Executive Summary

In the fall of 2014, the J. Murrey Atkins Library’s Usability Lab conducted a study of the library’s website homepage. Atkins library’s website plays a primary role for its services to its audience. The study included analysis of a focus group, paper prototyping, tasks-based testing, Google Analytics, and HTML CodeSniffer. The objectives for the J. Murrey Atkins Library Website study are as follows:

- Conduct a usability assessment of Atkins’ homepage.
- Conduct analysis of the design and functional features of the homepage.
- Determine whether the library should or should not implement changes in the redesign.

The study as a whole consisted of twenty four participants that represented undergraduate students and graduate students.

The focus group and the paper prototyping were combined into one session that consisted of ten participants that represented eight undergraduate students and two graduate students. During the focus group, the ten participants were asked seven predefined questions. These questions were developed to open further discussion of the website. The questions focused on: frequently used features, most important features, desired features, frequency of use, and pros and cons of the website. This method gathers a sampling of the intended audience’s views towards the website.

During the paper prototype session, the participants were given thirteen pieces of paper and were asked to create a homepage layout. Eleven pieces of paper represented different features found on the current website and two pieces were blank for the participants to add a feature not represented. The features were: laptop availability, desktop availability, interlibrary loan, book/article/database/journal search, eTextbooks, group study rooms, spotlight, library hours, news & events, contact information, and my library account. The participants were told they did not have to use all of the pieces of paper. After each participant completed their paper prototype they were asked why they chose that arrangement. The paper prototype exercise allowed participants to illustrate their ideal layout and organization for the library website.

The tasks-based testing consisted of fourteen participants that represented ten undergraduate students and four graduate students. The fourteen participants were asked to perform eleven identical tasks. This assessment method is an effective way to uncover usability issues as it consists of representative users conducting relevant tasks while using the homepage. The only exception to performing the predefined tasks was if a participant covered the task in the pre-test survey. The task list used in this study focused on: navigation to the library site, locating the library hours for a future date, reserving a room, locating subject librarian’s contact information,
reviewing your library account, requesting consultation with a librarian, locating eTextbooks, locating research guides, locating information about printing, scanning, and copying, locating open invite study sessions, locating laptops available for check out, and locating contact information for jobs. The majority of the participants completed the tasks with little difficulty. Feedback was largely positive with minor recommendations.

The study revealed several issues that can be altered to increase the efficiency, effectiveness, and engagement of the homepage. While no critical usability issues (problems that made the site unusable or negatively affect its efficiency for multiple users), were uncovered, the study revealed minor issues. This report contains a list of recommendations to address these issues. Additionally, the results identified further possibilities of inquiry for future studies.

**Recommendations**

*Note: This is a deviation from past formats due to the length of the report the recommendations have been moved to the beginning for the convenience of readers. Detailed findings are found further in the report.*

The following recommendations were developed based on analysis of the focus group session, paper prototype session, usability test recordings, pre-survey responses, post-survey responses from participants, Google Analytics, and HTML CodeSniffer. The study did not uncover critical usability issues, but did reveal smaller adjustments that could be made to improve the library’s homepage efficiency, effectiveness, and engagement.

The recommendations below are suggestions to make the homepage more efficient, desirable, and functional to its users.

**1. Add a rotating banner to the homepage.**

To fully utilize features found on the website, users must be aware of them. Participants from the focus group and the tasks-based testing commented that they didn’t know many of the features existed. These features included: Subject Librarians, eTextbooks, Research Guides, StudyConnect rooms, any My Library Account. The lack of knowledge of the features did not cause critical usability issues, which is confirmed by Google Analytics. Implementing a rotating banner that is prominently located that will include detailed information about tools will aid awareness which will lead to more use of the features. In addition, news & events can be included in the rotating banner. This will add interest to the homepage. Having the rotating banner prominently located on the homepage will eliminate the need for users to scroll. In addition, information included in the rotating banner will be above the fold. Shown below is a screenshot of the homepage on a Dell desktop in the library. It is evident that some features are not visible without scrolling.
Display sizes for library public use machines:

- Dell Desktops: 22 inches
- iMac’s (general use): 21 inches
- iMac’s (Multimedia Studio) 27 inches

Resolution sizes for library public use machines:

- P190s – 1280x1024
- P2213 – 1680x1050
- P2214H – 1920x1080
- 2408WFP – 1920x1200

2. **Consistently label features throughout the website.**

Having features consistently labelled throughout the website will increase the efficiency of the site and reduce confusion of users. Two occurrences of features not being consistently labelled were uncovered in the usability study.

The eTextbook interface was labelled two different ways. On the homepage the feature for students is labelled “Does the Library have your Textbook” (*Shown Below*) and when it is opened it is labeled “E-Textbooks at Atkins Library” (*Shown Below*). The feature for faculty members is labeled “Faculty eTextbook Database.”
Having a consistent label will reduce confusion among users. Only two of the fourteen participants in Task 6 used the eTextbook database. Two participants used the “Faculty eTextbook Database” to locate the eTextbook, but only after they were provided the title. Participants looked for key terms like “eTextbook” to complete the task. When the eTextbook interface is opened, the page is titled “E-Textbooks at Atkins Library.” This title might be more suitable for Atkins’ homepage as well because it is a better indicator of the service.

The StudyConnect Rooms feature is labelled three different ways. During Task 9, four participants expressed confusion due to the terminology. On the homepage, the feature is labeled as “Study Connect Rooms Open Invite” in the Study Rooms box (Shown Below).

On the group study page (https://library.uncc.edu/groupstudy/spaces/) located by clicking “Reserve a Group Study Room” under the navigation menu item “Services” or by clicking the “Reserve a Group Study Room” under “Quick Links” on the homepage is labelled “StudyConnect Rooms” (Shown Below).
When a user clicks “StudyConnect Rooms Open Invite” or “StudyConnect Rooms” they are directed to a list of the StudyConnect Rooms for the day (https://library.uncc.edu/groupstudy/spaces/public.php). This page labels the feature as “Reserved Public Group Study Rooms” (Shown Below).

3. **Add appointment widget to each subject librarian page.**

On the “Contact Us” Page and on the “Subject Librarians” page there is a “By Appointment Button” (Shown Below) but is not available on the specific librarian’s information pages. During Task 5, two participants used the “By Appointment” button to schedule a consultation for research help, where the other twelve participants said they would email the subject librarian in the subject they research help in. This tool would increase the efficiency of requesting an appointment with a librarian and would be utilized more if it was included in each subject librarian’s information page.

**Contact Us**

- **ADDRESS**
  J. Murrey Atkins Library
  9201 University City Boulevard
  Charlotte, N.C. 28225-0201

- **EMAIL**
  Email askatkins@unce.edu

- **INFORMATION DESK**
  Call 704.687.0494 or stop by the information desk for help.

- **SEND A TXT**
  Send us a text at 704.464.0555

- **BY APPOINTMENT**
  Click here to schedule an
4. **Reduce the clicks to view “My Library Account.”**

For a user to view their library account, a minimum of four clicks is required. In Task 4, participants first clicked “My Library Account” in the upper right corner and were sent to a page that provides information about the account, the participants then click “My Library Account” embedded in the page. Next, the users must enter their NinerNET credentials and click submits. The participants are then directed to a WMS search page (*Shown Below*), this is where seven of the fourteen participants expressed confusion to where they were. To view an individual’s library account, the participants had to make their final click on “My Library Account” located in the upper right corner. There is limited editing within the third party interface, which limits the click reduction. If the process was changed to when users first clicked “My Library Account” in the upper right corner they were directed first to the NinerNET login and then directed to the WMS search page, a user’s clicks would be reduced to three to view account information.

5. **Turn off the old mobile site.**

The participants that used the search box located in the upper right corner of the homepage occasionally were given results that led to the old mobile site. During Task 3, one participant searched “mathematics librarian” and clicked the second result “Click to Call” which led to outdated information (*Shown Below*). Information located in the old mobile site can be outdated and provide incorrect information to users (*Shown Below*).
6. **Redirect the old group study application to the new group study application.**
   
   One participant in the pre-survey of tasks-based testing used 49er Express to show how they reserved group study rooms. The participant clicked the “Library & Research” tab and then clicked “Group Study Rooms” located within the “Using the Library” box, which took the participant to the old group study room application (*Shown Below*). The old application was listed second on the page views via Google Analytics. Redirecting the old application to the new application will ensure that it cannot be accessed from any host.
7. **Add a title attribute to the WMS search input field.**

   HTML_CodeSniffer identified two errors under the WCAG regulations that associated with the WMS search field found on the homepage (*Shown Below*). The first error states that the search field should be labelled in some way that the information and user interface components are perceivable. The second error is that the search field does not provide a name to an accessibility API. Adding a title attribute to the WMS search input field will resolve the errors.

8. **Fix the broken laptop availability for Macs.**

   One participant asked in the focus group if the Mac laptop availability was correct and it was determined that it is not functioning properly. Fixing this feature will allow users to receive accurate information when inquiring about laptop availability. This also reduces the inconvenience for students asking for Macs and for staff members.

9. **Reevaluate current navigation menu items labels.**

   Reconsidering the labels of the current navigation menu items will improve and support an effective, efficient, engaging, error tolerant, and easy to learn website for users. “The goal of a label is to communicate information efficiently” (Rosenfield 73). The focus group had difficulty finding information about library services found due to inappropriate labeling on the website’s homepage and navigation menu. Conducting further analysis of the navigation menu will identify further changes to the navigation. Shown below is the drop-down for each navigation menu item.
Background

The library’s homepage is used by students, faculty, staff, and community patrons. The website is used: to locate electronic, print, and multimedia resources; to view a user’s library account information; to view desktop and laptop availability; to reserve group study room; to locate research and course help, which includes contact information for subject librarians, research guides, course reserves, and citation tools; to view information about the library; to view contact information, to view announcements, news, events, and spotlights; and to view the hours of operation.

In the fall of 2014, a Web Advisory Group was established. The group consists of 12 members that represent every department in the library. Each department of the library has at least one representative. A usability study was planned shortly after the initial meeting to provide data to support changes and to make recommendations made to the library’s homepage.

A Usability Study of Atkin’s homepage began in November 2014. The project consisted of the Director of the Usability Lab and Digital Scholarship Librarian, the Usability Assistant, and a student assistant.

The study used tasks-based testing, paper prototyping, and a focus group as its methodologies. The methodologies were supported by data from Google Analytics and HTML_CodeSniffer.

Focus Group
A Focus Group was the first methodology used in this study. A focus group is a “way to better understand how people feel or think about an issue, product, or service” (Krueger & Casey 4) known as needs analysis. The participant’s that partook in the focus group are members of the intended audience of the product being discussed. “In a typical focus group, participants talk. During the focus group users tell you about their experiences or expectations but you don’t get to
verify or observe these experiences” (Focus Groups), allowing the researcher to gather qualitative data. In addition, this method is best utilized before designing a website because it allows the researcher to understand insights to how the product and service are perceived from the participant’s opinions.

**Paper Prototype**

Paper prototype was another methodologies used in this study. Paper Prototypes is a “quick and cost-effective technique for identifying major usability issues early with sketches and paper” (Nielson). Paper Prototypes is an easy way to brainstorm and generate design and layout ideas. The participants that partook in the session are members of the intended audience of the product being discussed. In addition, this method is best utilized before designing a website because it allows researchers to gain a visual to what its audience desires in a website.

**Tasks-Based**

Tasks-based usability analysis was one of the methodologies used in this study. “Usability testing examines how people perform specific tasks, guiding the definition and implementation of functionality” (Goodman 73). This form of usability allows for accurate and comparable data analysis between multiple participants. In addition, this method is a reliable way of gauging usability at any stage of development.

**Google Analytics**

Google Analytics provided statistical data to support the findings from the focus group, paper prototyping session, and task-based testing. In addition, Google Analytics refutes prior assumptions to the webpage with the data it produces. “Google Analytics helps you analyze visitor traffic” (Why Google Analytics). This includes being able to track the routes users take to reach the website, the devices users are using while they are on the website, and how users interact with the pages found in the website. Google Analytics allows a researcher to view a large scale of data without having to meet with users face-to-face. Google Analytics provides statistical data based on user traffic but does not determine if the information found is useful to users.

**HTML_Code Sniffer**

HTML_Code Sniffer detects accessibility violations and potential violations on behalf of W3C’s Web Content Accessibility Guidelines (WCAG) and the U.S. Section 508 regulation. “HTML_CodeSniffer is a client-side script that checks HTML source code and detects violations of a defined coding standard.” (HTML_CodeSniffer). The U.S. Section 508 regulation standards “define the types of technology covered and set forth provisions that establish a minimum level of accessibility” (Summary of Section508 Standards). The criteria for web-based technology and information are based on access guidelines developed by the Web Accessibility Initiative of the World Wide Web Consortium. The standards aim to ensure that information like website graphics or animation is also available in an accessible format. “Generally this means use of text labels or descriptors for graphics and certain format elements” (HTML already provides an “Alt
Text” tag for graphics which can serve as a verbal descriptor for graphics)” (Summary of Section508 Standards).

WCAG is a wide range of recommendations for making web content more accessible. Content will be more accessible to a wider range of disabilities, “including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these” (Caldwell). These guidelines cover a wide range of issues but they are not able to address the needs of people with all types, degrees, and combinations of disabilities. In addition, WCAG’s guidelines make web content more usable by older individuals with changing abilities due to aging and often improve usability for users in general.

Study Design

Focus Group
Focus groups is a form of needs analysis which allows researchers to determine the participants’ opinions and desires for the website resulting in qualitative data. Participants in the focus group made comments and discussed the predetermined questions. The participant’s answers to the questions developed into a group conversation by other participants responding to the ideas and the comments. The Director of the Usability Lab and the Usability Assistant developed and finalized the script and the questions that were asked.

The questions asked:

1. What do you use the most on the library website?
2. How often do you use the library website?
3. What do you like the best about the library website?
4. Have you had any issues with the library website? If so, what have they included?
   a. How significant was this issue?
   b. What do you think the cause of this issue?
   c. What do you think would improve or fix this feature/issue?
5. What do you think the most important feature of the library website is and why?
6. If you could add a feature to the library website, what would it be and why?
7. Do you all know what research guides are?
   a. Have you ever used a research guide? If so, why?
   b. If not, what would expect to find in a research guide?
8. Is this an adequate summary? (Summary question, after the brief oral summary)
9. Is there anything else you would like to add to our discussion?

Participant’s comments as they discussed the website expose opinions from the intended audience and inform recommendations. During the session, participants were encouraged to share their point of view even if it differed from what others have said. Also, the participants were reminded that negative comments at times are the most helpful.
In addition to the discussion, participants completed a demographic survey (See Appendix). The survey captured demographic information, including year in school, major/field of study, frequency of website use, and an explanation of use.

The focus group session lasted around 35 minutes and involved a moderator and observer/note taker. The Usability Assistant acted as the moderator and a student assistant acted as the observer/note taker. The moderator greeted participants upon arrival, guided participants through the informed consent, presented the participants with the questions, answered participant’s questions, prompted the participants for responses, and guided the discussion. The observer took notes during the session.

The session was captured on a video camera. After the focus group session was completed, the qualitative data was analyzed as a whole and per individual by the Usability Assistant.

**Paper Prototype**

Analysis of the paper prototypes helps researchers gain insight to participants’ wants and needs associated with the design and layout of the library’s homepage. The participants discussed why they chose the design and layout. The Director of the Usability Lab and the Usability Assistant developed and finalized the script and the features to be included in the paper prototype.

The paper prototype session lasted around 15 minutes and involved a moderator and observer/note taker. The Usability Assistant acted as the moderator and a student assistant acted as the observer/note taker. The moderator greeted participants upon arrival, guided participants through the informed consent, presented the participants with materials, provided the participants with instructions, answered participant’s questions, and prompted the participants for responses. The observer took notes during the session.

The session was captured on a video camera. After the paper prototype session was completed, the data was analyzed as a whole and per individual by the Usability Assistant.

**Tasks-Based**

The tasks-based analysis helps researchers uncover usability issues as users interact with an interface via predefined tasks. Participants in this study attempted eleven predefined tasks on library website (Shown Below). In addition to the task list, participants completed a pre-test survey and a post-test survey (Shown Below). The pre-test survey captured demographic information, including year in school, major/field of study, frequency of website use, and an explanation of use. Before the participants provided their explanation of use, they were asked to navigate to the library website. Then the participants commented and showed how they use the library website step-by-step. If a participant showed their process for a feature they use on the website and it related to a predefined task, the participant was not be asked to perform that task during the usability test. This alternative did not affect any of the data from the predefined eleven tasks. The post-test survey captured information about future use, features used previously, the most useful features, and features that should be added. From the conversation in the first Web
Advisory Group meeting, Google Analytics top page views, and the focus group data helped provide a list of potential topics to test. The Director of the Usability Lab and the Usability Assistant developed and finalized the task list in this study. The final task list highlights typical activities performed by students, staff, and faculty when using the library catalog.

The following includes the pre-test and post-test questions/commands and the tasks the participants were asked to perform:

**Pre-Test Conversation**
- What year are you in school?
- What is your major?
- How often do you use the library website?
  - (A). Never
  - (B). A few times a semester (2 or more)
  - (C). A few times a month (2 or more)
  - (D). A few times a week (2 or more)
  - (E). Daily
- Navigate to the library website.
- When you visit the library website, where is the first place you go? (Show me your process, how do you get there?)
  - Where do you go next?
  - Continue until they run out of places they go. If the user shows steps to meet any of the tasks do not ask them it again.

**Task-based Questions**
1. Locate the library’s hours for January 6, 2015.
2. Reserve a room on the main floor that holds 8 people for Monday, November 24 at 8:30 pm.
3. Locate the contact information for the mathematics librarian.
4. Review your library account’s checkouts, holds, and charges.
5. You need assistance with a research project, how can you request a consultation with a librarian?
6. Find the E-Textbook for Dr. Meaghan Rand’s UWRT 1101 course, what is the title (*What the best college students do)*?
7. Locate the Public Policy research guide.
8. Locate the library’s information about printing, scanning, and copying.
9. What open invite study sessions are occurring today?
10. You’re interested in applying for a job in the library, who would you contact?
11. How many laptops are available for checkout?

**Post-Test Survey**
1. Have you done any of the above tasks before today?
2. Is there any features you learned about today that you want to explore further or that you will use in your future visits to the library site?
3. Which feature do you find the most useful? Why?
4. Is there any feature missing that the library should add?
Participant’s performances as they attempt to complete the tasks expose usability issues and inform recommendations. During the test session, participants were encouraged to articulate their thoughts and actions out loud as they worked through the tasks. The think out loud protocol allows researchers to understand the context for user actions and decisions while completing a specific task; making it easier for the researchers to determine the underlying cause of usability issues.

The test sessions ranged from 13-30 minutes and involved the test facilitator/observer and the participant. The Usability Assistant acted as the facilitator and the observer. The Usability Assistant greeted the participants upon arrival, guided participants through the informed consent, presented the participants with the tasks, answered participant’s questions, prompted the participants for responses, and took notes during the session. After the test sessions, the Usability Assistant reviewed and analyzed the data produced.

The test was conducted on a Dell desktop computer running Morae Recorder. Morae Recorder captures the desktop activities and the participants’ facial expression via a web camera. Once launched, Morae began recording the participant’s interaction with the website. Following the test completion, the tests were opened in Morae Manager and then the data was compiled and analyzed as a whole and per individual.

**Recruitment**

**Focus Group & Paper Prototype**
Participants were recruited through the library’s social media accounts and posters throughout the building. The poster signage advertised:

“$10 Starbucks Gift Card
Help improve Atkins’ Website and receive a $10 Starbucks Gift Card!”

In addition, the posters provided the time, location, and contact information for potential participants.

Ten participants took part in the study. The ten participants read and signed two informed consent forms one for focus groups and the one for paper prototyping. Both consent forms are approved by the university’s Institutional Review Board. Participants received two $5 Starbucks gift cards for their participation in the study. Participants received the incentive regardless of whether they completed the focus group and paper prototype session.

**Tasks-Based**
Participants were recruited through the library’s social media accounts and posters throughout the building. The poster signage advertised:
“$5 Starbucks Gift Card
Help Improve Atkins’ website and receive a $5 Starbucks Gift Card!”

In addition, the posters provided contact information for potential participants.

Fourteen participants took part in the study. The fourteen participants read and signed an informed consent form approved by the university’s Institution Review Board. Participants received a $5 Starbucks gift card for their participation in the study. Participants received the incentive regardless of whether they successfully completed the usability test.

**Participant Demographics**

**Focus Group & Paper Prototype**
The participants consisted of 8 undergraduate students and 2 graduate students. The undergraduate and graduate students represented 9 different areas of study. The participants’ prior experience with the website varied from using it daily, several times a week, several times a month, to several times a semester.

**Tasks-Based**
The participants consisted of 10 undergraduate students and 4 graduate students. The undergraduate and graduate students represented 14 different areas of study. The participants’ prior experience with the website varied from using it daily, several times a week, several times a month, to several times a semester.

**Findings**

**Focus Group**
Findings are based on what the facilitator identified the participant’s needs were through the session.

1. **What do you use the most on the library website? (Listed most used to least used)**
   - Reserving Group Study Rooms (8/10 participants)
   - Library Hours (8/10)
   - Locating books/articles/journals (7/10)
   - Computer Availability (6/10)
   - Contact Information (2/10)
   - Course Reserves (1/10)

2. **How often do you use the library website?**
   - Daily (2/10 participants)
   - A few times a week (1/10)
   - A few times a month (4/10)
   - A few times a semester (3/10)

3. **What do you like the best about the library website?**
• The WMS search bar was the most liked feature of the website. The participants like the tabs that allow them to refine their results before beginning the initial search. In addition, the participants like the advanced search feature. Numerous participants commented that it is helpful that databases can be viewed by the top 10 databases, by subject, or alphabetically.

• A participant stated that “the website is not cluttered or overbearing…it is clean and easy to navigate” and all of the participants agreed.

• The participants liked “Today’s Hours: _____” because it updates daily and that you can view the hours for a future date.

4. Have you had any issues with the library website? If so, what have they included?
• Have had issues with two groups booking the same group study room.
• Could not find a list of “services” that the library offers. The example given was a student trying to locate if the library had a laminator. The student eventually called the information desk after searching the site.

5. What do you think the most important feature of the library website is and why?
• The “Today’s Hours: _____” feature because the library is 24/5 and it allows students to see hours each day and future dates. A participant commented it is nice to be able to view what the hours are in advance especially for finals week.
• Reserving a group study room because you can reserve a room in advance and do not have to wait until you are physically in the library. Participants also liked that you can filter available rooms by equipment, capacity, and floors.
• The WMS search bar because it is crucial for research that most classes require at some point during the semester. The two graduate students commented that they use the search bar daily.

6. If you could add a feature to the library website, what would it be and why?
• A participant stated they would like news & events to be added the homepage. The participant did not know that it already existed; this led several other participants to comment that they didn’t know that homepage feature existed. This led the participants to suggest the news & events section to be prominently located on the homepage. This opened the discussion further where participants claimed they would want a rotating banner and for it to include pictures of students and Norm the Niner in the library and have stories spotlighted. The participants used Yahoo’s homepage as an example.
• Coffees shop’s hours, because they are located in the library and have different hours of operation than the library.

7. Do you all know what research guides are?
None of the participants knew what was a research guide was and guessed that it would help navigate websites or give citation information. After the participants were told what a research guide was, numerous participants commented that they would use it in the future.
8. *Is there anything else you would like to add to our discussion?*

- One participant asked if the laptop availability and desktop availability was up to date. The participant asked this questioned because they have noticed that Macs are never available.
- A participant asked when you click on “Rooms Available” under the “Group Study Rooms” box on the homepage and there is none is available right now, is there any way it can list when the next room is available? The participant stated they have to keep selecting different times to see what would be available later that day.

**Paper Prototype**

Findings are grouped by the features most used in the session and the organization of the documents. With additional paper prototyping sessions, more data would be produced to support a design of the future homepage. With the limited data, trends were still identified. All of the participants had different layouts but organized the features in a similar manner. Eight of the ten participants placed News & Events at the top of their design, while five of the eight participants placed it in the center. Numerous participants organized the elements by what they are used for. For example, participants grouped features that deal with academic research together (Book/article/database/journal search, Interlibrary Loan, eTextbooks, and Course Reserves) and grouped features associated with the library together (Library hours, my library account, group study rooms, desktop availability, and laptop availability).
The most utilized features in the paper prototype session:

1. Library Hours (10/10 participants)
2. Desktop Availability (10/10)
3. Group Study Rooms (10/10)
4. Books/Articles/Journals Search (9/10)
5. Course Reserves (9/10)
6. My Library Account (9/10)
7. News & Events (9/10)
8. Laptop Availability (9/10)
9. eTextbooks (8/10)
10. Contact Information (7/10)
11. Interlibrary Loan (6/10)
12. Spotlight (5/10)

**HTML_CodeSniffer**

Findings are based on the data produced by the HTML_CodeSniffer on the library’s homepage.
The library’s homepage meets the U.S. Section 508 standards. When the tool was run, it provided a report describing 15 errors and one warning (Shown Below), the errors and warnings provided were false positives. Fourteen of the fifteen errors stated “Anchor element found with a valid href attribute, but no link content has been found,” (Shown Below) which is an element that administrators of the webpage use to edit the page that is invisible to the public.

The library’s homepage meets the majority of WCAG’s regulations. When the tool was run, it provided a report describing 56 errors and 16 warnings. All of the errors were false positives except two. Both errors were associated with the WMS search box. The first error states that the search field should be labelled in some way that the information and user interface components are perceivable. The second error is that the search field does not provide a name to an accessibility API. WCAG’s principle 4 states “content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies” (Caldwell).
Google Analytics

Findings are based on statistics found on the library’s homepage from the fall semester (August 10, 2014 to December 12, 2014). It is noted that Google Analytics provides statistical data based on user traffic but does not determine if the information found is useful to users.

The top page views and average time spent on the page is listed below. Note that unique page views is more accurate statistic than page view, this is because page views count each time a page is refreshed as a page view.

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
<th>Unique Pageviews</th>
<th>Avg. Time on Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. /</td>
<td>296,947</td>
<td>188,654</td>
<td>00:04:30</td>
</tr>
<tr>
<td>2. /groupstudy/book/day.php</td>
<td>272,103</td>
<td>12,059</td>
<td>00:00:58</td>
</tr>
<tr>
<td>3. /groupstudy/spaces/availability.php</td>
<td>60,495</td>
<td>15,199</td>
<td>00:00:30</td>
</tr>
<tr>
<td>4. /groupstudy/spaces/</td>
<td>25,355</td>
<td>13,534</td>
<td>00:00:32</td>
</tr>
<tr>
<td>5. /groupstudy/spaces/confirm_booking.php</td>
<td>17,872</td>
<td>11,727</td>
<td>00:01:07</td>
</tr>
<tr>
<td>6. /computers/</td>
<td>15,798</td>
<td>1,900</td>
<td>00:02:07</td>
</tr>
<tr>
<td>7. /newmobile</td>
<td>14,478</td>
<td>11,069</td>
<td>00:01:33</td>
</tr>
<tr>
<td>8. /login/</td>
<td>14,110</td>
<td>11,037</td>
<td>00:02:03</td>
</tr>
<tr>
<td>9. /hours/</td>
<td>11,929</td>
<td>9,281</td>
<td>00:01:01</td>
</tr>
<tr>
<td>10. /groupstudy/book/view_entry.php</td>
<td>7,861</td>
<td>3,534</td>
<td>00:00:26</td>
</tr>
<tr>
<td>11. /oa/docs/courseres/</td>
<td>6,868</td>
<td>5,699</td>
<td>00:02:32</td>
</tr>
<tr>
<td>12. /newmobile/</td>
<td>5,361</td>
<td>3,209</td>
<td>00:01:06</td>
</tr>
<tr>
<td>13. /groupstudy/spaces/edit_entry.php</td>
<td>5,187</td>
<td>3,221</td>
<td>00:00:22</td>
</tr>
<tr>
<td>14. /newmobile/hours</td>
<td>4,113</td>
<td>3,685</td>
<td>00:01:46</td>
</tr>
<tr>
<td>15. /login</td>
<td>3,970</td>
<td>3,309</td>
<td>00:01:33</td>
</tr>
<tr>
<td>16. /groupstudy/spaces/modify_booking.php</td>
<td>3,570</td>
<td>2,131</td>
<td>00:00:41</td>
</tr>
<tr>
<td>17. /maps/libraryfloors</td>
<td>3,300</td>
<td>1,401</td>
<td>00:01:22</td>
</tr>
<tr>
<td>18. /directory</td>
<td>2,830</td>
<td>2,065</td>
<td>00:02:11</td>
</tr>
<tr>
<td>19. /textbooks</td>
<td>2,742</td>
<td>2,260</td>
<td>00:03:22</td>
</tr>
<tr>
<td>20. /research</td>
<td>2,642</td>
<td>1,928</td>
<td>00:01:17</td>
</tr>
<tr>
<td>21. /contact/</td>
<td>2,594</td>
<td>2,251</td>
<td>00:01:13</td>
</tr>
<tr>
<td>22. /groupstudy/book/edit_entry.php</td>
<td>2,483</td>
<td>1,234</td>
<td>00:00:18</td>
</tr>
<tr>
<td>23. /directory/departments</td>
<td>2,387</td>
<td>918</td>
<td>00:00:42</td>
</tr>
<tr>
<td>24. /borrow/requests</td>
<td>2,069</td>
<td>1,614</td>
<td>00:02:33</td>
</tr>
<tr>
<td>25. /groupstudy/spaces/public.php</td>
<td>1,977</td>
<td>1,595</td>
<td>00:00:42</td>
</tr>
</tbody>
</table>
Nine of the twenty five top viewed pages are associated with group study rooms. The group study page listed second leads to the old interface (Shown Below) which is being accessed from 49er Express and from users that have the page bookmarked.

The other top pages included the: desktop availability maps mobile site, my library account, hours, floor maps, directory, eTextbooks, contact information, and Interlibrary Loan.

**Tasks-Based**

Findings are grouped by the individual task along with a description of the success rate, ease of completion, errors, and participant’s comments.

**Task 1: Locate the library’s hours for January 6, 2015.**

The task was designed to determine if users could locate the library’s hours for a future date. All participants completed the task successfully. To complete this task, participants must demonstrate a successful search technique that results in locating future operating hours. This task requires the participants to complete multiple steps, first locating the library’s hours and then finding the hours for a specific date (January 6, 2015).

Several different approaches were taken to complete this task. Thirteen of the fourteen participants took the same approach. Nine of the thirteen participants immediately clicked “Today’s Hours: _________” in the upper right hand corner (Figure 1.1). The nine participants then hovered over January 6, 2015 (Figure 1.2) to view the hours of operation. Four of the thirteen participants first looked under the navigation for a term relating to hours before clicking “Today’s Hours: _________” and then hovering over the specified date. The four participants commented that they assumed it would be under “About” or “Services.” One participant commented that “Today’s Hours: _______” is misleading, it made the participant think that it was just for the current date not future dates.
The remaining participant began the task by searching “hours” in website search bar located in the upper right corner (Figure 1.3). The participant then clicked the first result (Figure 1.4) and was directed to the Library Hours page, then hovered over January 6, 2015 (Figure 1.2) to view the hours of operation.
Task 2: Reserve a room on the main floor that holds 8 people.

The task was designed to determine if users could go through the steps to reserve a group study room for 8 people on the main floor of the library. Eight of the fourteen participants exhibited how to reserve a group study room in the pre-test survey, therefore they were not asked to complete Task 2 once the test begun. Five of the six participants that were given this task completed it successfully. This task requires the participants to complete multiple steps, first to locate the “reserve a group study” page, then to apply the appropriate filters, and determine which rooms were available.
The nine participants that showed how to reserve a group study room in the pre-test survey took three different approaches. Six of the nine participants clicked “reserve a group study room” located under the “services tab” in the navigation (Figure 2.1). The participants then selected a date and time in the “Reserve Study Room” application. The participants stated that they refine by capacity, equipment, or floors if needed. The participants then clicked submit and view/select the available rooms listed below. One of the nine participants clicked “Rooms Available” located in the “Group Study Rooms” application on the homepage (Figure 2.2). The participant stated that they look through the available rooms and select whichever meets their needs. If no rooms are available, the participant changes the date and time. One out the nine participants clicks “Reserve a Group Study Room” located in the “Quick Links” on the homepage (Figure 2.3). The participant stated that they refine by capacity, equipment, or floors if needed. The participant then clicked submit and view/select the available rooms listed below. The remaining participant uses 49er Express to reserve group study rooms. The participant clicks the “Library and Research” tab and then clicks “Group Study Rooms” located in “Using the Library” widget (Figure 2.4). The participant was then directed to the old group study interface (Figure 2.5). The participant then clicks on whichever room desired.
The six participants that were asked to complete task 2 took several different approaches to complete the task. Three out of the six participants clicked Rooms Available” located in the “Group Study Rooms” application on the homepage (Figure 2.2). The participants then refined by main floor and used the capacity dropdown to select 8. The participants then clicked “submit” and selected one of the available rooms listed. The participants then selected “My Group” and then entered their NinerNET credentials. One out of the six participants clicked “reserve a group study room” located under the “services tab” in the navigation (Figure 2.1). The participant then selected a date and time in the “Reserve Study Room” application. The participants then selected a date and time in the “Reserve Study Room” application and then clicked “search.” The participants then used the “Capacity” dropdown to select 8 and selected the “main floor” then clicked “submit.” The participants then selected one of the available rooms listed and then clicked “submit.” The participant then chose “My Group” and then entered their NinerNET credentials. The remaining participant was unsuccessful. The participant searched “reserve a
room” in the upper right corner search bar and clicked the first result (Figure 2.5) which led to the mobile site and did not have any visible content (Figure 2.6). The participant went back to the search results and clicked the second result which resembled the first page he viewed. The participant then selected the third result and was redirected to the homepage. The participant commented that he would call the information desk for help.

Website Search

reserve a room site:library.uncc.edu

About 405 results (0.10 seconds)

Reserve A Study Room

Reserve Study Room

J. Murrey Atkins Library | UNC Charlotte
library.uncc.edu/
Atkins Library will again host the EXAM THERAPY break room for students during … Quick Links people icon Reserve A Study Room book icon Interlibrary Loan

Figure 2.5

Figure 2.6
Task 3: Locate the contact information for the mathematics librarian.
The task was designed to determine if users could locate subject librarians contact information. Four of the fourteen participants commented that they did not know Atkins Library had subject librarians. All of the participants completed the task successfully. This task requires the participants to complete multiple steps, first to locate the subject librarians and then to locate a specific librarians contact information by subject.

Several different methods were used to complete Task 3. Five of fourteen participants started the task by clicking “Contact Us” in the upper right corner. The participants then clicked the “Directory” widget (Figure 3.1). Next, the participants clicked “Subject Librarians” found in the left side navigation (Figure 3.2) and then clicked “Mathematics” from the “Browse Librarians by Subject” dropdown (Figure 3.3) to locate the contact information. Four out of fourteen participants clicked “Subject Librarians” located under the “Research & Course Help” navigation menu item (Figure 3.4). Three of the four participants clicked “Mathematics” from the “Browse Librarians by Subject” dropdown to locate the contact information. One of the four participants hovered over the options in the rotating banner (Figure 3.5) until they located the mathematics librarian’s information.

Contact Us

Figure 3.1
Figure 3.2

I'm here to help!
Subject librarians provide research support to students and faculty to help them achieve their educational and academic goals. Subject librarians assist students at all levels with curriculum and research assignments. They are available in-person, online, and by phone for consultation on how to find and use the best information for research projects and academic assignments. Subject librarians are also available to assist faculty members by providing instructional sessions for their courses, being available in Moodle, and by the creation of course-specific resource web pages. Subject librarians provide assistance to faculty members in their own research endeavors and also serve as a link to collection development for academic programs.

Browse Librarians by Subjects

Figure 3.3
Two of the fourteen participants clicked “Directory” located in the “About” navigation menu item. (Figure 3.2) and then clicked “Mathematics” from the “Browse Librarians by Subject” dropdown (Figure 3.3) to locate the contact information. Three of the fourteen participants used the search bar in the upper right corner and searched “mathematics librarian” (Figure 3.6). Two of the three participants click the first result, which redirected them to the subject librarian page. The participants then clicked “Mathematics” from the “Browse Librarians by Subject” dropdown (Figure 3.3) to locate the contact information. One of the three participants selected the second
result which was titled “Click to Call.” The participant then clicked “Call my librarian (Figure
3.7) and then clicked mathematics to find the contact information (Figure 3.8).

**Website Search**

```
mathematics librarian site:library.uncc.edu
```

About 119 results (0.25 seconds)

**Subject Librarians**

library.uncc.edu/research

Apr 28, 2011 ... I am the subject librarian for History, Anthropology, Political Science, ... and library instruction for the department of Mathematics and Statistics.

**Click to Call**

library.uncc.edu/mobile/apple/

Call My Librarian; Available Computers; Hours; Floor Guide; Dictionary/Thesaurus; Map to Library; Full Site. Accounting; Actuarial Mathematics; Aerospace ...

**Math - Charlotte Teacher Institute 2013 - Research Guides at UNC ...**

guides.library.uncc.edu/content.php?cid=461001&sid=3773512

Task 4: Review your library account’s checkouts, holds, and charges.
The task was designed to determine if users could locate their library account information. Twelve out of the fourteen participants completed the task successfully. During this task, seven out of the twelve successful participants expressed confusion. This task requires the participants to complete multiple steps before viewing their account’s information.

Twelve out of the fourteen participants began the search process the same. The participants clicked “My Library Account” in the upper right corner on the homepage (Figure 4.1) and then clicked the orange button titled “My Library Account” (Figure 4.2). The participants then entered their NinerNET credentials. The participants were directed to a WMS search page (Figure 4.3) which led seven of the twelve participants to make confused comments. Some of the participants questioned what the page was while others thought they were in the wrong place.

Two out the seven confused participants clicked “Your Library Account” found in the “UNC Charlotte Libraries” navigation menu item, the participants were redirected the my library account homepage and they re-clicked the orange “My Library Account” button which took them back to the WMS search page. The twelve participants all eventually clicked “My Library Account” in the upper right corner (Figure 4.3) located on the WMS search page and found their library account information.
The two unsuccessful began the task the same way as the twelve successful participants. Both participants clicked “My Library Account” located on the homepages upper right corner. Then the two participants clicked the orange “My Library Account” button and entered their NinerNET credentials. One of the two participants received an error message after entering their NinerNET credentials. The participant stated they would report the error. Due to the error, the participant could not complete the task. The remaining participant reached the WMS search page and commented “I don’t know what this is.” The participant went back through the steps several times and kept ending back up the WMS search page. The participant commented that they would call the information desk for help.

Task 5: You need assistance with a research project, how can you request a consultation with a librarian?
The task was designed to determine if users could discover how to schedule a consultation with a librarian. All participants completed the task successfully. To complete the task, participants must demonstrate a success search technique.

Several different methods were taken to complete Task 5. Ten of fourteen participants begin their technique the same. The participants first, clicked “Subject Librarians” located under the navigation menu item, “Research & Course Help” (Figure 5.1). Eight of the ten participants clicked the “Browse Librarians by Subjects” dropdown to select a subject that corresponded with their field of study (Figure 5.2). The participants commented that they would email the designated librarian to schedule an appointment. Two out of ten participants clicked the “By Appointment” widget in the right margin (Figure 5.3). Both participants stated they would fill out the form to the best of their knowledge.
Figure 5.2
Two of the fourteen participants used the search bar in the upper right corner. One participant searched “assistance” and clicked the first result, “subject librarians” (Figure 5.4). The participant then clicked the “By Appointment” button in the right margin (Figure 5.3) and stated they would fill it out. The other participant searched “Librarian” and clicked the first result, “Subject Librarian.” The participant then clicked the “Browse Librarians by Subjects” dropdown to select a subject that corresponded with their field of study. The participant commented that they would email the designated librarian to schedule an appointment. One of the fourteen participants clicked directory located in the “About” navigation menu item (Figure 5.5) and then clicked “Subject Librarians” located in the left margin navigation (Figure 5.6). The participant then clicked the “Browse Librarians by Subjects” dropdown to select a subject that corresponded with their field of study. The participant commented that they would email the designated librarian to schedule an appointment. The remaining participant clicked “Live Chat” navigation menu item and stated they would ask who to contact to schedule an appointment.
Figure 5.4

Figure 5.5
Task 6: Find the E-Textbook for Dr. Meaghan Rand’s UWRT 1101 course, what is the title (What the best college students do)?

This task was designed to determine if users could locate a specific eTextbook offered by the library. Two of the fourteen participants were successful on their first attempt. Three out of the fourteen participants used the “Does the Library have your textbook?” which is the eTextbook interface for students. Ten of the fourteen participants were given the title of the eTextbook to assist their search and eight of the ten participants used the WMS search bar to locate the item while the other two used the Faculty eTextbook Database. The ten participants did not know how search using a professor’s name or course number. One participant was unsuccessful in locating the item.

Several different methods were taken to complete Task 6. Three out of the fourteen participants used the eTextbook database for students and took two different approaches. Two of the three participants scrolled down and clicked “search” in the “Does the Library have your Textbook” (Figure 6.1) section on the homepage. The other participant uses the search bar located in the upper right corner to search “e-textbook” and clicks the first result, “E-textbooks at Atkins Library” (Figure 6.2). The three participants then use the drop down to select Professor Rand-UWRT 1101(Figure 6.3), then click the result to view the eTextbook.
Four of the fourteen participants began their search by using the WMS search bar. The searches included professor’s name (Meaghan Rand), course number (UWRT 1101), professor name, and course number (Rand UWRT 1101). All three of the searches were unsuccessful, several participants refined by eBook and attempted to refine by author. The four participants were then given the title of the book, *What the Best College Students Do* and changed their search to the title. The four participants clicked the first result (*Figure 6.4*) and then clicked “View eBook” and were redirected to 
http://www.degruyter.com/viewbooktoc/product/184426;jsessionid=108DC44DB5BC15AD8199F6490A4FD404  the view the eBook.
Five of the fourteen participants began their method by clicking “Course Reserves” under the navigation menu item “Research and Course Help” and then entered their NinerNET credentials. Three of the participants typed in the course number and two participants typed the professor’s name in the search box (Figure 6.5) and all five participants were given zero results. One of the five participants refined their search to course number and was given three results, but none were for the specified professor. The participant thought it must be one of those and was unsuccessful in completing the task. The other four participants were given the title of the textbook. Three participants used the WMS search bar to search by title to find the eTextbook. One participant commented that they found the eTextbook but without the title they wouldn’t be able to find it because they could not find how to search by professor or course number. The remaining participant clicked the “Faculty eTextbook Database” and typed the title in the “Title or Subject” search bar (Figure 6.6) and were given one result (Figure 6.7).

Two of the fourteen participants clicked the “Faculty eTextbook Database” located on the homepage. Both participants searched the course number in the “Title or Subject” search bar and were given zero results. Both participants were given the title of the eTextbook and then searched it and were given one result (Figure 6.7).
Figure 6.5

Figure 6.6

Figure 6.7
**Task 7: Locate the Public Policy research guide.**

The task was designed to determine if users could locate subject specific research guides. Thirteen of fourteen participants completed the task successfully. During this task, numerous participants asked the facilitator questions about research guides such as: What is a research guide? Is it a book? Is it an article? And is it a type of policy? The confusion of what a research guide is led three participants first search technique to be unsuccessful and led one participant to not complete the task.

Several different methods were taken to complete Task 7. Nine of the fourteen participants began their search by clicking “Research Guides” located in the navigation menu item, “Research & Course Help” (*Figure 7.1*). Seven of the nine participants used the “Jump To:” drop down and clicked “Public Policy.” Two of the nine participants scrolled through the research guides until they reached public policy, which were listed alphabetically by subject. One of the fourteen participants searched “Public Policy research guide” in the search bar located in the upper right corner of the homepage. The participant clicked the first result which was “POLS 2120: Introduction to Public Policy” research guide (*Figure 7.2*).
Three of the fourteen participants began their search by typing “public policy research guide” into the WMS search bar on the homepage (Figure 7.3). The search developed 108,065 results, which led two of the three participants to look elsewhere and the remaining participant to give up. The two participants both returned to the homepage and typed “research guides” in the search bar located in the upper right corner. Both participants clicked the first result, “Research Guides at UNC Charlotte: Home.” The two participants then clicked “public policy” from the left margin widget titled “Subjects & Librarians” (Figure 7.4). The remaining participant began their search by clicking “Policies” found in the navigation bar item “About.” The participant commented that this is the library’s policies and not a research guide. The participant then clicked “Research Guides” located in the navigation menu item, “Research & Course Help” (Figure 7.1) and then clicked “Public Policy” in the “Jump To:” drop down.
Figure 7.3
### Subjects & Librarians

- Africana Studies
- African American Studies
- Anthropology
- Architecture
- Art
- Art Education
- Art History
- Bioinformatics
- Biology
- Business
- Chemistry
- Child & Family Development
- Child & Family Studies
- Children's Literature & Childhood Studies
- Civil Engineering
- Communication Studies
- Computer Science
- Counseling
- Criminal Justice
- Curriculum & Instruction
- Curriculum & Supervision
- Dance
- Dance Education (K-12)
- Distance Education
- Earth Science
- Educational Leadership
- Electrical Engineering
- Elementary Education
- Engineering
- English
- First Year Writing
- Geography
- Geology
- German Education (K-12)
- Gerontology
- Health Services Research
- History
- History Education

### Guides

**Show: Popular | Recent | All**

#### The most popular guides

1. **Database List A - Z**  
   by Suzanne Penninger - Last Updated Dec, 18, 2014  
   114,438 views this year

2. **Citation And Style Guides**  
   by Pamela Mason - Last Updated Nov 24, 2014  
   9,558 views this year

3. **Nursing Databases and Research**  
   by Meredith Oran - Last Updated Nov 25, 2014  
   7,323 views this year

4. **ENGRETGR 1201**  
   by Jeff McAdams - Last Updated Oct 8, 2014  
   5,853 views this year

5. **MPAD 6125: Quantitative Research Methods in Public Administration**  
   by Amanda Binder - Last Updated Nov 24, 2014  
   5,743 views this year

6. **Business Databases**  
   by Nicole Scoor - Last Updated Jul 29, 2014  
   3,705 views this year

7. **ENGL 1102/1103**  
   by Stephanie Osa - Last Updated Mar 24, 2014  
   2,021 views this year

8. **EndNote 101**  
   by Beth Scarborough - Last Updated Nov 19, 2014  
   2,547 views this year

9. **Liberal Studies: History**  
   by Amanda Binder - Last Updated Oct 1, 2014  
   2,493 views this year

10. **Education Related Tutorials**  
    by Judy Walker - Last Updated Nov 24, 2014  
    2,479 views this year

---

**Figure 7.4**

[http://guides.library.uncc.edu/browse.php?o=s#28955](http://guides.library.uncc.edu/browse.php?o=s#28955)

Task 8: Locate the library’s information about printing, scanning, and copying.
The task was designed to determine if users could locate information about printing, copying, and scanning in the library. All of the participants completed the task successfully, but twelve of the fourteen participants searched for the information in the navigation menu before successfully completing Task 8. Five participants commented that they assumed the printing, scanning, and copying information would be located under the “services” navigation menu item.

Two search methods were taken to successfully complete the task. Twelve of the fourteen participants used the search bar located in the upper right corner of the homepage. Nine of the twelve participants searched “printing” and the remaining three participants searched “printing, copying, and scanning.” The twelve participants clicked the first result, “Print/Copy/Scan” (Figure 8.1) to successfully complete the task. Two of the fourteen participants used Google to search “UNCC library printing” and clicked the first result to successfully complete the task (Figure 8.2).

![Figure 8.1](image1)

![Figure 8.2](image2)
Task 9: What open invite study sessions are occurring today?

The task was designed to determine if users could locate the open invite study sessions occurring that day. All of the participants completed the task successfully. Four participants expressed confusion due to different terminology being used to represent the feature, the terms include “study connect rooms,” “Open Invite,” and “Reserved Public Group Study Rooms.”

Several different methods were used to complete Task 9. Seven of the fourteen participants clicked “Study Connect Rooms Open Invite” located in the “Group Study Rooms” application (Figure 9.1) on the homepage, which directed the participants to a listing of the open invite study sessions occurring that day. Five of the fourteen participants clicked “Reserve Group Study Room” located in the navigation menu item “Services.” The participants then clicked “StudyConnect rooms” located in the “What’s Happening Now” block (Figure 9.2), which directed the participants to a listing of the open invite study sessions occurring that day (Figure 9.3). Two of the fourteen participants used the search box in the upper right corner and searched “Open invite.” The first result redirected to the homepage which led to the participants using the back button and clicking the second result, “Group Study Rooms Availability 2014.” The participants then clicked “StudyConnect Rooms Open Invite” (Figure 9.4) to view the sessions occurring that day.
Figure 9.1

Figure 9.2
Task 10: You’re interested in applying for a job in the library, who would you contact?
The task was designed to reveal if users could locate and determine who to contact about jobs in the library. Technically, none of the fourteen participants were successful in locating a specific person to contact. Thirteen of the fourteen participants located a phone number associated with the library and said they would call to inquire about who to contact. Three participants commented that if they were looking for a job on campus, they would visit www.jobs.uncc.edu.

Several different methods were taken to complete Task 10. Six of the fourteen participants began the task by clicking “Jobs” located in the navigation menu item, “About” (Figure 10.1). The
participants then clicked the only job listed, “Archivist for Collection Management” (*Figure 10.2*) and then clicked the job posting. Five of the six participants then clicked “Contact Us” in the upper right corner and the commented that would call the circulation desk which is listed as phone option (*Figure 10.3*). The remaining participant clicked [https://jobs.uncc.edu/](https://jobs.uncc.edu/) listed in the job posting and commented that they would email the Human Resources Department.

![Figure 10.1](image1.png)

![Figure 10.2](image2.png)
Four of the fourteen participants clicked “Contact Us” in the upper right corner of the homepage and the commented that would call the circulation desk which is listed as phone option. Two of the fourteen participants clicked “Jobs” located in the footer (Figure 10.4) and commented that would call the Human Resources Department. One of the fourteen participants looked through the homepage and said they would call the number listed in the “Contact Us” box at the bottom of the homepage (Figure 10.5).

The one participant that did not locate any form of contact information began their method by clicking “Contact Us” in the upper right corner. After, the participant looked at the options they clicked “Jobs” located in the navigation menu item “About.” The participant then clicked the only job listed, “Archivist for Collection Management” and then clicked the job posting, but did not locate any contact information. The participant then clicks “Directory” located under the navigation menu item “About” and then clicks “Employees by Department” located in the left margin navigation menu. The participant comments they would want to contact the “head librarian,” but does not know how to narrow the search any farther.
Task 11: How many laptops are available for checkout?  
The task was designed to determine if users could locate how many laptops are available for checkout. Twelve of the fourteen participants completed the task successfully. The two unsuccessful participants used the search bar to try to locate the laptop availability.  

The twelve successful participants used the same method. The participants returned to library homepage and then read off the numeral located on the “Laptop” box (Figure 11.1). The two unsuccessful participants began their method by using the search bar in the upper right corner. One participant searched “laptop checkout” and clicks the second result “Laptop Lending,” (Figure 11.2) which provides information about checking out a laptop but does not provide the number of available laptops for checkout (Figure 11.3). The participant goes back to the results page and selects the first result, “Laptop Policy,” (Figure 11.4) which gives the same information as “Laptop Lending” just in a different format. The participant then changes the search to laptops and finds the same results. The remaining participant searched “laptop” after looking through the navigation menu. The participant clicks the third result, “Laptop Lending” and does not find the number of available laptops.
Figure 11.1

**Website Search**

```
laptop checkout site:library.uncc.edu
```

About 9 results (0.21 seconds)

**Laptop Policy**

library.uncc.edu/c/computingprinting/laptop

May 2, 2011 ... Circulation Loan Period: Laptops circulate to currently enrolled UNC Charlotte students; UNC Charlotte ID must be presented for checkout ...

**Laptop Lending | J. Murrey Atkins Library | UNC Charlotte**

library.uncc.edu/node/140

May 3, 2011 ... Laptops circulate to university affiliated patrons only -- students, faculty, staff. UNC Charlotte ID must be presented for checkout.

Laptops

Figure 11.2
Laptop Lending

Laptop Circulation Policy:

Circulation Loan Period:
- Laptops circulate to university affiliated patrons only — students, faculty, staff
- UNC Charlotte ID must be presented for checkout
- Laptops circulate for a twenty-four hour loan period with no renewals. There is a four hour wait before next checkout for the same patron

Circulation Fines:
- Laptop fines are $5.00 per hour
- Additional $10.00 fine if kept another night beyond the due date (i.e. a $10 charge will be added to the hourly fines accrued)

Circulation Replacement Costs:
- Patrons are responsible for replacing missing or damaged parts or the entire cost if lost. This policy currently applies to all library circulated material. Each item required to use the laptop will be priced separately.
- Current Replacement Costs (includes S&H and tax) for Laptops are shown on the laptop screen when the computer is turned on. An additional $10 processing fee will be added to all replacement costs.

Technical Specifications:
- Laptops are wireless capable
- Additional software includes Microsoft suite:
  - Access
  - Excel
  - FrontPage
  - PowerPoint
  - Publisher
  - Word
- Patron work can be saved to the hard drive
- Laptops will be protected with DeepFreeze which will restore the original image after the computer is restarted, thereby ensuring a clean image for each patron and minimal maintenance by Circulation staff. Drive T will, however, not be deleted upon reboot, so saved patron files will not be automatically deleted.
- Each laptop has a media base with a CD/DVD drive for saving files.
Conclusion

This study uncovered that the old group study application was still active, that the old mobile site was still active, that the Mac Availability feature was broken, and that the audience is unaware of many features the library website offers. Even though the study did not uncover any critical usability issues on the homepage, it did reveal ways to make the homepage more effective, efficient, engaging, error tolerant, and easy to learn. The study supports that Atkins should redesign the homepage as soon as we can migrate to Drupal 7. This recommendation comes with
the understanding that the future design of the homepage might alter due to the features offered in Drupal 7.

The Usability Assistant communicated findings and recommendations with the development team during the analysis of the study. The development team quickly resolved issues that needed immediate attention. While this report was being compiled, the old reserve a group study application found in 49er Express was redirected to the current group study application. In addition, any public user that attempt to use the old reserve a group study room application will be redirected to the current application. The old group study application is available behind the scenes and will remain accessible as the library transitions its services. The development team also fixed the Mac laptop availability located on the homepage, turned off the old mobile site, and resolved the accessibility errors.

The usability study did not have direct statistics for the usage of the desktop, laptop, and study room availability but has qualitative data from pre-surveys and post-surveys given in the focus group/paper prototype session and the tasks-based tests to support that these features are being utilized by users on a regular basis. Currently there is no way to track the views of the desktop and laptop availability because the users do not have to click anything to view the numeric. Researchers cannot only rely on clicks in analysis but must also examine the qualitative data.

Usability testing should be conducted on the library’s website on a regular basis to ensure functionality, efficiency, and desirability. Future studies are planned to continue analyzing the website.

Works Cited


