS does not diagnose usability problems. What it does do is show how usable your tool is if you make no changes to it. This can be used as a baseline or point of reference for any future usability studies. It is used most effectively alongside the next usability method, task observation, because the participants actually use the tool to complete a series of tasks instead of simply judging it by its appearance. If you make changes to your tool based on usability findings from other methods, another SUS survey will show whether your changes made a real difference in how usable the tool is.

**Task Observation**

The most standard usability method, and the one that follows Schmidt and Etches-Johnson’s “watch people use your stuff” advice, is to give participants a series of tasks to complete and either observe or record them doing it. This can be achieved with copious note taking, a simple video camera placed behind the shoulder of the participant, or with software specifically designed for usability testing, such as Morae or eye tracking software. Formulating a series of tasks that users would typically use the tool for and watching participants perform the tasks yields key information such as where users go first and what frustrates them. Hard data about each task can be gleaned with this method, such as the number of participants that completed a particular task with ease, completed it with difficulty, or didn’t complete it at all. The facilitator may encourage participants to speak their thoughts out loud as much as they see fit during the process. In addition, participants can be questioned about their impressions of the task immediately afterward while it is fresh in their memory.

The Morae usability software, while not an inexpensive option, provides both screen capture and an audiovisual recording of the participant. While the participant performs the tasks in one room with one facilitator, the other facilitators are able to watch both his/her screen movements and physical and verbal reactions to what he/she is doing. With all this
data it is easy to see where the users are running into trouble. The mouse movements in
the screen capture show where participants are inclined to go first and shed light on why
they make certain mistakes, while the video recording shows how they feel about their
experience. Capturing all of these things is particularly useful when the facilitators need to
illustrate identified problems to those in charge of developing the tool. Furthermore, Morae
makes it easy to create video bites of participants at points of interest during their test and
to create graphs and other representations of the data collected.

A less expensive option than Morae would be Camtasia, software by the same company,
which does simple screen capture. The cost of Camtasia is about $500, as opposed to
Morae’s $1,500. Camtasia may be used alone or along with an independent video camera
recording the participant’s reactions.

Usability software has a lot of capabilities and makes it easier to compile data, but it is not
necessary. A video camera alone may be used to record the users. If a video camera isn’t
feasible, the test facilitator may simply take notes. In a debriefing after each usability
session about what they observed, the testers can draw conclusions the very day of the
usability tests.

Texas Tech University’s Usability Research Laboratory offers a two-day workshop,
developed by Dr. Brian Still, about usability. Participants in the workshop will learn more
about usability methods and how to design and execute a usability test, and become a
Certified User Experience Professional.

Fixing Usability problems

A usability study will make your tool’s problems obvious. What is not obvious is how to fix
those problems. To fix usability problems, you have to make an educated guess at why
users are not able to do what they want easily. In the case of a website, educate yourself on
current web standards, what users expect when they approach it. They want a search box
to be obvious, and they expect all the links to be blue with an underline on it. They tend to
want most of their information in the top of the page, the left of the page, and the middle of
the page, because that’s how most websites are designed. Users want a simple navigation
structure that allows them to know where they are. Giving users three different ways of
getting to one piece of information is not as useful as giving them one obvious way. Also,
don’t be afraid of experimenting. Making changes in a test system and testing those
changes with a few users (making sure to give them the SUS survey), will show whether the
changes make a difference.

Texas Tech University Libraries OneSearch Usability Test

The TTU Libraries Usability Task Force has researched and utilized methods previously
mentioned in two usability tests over the past year. The first usability study was of
OneSearch, TTU Libraries’ instance of Primo, which is an Ex Libris discovery tool. A beta
version of OneSearch was made available to the TTU community in October of 2011, and
the TTU Libraries’ Usability Task Force commenced its study soon after.

OneSearch is capable of simultaneously searching all the library’s resources—including the
OPAC, digital collections system, and e-scholarship repositories—along with the library’s
subscription databases. For faster search results, the TTU libraries opted to separate the federated database search from the library’s collections, resulting in a tabbed search box. Each tab has dropdown limiters for collection and format.

**Purpose**
The purpose of the study was to evaluate how well the OneSearch interface serves library patrons and identify ways it could be improved before it replaced the existing library search tools. Our goal was to evaluate the pros and cons of the OneSearch interface as demonstrated by novice, intermediate, and expert users searching for common items such as books, e-books, and articles. The information collected about the website navigation and searching practices of TTU students could also assist instruction librarians in teaching students how to use OneSearch.

**Methodology**
There were three components to the study: 1) a brief demographic survey 2) a task evaluation, and 3) the System Usability Scale (SUS). We tested one user at a time in a room with a facilitator, while the rest of us observed in the other room. After completing the demographic survey, the facilitator walked the user through 7 tasks using OneSearch. The facilitator asked the user what they thought after each task before moving on to the next one. The participants completed the SUS survey after finishing the tasks. (See appendix for the full survey questionnaires and test script).

The Morae software was installed on two laptops. The first laptop was installed with Morae Manager software to capture video, audio, and screen movements. The other computer was installed with Morae Observer software, allowing us to view, evaluate, and tag important occurrences in the recording, such as instances when users experienced difficulties. The software also captured the pre (demographic) and post (SUS) survey answers as they were generated.

**Test Phase**
In order to become familiar with the software, the test scripts, and the assigned roles (facilitator or observer), we held pre-testing sessions during which four library student workers completed the 7 tasks. During the test phase we found that OneSearch’s database tab, labeled “Databases by Subject”, was misleading, as it functions as a federated search for articles rather than database titles. In a preliminary report we recommended changing the label to “Articles by Subject” and the change was made before the usability test commenced. We also modified our facilitator scripts for clarity based on the pre-test.

**Participants**
The usability test had eight participants, the majority of which were recruited through a campus-wide email announcement. Pizza and soda were provided for each participant as incentives. Based on the demographic profile 3 of the participants were expert users, 3 were intermediate, and 2 were novices. Participants were categorized according to their experience with the existing library search tools, how often library resources were used, and the status of each individual (undergraduate, graduate student, etc.).
Results
For the most part, the novice users had the most success with the tasks. The intermediate and expert users tended to make the tasks more difficult by performing more complex searches. Almost without exception, the first thing the more experienced users did for each task was to look at the dropdown limiters, even when a general search would yield sufficient results.

Below is the success rate of each of the 7 tasks (see appendix for the full task descriptions):

<table>
<thead>
<tr>
<th>Task</th>
<th>Completion Time (min)</th>
<th>Completed with Ease</th>
<th>Completed with Difficulty</th>
<th>Average Error Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Find a book)</td>
<td>1.74</td>
<td>50%</td>
<td>50%</td>
<td>1</td>
</tr>
<tr>
<td>2 (Find an e-book)</td>
<td>0.97</td>
<td>87.5%</td>
<td>12.5%</td>
<td>0.63</td>
</tr>
<tr>
<td>3 (Open a database)</td>
<td>1.11</td>
<td>37.5%</td>
<td>62.5%</td>
<td>3.25</td>
</tr>
<tr>
<td>4 (Find an article)</td>
<td>2.92</td>
<td>37.5%</td>
<td>50% (1 did not complete the task)</td>
<td>3.63</td>
</tr>
<tr>
<td>5 (Find a digital collection item)</td>
<td>1.12</td>
<td>62.5%</td>
<td>37.5%</td>
<td>0.75</td>
</tr>
<tr>
<td>6 (Find a thesis)</td>
<td>0.87</td>
<td>87.5%</td>
<td>12.5%</td>
<td>0.38</td>
</tr>
<tr>
<td>7 (Find an image)</td>
<td>0.70</td>
<td>87.5%</td>
<td>12.5%</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Problems Identified
The test indicated that users have the most trouble searching for articles and opening specific databases. We identified the following three problems as contributing most to the users’ difficulties.

Problem 1: In order to search a specific database (as opposed to a federated search of a group of subject-related databases) users must click on the "Databases A-Z" link. This link is not visible to users and it is overshadowed by an image above it.

Problem 2: Some of the dropdown limiters are misleading. For instance, the “Texas Tech Libraries” search tab does not include subscription databases or articles from them, but the format dropdown menu includes options for articles and databases. It is misleading to have a limitation for a format that the collection does not even include.

Problem 3: The “Articles by Subject” tab, or federated database search tab, is not visible to users. The text is smaller than other surrounding text and the graphic design does not make it immediately recognizable as a tab.

None of these main problems have to do with the basic functionality of OneSearch as a search tool. The first two are visual design problems, while the third is a lack of clarity about what the tool searches. The lessons that can be learned from this are to avoid misleading users with information and to make visual components such as tabs and links immediately recognizable.

Recommendations
From these problems, we identified as many simple solutions as we could. We demonstrated each one with a mock-up of the interface with the possible change.

Our Problem 1 solutions included integrating the “Find Databases” function into one of the two main search tabs; making the databases searchable by name as a new tab entitled “Find Databases”; moving the “Find Databases” link to a different, more visible part of the page; or making “Find Databases” more eye-catching through a size or color change.

The solutions we suggested for Problem 2 were to remove “articles” from the format limiter dropdown menu; remove “databases” from the same menu; and on the “Articles by Subject” tab, remove “images” and “journals” from the format limiter dropdown. The dropdown boxes could also be included only in advanced searches to eliminate the confusion on the simple search pages.

Our solutions to Problem 3 were to make the tabs more visible either by using contrasting colors or enlarging the tabs and their text; and to add a description of “Articles by Subject” to the “What am I searching?” text on the main page.

**System Usability Scale Results**

OneSearch scored 78.75 using the System Usability Scale (SUS). A score over 70 suggests that there is nothing inherently wrong with the tool.

**Test Conclusions**

The overall SUS results were positive, as was the task evaluation. The problems we identified in the evaluation were mainly cosmetic and can be fixed easily. The functionality issues, such as the dropdown limiters, can be addressed by altering or eliminating the function.

**Obstacles and Lessons Learned**

**Obstacles**

As is common with every new undertaking, we ran into a number of unforeseen obstacles during the course of our project. The first obstacle we faced wasn’t related to the project itself, but to our plan to share our research. The project had to be reviewed and approved by the Texas Tech University Institutional Review Board, IRB, to protect the rights and welfare of the human subjects participating in our research. As risks in research of this kind are minimal, the main concern was privacy when reporting to an audience outside the TTU Libraries. A detailed plan of our research was required for the proposal, and we could not begin until it was approved.

The second obstacle we encountered was with recruitment. We originally intended to test 16 students and sent out multiple university-wide calls for participation, offering free pizza as an incentive. We received five total responses, all from graduate students. To diversify our participants we recruited undergraduate library student assistants who had not been trained on the library’s online resources. Finally, we decided that 16 participants were more than we needed and settled with eight. Although usability experts may recommend
particular numbers of participants, there is no magic number. One is better than none, but three is better than one. Five is great, but more than five may be better utilized in a second usability test following changes to the tool. For our subsequent usability project, which is in progress, we decided to use a different recruitment method: face-to-face recruitment. The idea behind this method is that if we design a usability test that only takes five minutes of a student’s time, it will be easier to recruit them as they pass through the library lobby during their free time.

The third obstacle we faced was an obstacle universal to usability. It is that implementing usability findings is often more difficult than identifying them, especially when usability is conducted on a “finished” system. Factors contributing to the difficulty of implementing usability findings include: deadlines or other time constraints; lack of the skill or expertise needed to alter the resource; limitations of the software or system behind the resource; fear of a new set of problems resulting from any changes; and buy-in from the manager of, or the person responsible for the resource.

Lessons Learned

As our first usability project, the first lesson we learned was to not set a rigid timeline. Delays are inevitable. In our case getting the project approved by the IRB, acquainting ourselves with the Morae software, scheduling testing times for participants, and analyzing our results were all pieces whose time requirement could only be approximated during the planning process.

While planning the project we observed, in our discussions with others, a misunderstanding of what usability is. Usability is often confused with accessibility issues and opinion surveys. While these are related, each is a distinct branch of the same tree. There is also a widespread assumption that feedback surveys are all that is required for usability evaluation. As discussed above, feedback surveys are useful tools, but the data they acquire is unstructured and only gather the user’s opinions or attitudes. Only limited analysis can be done with data collected through surveys. It is essential that the managers of a new tool understand the scope of usability testing and what it can accomplish.

The next set of lessons we learned relates to the third obstacle discusses above: implementing usability findings. More often than not, in libraries the managers of a tool are not the facilitators of the usability test and may not understand the significance of the findings. When encountering such obstacles in implementation the best course is to focus not on your restrictions, but on your sphere of influence. When reporting your findings to the managers of the tool, make sure your data is thorough and easy to understand. Make sure your recommendations are sound and that you communicate how much of an impact they will make to the success of the tool. Good results and clear communication together may trump any fear of a new set of problems resulting from changing the tool. Buy-in from those directly responsible is the first step to finding solutions for other obstacles such as limitations in time or skills.
When presenting usability findings, focus on identifying the problems, rather than creating one solution. In our final report we provided the managers with many simple and reasonable solutions for each problem, illustrated with graphic mockups. Presenting multiple solutions helps counter obstacles in implementation. The more options given to fix a problem, the more likely one of them will work with the time or software constraints you face.

Our method of presenting these solutions in was also an important lesson learned. We submitted a written report initially, but then judged a presentation was needed to discuss our recommendations with the stakeholders. We used short video clips to illustrate the problems identified and graphic mockups for a visual discussion of the possible solutions. We even played a game by inserting the same text in various places on the page and asking the stakeholders to count how many places they could find it. This illustrated how invisible most text or links are when a page is cluttered or not organized in a clear manner. All of the stakeholders agreed that the visual presentation resonated much more strongly than the written one. Visual aids are an effective way to report results because visibility itself is crucial in usability.

**Conclusion**

Our year of usability testing has made us view our library resources differently. It has helped us, along with a number of others in the library, look at our tools from the perspective of the user in a way we had never done before. It provided us with a clear idea of what was “wrong” with our tools, and gave us an idea about how to fix them.

Sit a few users down and watch over their shoulder while they use one of your systems. Offer them pizza or forgive their library fines. Ask them to think aloud while they work. After they’re done, hand them a SUS survey. Then chat with them about their thoughts about what was difficult. You will be surprised what you learn in a very short period of time.
Reference List


Appendices

TTU Libraries OneSearch Usability Study

I. Rationale: The University Libraries is rolling out a new search tool, OneSearch, for its website. The four investigators will be performing a usability study to evaluate how well the OneSearch interface serves library patrons, and identify ways it could be improved before it replaces the existing library search tools in the spring 2012 semester. This study will collect information about the website navigation and searching practices of various groups of TTU library users, and will aid the library staff in tailoring services to better meet the needs of the TTU community.

II. Subjects:
(a) The population involved in this study will be TTU undergraduates, graduate students, and faculty who voluntarily respond to a call for participation. Subjects must be 18 or older and affiliated with TTU.
(b) Subjects will be recruited through a Techannounce advertisement.

III. Procedures:
(a) Subjects will be asked by one of the investigators to perform a set of 7 tasks using the OneSearch web interface, on a provided laptop. Before completing the tasks, the subject will fill out a short demographic survey. Afterward, the subject will fill out the System Usability Scale survey. The entire process will take approximately 20 minutes for each subject to complete. Audio and video of the subject as they complete the surveys and tasks, in addition to screen capture, will be recorded with Morae usability testing software. The collection of this data will be monitored by two of the investigators in another room.
(b) The only potential risk is the breach of privacy, but such breeches will be avoided. The data will be saved in a folder on the TTU Libraries' server, lib-share.tosm.ttu.edu (on the Storage Area Network), managed by TTU IT. The folder is restricted to the four investigators. Although the investigators will collect the subjects’ names with a consent form for the test, subjects will be completely anonymous in any reports to other library staff, or to a wider audience. The results will be reported mainly in summary. While short clips of the screen capture portion of a subject’s test may be used to illustrate a point in a presentation of the study’s findings, video footage of the subjects’ faces shown in any reports outside the library will be blacked out. Once the test results are reported, the original data will be deleted.
(c) Refreshments will be served to the subjects, but no other compensation will be given.

IV. Adverse Events and Liability:
The proposed research does not increase risks for subjects more than minimally beyond the ordinary risks of daily life.

V. Consent Form: Subjects will be given a consent form to sign that explains the study and that they will be videotaped.

Attachments: Recruiting Announcement; Consent Form; Test Script.
Library Search Tool Evaluation Call for Participants

The University Libraries needs volunteers to help evaluate a new online search tool called OneSearch. Faculty, graduate and undergraduate students, 18 and up, are encouraged to participate.

Participants will be asked to complete a series of tasks using OneSearch. The series of tasks will take approximately 20 minutes to complete.

Participants must consent to being videotaped as part of documenting the evaluation process, but may discontinue participation at any time. Refreshments will be provided!

To find out more or to participate in the study, please contact:
CONSENT FORM

Purpose: We are asking you to participate in a usability study for the Texas Tech University Libraries’ new search tool called OneSearch. This study is for research, and participating will help us evaluate how well OneSearch serves library patrons and identify ways the interface could be improved.

Testers: Melanie Clark, Joy Perrin, Lynne Edgar, Esther De Leon

Environment: The study takes place at the University Library, where you will be observed as you use OneSearch.

Information collected: We will record information about how you use the interface. We will ask you to fill out surveys and interview you. We will use the information you give us, along with the information we collect from other people, to recommend ways to improve the interface.

Videotape Waiver: Your work with the interface and the interviews will be videotaped. By signing this form, you give your consent to use your voice, verbal statements, and videotaped pictures for the purpose of evaluating the site and showing the results of our testing. However, your data will always be reported anonymously (your name will not be revealed).

Comfort: You may take a break at any time you wish. Simply inform the facilitator that you would like to do so. Also, remember that we are evaluating OneSearch, NOT you.

Freedom to withdraw: Helping us today is up to you. You may withdraw from this study at any time, without any negative consequences. However, we do appreciate any help you are able to give.

Compensation: For helping us out today you will be provided with refreshments.

Freedom to ask questions: If you have any questions, you may ask the test administrator now or at any time during the study.

I agree to participate in this research. I have read this form. My questions were answered.

Signature: _________________________________
Printed Name: _______________________________
Date: _________________________________

This consent form is not valid after December 31, 2011
OneSearch Test Plan

Purpose

Why are you doing the test? To make sure the interface is as easy to use as possible; to inform instruction Librarians on how to teach with it; to make sure there’s enough context for students to navigate themselves without instruction.

What are the goals of the Usability Taskforce and OneSearch Implementation Team for this stage of testing? Define areas of the interface that could be improved. Define problem areas that would cause errors.

Methodology

- One user at a time
- Test in one of the meeting rooms with one facilitator
- Use Retrospective recall (have the person talk about what they did after the fact)
- Pre-test demographic survey
- Post survey
- SUS

Pre-Survey

1. Which of these statements best describes you? (Finding resources means looking for information for research or coursework).
   a. I use the library website to find resources all the time. (Expert)
   b. A few times a semester, I use the library website to find resources. (Intermediate)
   c. I use the library website to find resources a few times a year. (Beginner)
   d. I don’t use the library website to find resources. (Beginner)

2. What is your age?
   a. 18-25
   b. 25-35
   c. 35-45
   d. Over 45

3. What is your relation to Texas Tech University?
   a. Undergraduate Student
   b. Graduate Student
   c. Faculty
   d. Staff
   e. Other: Open ended question

4. How often do you use the Library website? Open ended question

5. Please check all the ways you use the library website.
a. Find books
b. Find articles, databases, or e-journals
c. Find a Personal Librarian
d. Check hours
e. Check your library account
f. Other
   i. _______________________
6. What is your primary language (e.g. English, Spanish, German, Japanese)? Open ended question

Scenarios/Task List
1. You are looking for a work called “Operations management” by Roberta Russell. Find out if the library has this book and if you can check it out. If the library has it, where is it located?
2. You are not on campus, but you want to read a book about human resources management. See if there are any books available online and open one.
3. Find the database JSTOR and open it.
4. You need to find a full text online article about customer service training. Try to find an article and view it.
5. You want to see the 1977 volume of the Texas Tech yearbook (La Ventana). Locate the yearbook and then try to view the cover of the book.
6. Find Dr. Rebecca K. Worley’s TTU thesis The House of Yes: a Director’s Approach and find the abstract of the thesis.
7. You need to find a picture of Frank Lloyd Wright’s Falling water. Find the picture and access it.

Post-Survey (System Usability Scale)
1. I think that I would like to use this system frequently
   Strongly disagree   Strongly agree
   1  2  3  4  5
2. I found the system unnecessarily complex
   Strongly disagree   Strongly agree
   1  2  3  4  5
3. I thought the system was easy to use
4. I think that I would need the support of a technical person to be able to use this system

5. I found the various functions in this system were well integrated

6. I thought there was too much inconsistency in this system

7. I would imagine that most people would learn to use this system very quickly

8. I found the system very cumbersome to use

9. I felt very confident using the system

10. I needed to learn a lot of things before I could get going with this system
Never say that this is a “Test” we don’t want the people to feel like we are testing them. We are testing the site not them.

(Subject arrives)

Hi. My name is ________ and I’m going to be walking you through this session.

I am a part of a development team that is trying to make the interface of the library search better for the TTU community.

You probably already know, but let me explain why we’ve asked you to come here today. We're evaluating a Web site that we’re working on so we can see what it's like for actual people to use it.

I want to make it clear right away that we're evaluating the site, not you. You can’t do anything wrong here. In fact, this is probably the one place today where you don’t have to worry about making mistakes.

If you have questions, just ask. I may not be able to answer them right away, since we’re interested in how people do when they don’t have someone sitting next to them, but I will try to answer any questions you still have when we're done.

You may have noticed the camera. With your permission, we’re going to record the computer screen and what you have to say. The recording will be used only to help us figure out how to improve the site. There are also some people watching the screen in another room. It helps me because I don't have to take as many notes.

If you would, I’m going to ask you to sign something for us. It simply says that we have your permission to record you, but that it will only be seen by the people working on the project.

Do you have any questions before we begin?

[Wait for questions. Answer as many as you can]

Before we get started, you will fill out a short survey on this computer [bring up the survey], and we’ll hand you the first task when you are done. So, here is the survey—let me know when you are done.

[User fills out survey]

Alright, we are ready to begin. I will hand you the tasks one by one. At the end of each task, I am going to ask you to talk about what you were thinking when you were going through the tasks. Here is the first task.

[Hand them task 1]
Please read this out loud and then complete the task. Tell me when you are done with the task.

[The user reads the task, and the moment they are done reading, the task starts. Stop task when they say they are finished. If they seem to have finished but have forgotten to say they are finished, prompt them by asking if they are finished]

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 1]

[Hand them task 2]:

Please read this out loud and then complete the task. Tell me when you are done with the task.

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 2]

[Hand them task 3]:

Please read this out loud and then complete the task. Tell me when you are done with the task.

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 3]

[Hand them task 4]:

Please read this out loud and then complete the task. Tell me when you are done with the task.

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 4]

[Hand them task 5]:

Please read this out loud and then complete the task. Tell me when you are done with the task.

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 5]

[Hand them task 6]:

Please read this out loud and then complete the task. Tell me when you are done with the task.
[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 6]

[Hand them task 7]:

Please read this out loud and then complete the task. Tell me when you are done with the task.

[After they say they are done, prompt them to go back to the home screen of OneSearch]

[Ask them to verbalize their thoughts about Task 7]

Now that you have completed the tasks, I’m going to talk to the team in the next room. Please fill out this survey and I’ll be back with some follow up questions.

[User fills out survey]

[Facilitator, ask any and all questions now, especially if you saw them having problems with something that they didn’t talk about. You want to get as much out of them as possible.]

Alright, that’s all of the questions we have. Thank you for your participation. I will walk you out.

[Stop recording. Save the data. Name each recording with the date and participant number i.e. P01 P02 P03 etc. Clear the cache on the browser]