

Assignment 3: Evaluation Report

[REDACTED]

Chris Hugelmann

[REDACTED]

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1. Executive Summary:

This report provides actionable recommendations on how to improve the website of the University of North Carolina at Chapel Hill School of Information and Library Science (UNC iSchool) based on the findings of a usability assessment.

The user group for the test plan was prospective graduate students. Our participants were given four tasks to complete which were designed to emulate a real world situation of utilizing the website, as each task would build off of the previous one. Screen capture software and audio recordings provided our team with data to evaluate the participant's interaction with the site in a qualitative way. A background questionnaire administered before the assessment revealed that all of the 5 participants identified as female, between the ages of 18-34 and spent a minimum of 5 hours per day using a computer. After the tasks were completed, two post-assessment instruments were administered - the System Usability Scale and Product Reaction Cards, which allowed for quantitative data collection.

Our findings revealed that of the 20 assigned tasks (5 participants with 4 tasks each), 14 were completed. However, despite this success rate, participants expressed frustration and annoyance with elements of their interaction with the site. The main issues participants encountered were issues with information overload, navigation problems and redirection to other faculty and department webpages.

In order to remedy the problems uncovered, we recommend an overhaul of the aesthetic and information architecture of the site. Specific recommendations include:

- Merging the top and left navigation menus to alleviate confusion
- Reducing page length and text quantity for easier reading experience
- Improving navigational consistency to eliminate global and local navigation usage
- Making the search function more prominent on the webpage

Proposed next steps would be to run this same evaluation on a larger group of participants with more diverse backgrounds to be more representative. Additionally, it is recommended that evaluations be conducted for other core user groups before any changes are implemented, as the site is utilized by many distinct user types.

2. Introduction:

Our evaluation of UNC Chapel Hill's School of Information and Library Science was conducted in order to diagnose usability issues and recommend actionable solutions. The website is a resource for current and prospective students as well as faculty and staff members. It operates as an informational site and provides details about program options, admission details, course timetables and faculty contact information. Our user group was prospective graduate students. The objectives of the evaluations were to determine how effectively a set of predetermined tasks could be completed. We designed our tasks to mimic a potential continuous real-world use session, with each task building off of the previous one. After analyzing our findings, this report will make recommendations for potential improvement to the site.

3. Methodology:

Participants were asked to sit at our testing station and were advised they would be participating in a usability test for the University of North Carolina at Chapel Hill School of Information and Library Science website. The participants all agreed to have their screen and voice recorded. They were also advised to verbalize their thought process to help inform qualitative analysis that would be conducted later, to help create a fuller picture than simply screen capture alone.

Tasks:

We outlined three key tasks for the participants to complete:

1. Have the participant locate all relevant program options
2. Have the participant locate all relevant application and admission requirements for the MSIS program
3. Have the participant locate information about gaining practical experience during their degree
4. Have the participant locate an appropriate iSchool contact to follow up with for further admission questions.

The test itself:

The team utilized room [REDACTED] in the [REDACTED] Building of the University of [REDACTED] to conduct the usability test. The room was chosen as it offered ample space and allowed for a circular space to circulate participants easily between groups. We used a laptop running Windows 10 as an operating system, equipped with a Blue Snowball microphone with a pop filter attached for noise reduction. Open Broadcaster Software was used to locally record the screen of the laptop and to capture the voice of the participant. 5 participants went through the tasks presented in the usability test. Each of these sessions were targeted for 30 minutes. Data was collected by two observers, one following the actions on screen and one following the actions of the participants. Roles were distributed within the group as follows: a notetaker, an observer, a moderator, and a technician. These roles between the team were swapped as needed between participant sessions.

Debriefing/closing:

The participants were thanked for their time and participation in the usability test. They were then asked to complete two post-sessions documents: a questionnaire based on the System Usability Scale (see Appendix B) and Product Reaction Cards (see Appendix C). The participants were asked if they have any questions following the usability test and were assured their feedback would help improve the website for future users.

Participants:

Participant 1

25-34 year old female Master's student. Visits her academic department's website roughly once a day. Spends roughly 6 hours a day on a computer, primarily a Windows user.

Participant 2

18-24 year old female Master's student. Visits her academic department's website roughly once a month. Spends roughly 12 hours a day on a computer, primarily a Mac user.

Participant 3

25-34 year old female Master's student who also works part time. Visits her academic department's website roughly once a week. Spends roughly 5 hours a day on a computer, primarily a Windows user.

Participant 4

18-24 year old female Master's student. Visits her academic department's website roughly once a week. Spends roughly 8 hours a day on a computer, primarily a Mac user.

Participant 5

18-24 year old female Master's student. Visits her academic department's website roughly once a week. Spends roughly 5 hours a day on a computer, primarily a Windows user.

Our participants were all Master's students with considerable daily computer use. The least amount of time any of our participants spent a day on a computer was 5 hours. All of our participants fit within two age ranges, 18-24 and 25-34. Our participants were roughly evenly split between Mac and Windows users, 2 and 3 respectively.

4. Performance on Tasks:

Table 1: Task Completion Outline

	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
Task 1	Partially Successful Located and correctly identified MSLS and MSIS, but completely missed Dual Degree option 40 seconds	Successful Located and corrected identified MSLS, MSLS, and Dual Degree programs 1:10 min	Partially Successful Located and correctly identified MSLS and MSIS, but completely missed Dual Degree option 2:30 min	Successful Located and corrected identified MSLS, MSLS, and Dual Degree programs 2:00 min	Successful Located and corrected identified MSLS, MSLS, and Dual Degree programs 3:30 min
Task 2	Successful Located and correctly identified admission requirements within the <i>Graduate Admission Page</i> . 1 min	Successful Located and correctly identified admission requirements within the <i>Graduate Admission Page</i> 3:30 min	Successful Located and correctly identified admission requirements within the <i>Graduate Admission Page</i> 2:45 min	Unsuccessful Was unable to find the <i>Graduate Admissions Page</i> 3:15 min	Successful Located and correctly identified admission requirements within the <i>Graduate Admission Page</i> 5:30 min
Task 3	Successful Successfully located <i>Field Experience Page</i> 1 min	Successful Successfully located <i>Field Experience Page</i> 45 seconds	Successful Successfully located <i>Field Experience Page</i> 4:00 min	Unsuccessful Was unable to locate the <i>Field Experience Page</i> 2:50 min	Successful Successfully located <i>Field Experience Page</i> 4:00 min
Task 4	Successful Located and successfully identified Lara Bailey as an appropriate contact 1:30 min	Partially Successful Unable to locate specific contact information so settled for general school email. 2:00 min	Successful Located and successfully identified Lara Bailey as an appropriate contact 30 seconds	Partially Successful Unable to locate specific contact information so settled for general school email. 2:15 min	Successful Located and successfully identified Lara Bailey as an appropriate contact 4:50 min
Total Time	4:10 min	7:30 min	13:45 min	10:20 min	17:50 min

Table 2: Average Task and Total Times

Task 1	~ 2:00 min
Task 2	~ 3:10 min
Task 3	~ 2:30 min
Task 4	~ 2:10 min
Average Total Time	~ 10:45 min

Table 3: Task Completion Summary

Task	Participant Completion Fraction
Task 1	3/5
Task 2	4/5
Task 3	4/5
Task 4	3/5
Total Tasks	14/20

Task 1 Performance:

As mentioned, for our first task we asked participants to locate all relevant program options. Specifically, we were testing to see if participants were able to navigate the website to correctly identify the MSLS, MSIS, and Dual Degree program options. Our usability test determined that 3 out of 5 participants were able to successfully complete this task and identify all three programs. Interestingly, of the 2 participants that did not successfully complete this task both failed to identify the Dual Degree program as a relevant program. Furthermore, of the 3 that successfully identified all relevant programs, all 3 of them experienced some difficulty identifying the Dual Degree program option.

The average time it took to complete this task was 2:00 minutes, with the fastest time being 40 seconds and the slowest being 3:30 minutes. There was not a significant relation between how long a participant took to perform the task and the task success rate. 4 out of 5 participants began this task with the same step (selecting Programs menu option). All 5 participants utilized the left navigation menu during at least one point during the tasks, with 4 out of 5 using this navigation bar as their common method of navigation.

While completing this task, 4 out of 5 participants appeared to experience some confusion or questioning. Some were able to recover while others did not. All 5 participants were able to correctly identify the MSLS and MSIS programs, but experienced trouble identifying the Dual Degree option. Of the 3 participants that completed the tasks all 3 only caught the Dual Degree program on their second pass through the website.

Task 2 Performance:

As mentioned, for our second task we asked participants to locate all relevant application and admission requirements for the MSIS program. Specifically, we were testing to see if participants were able to navigate the website to locate the Graduate Program Admissions page and correctly identify the minimum GRE score, competitive GPA, 3 letters of reference, a statement of purpose, resumé, and transcripts as admission requirements. Our usability test determined that 4 out of 5 participants were able to successfully complete this task and identify all admission requirements. The average time it took to complete this task was 3:10 minutes, with the fastest time being 1:00 minute and the slowest being 5:30 minutes. There was no relation between time and success rate.

Although, most participants were able to complete the task, many of the participants experienced difficulties. There did not appear to be a common issue that repeatedly came up during this task, rather each individual ran into their own problems. Results were varied; some participants had an easy time accomplishing this task, such as participant #1 who completed the task within a minute. While others initially had trouble, but eventually found the correct page after some missteps. At one point, participant #2 verbally expressed frustration and ended up using the search bar to complete the task after multiple failed attempts to manually navigate the website. One participant was not able to find this information at all. 4 out of 5 participants took the same approach to this task through using the left navigation menu.

Task 3 Performance:

As mentioned, for our third task we asked participants to locate information about gaining practical experience during their degree. Specifically, we were testing to see if participants were able to navigate the website to locate the Field Experience page. Our usability test determined that 4 out of 5 participants were able to successfully complete this task and find out about this program.

The average time it took to complete this task was 2:30 minutes, with the fastest time being 45 seconds and the slowest being 4:00 minutes. There was no relation between how long a participant took to perform the task and the task success rate. Out of the 4 successful participants, 3 arrived at the Field Experience page by taking the same path (left navigation menu to MSIS page then Field Experience link at bottom page), while the other successful participant took an alternate route through the Careers sections using the top navigation menu. The participant who was unsuccessful tried to locate this information through the financial information section which was a dead end. In general, the 4 participants that successfully completed the tasks did so with ease.

Task 4 Performance:

As mentioned, for our fourth task we asked participants to locate an appropriate contact to follow up with for further admission questions. Specifically, we were testing to see if participants were able to navigate the website to correctly locate the Graduate Student Coordinator Lara Bailey from Student Services. Our usability test determined that 3 out of 5 participants were able to successfully complete this task and locate Lara's contact information. The 3 participants who successfully completed the task all took the same path (through the People section in the top navigation bar). The remaining 2 participants both tried to use the left navigation bar to complete the task and ended up settling for generic contact information. Participants that tried to use the left navigation bar to complete this task voiced their confusion and had difficulty accomplishing the objective. 3 participants started with the left navigation bar and only 1 was able to re-group and complete the task successfully.

The average time it took to complete this task was 2:10 minutes, with the fastest time being 30 seconds and the slowest being 4:50 minutes. Time and success rate did not appear to have any relation.

Performance Summary:

Overall, 14 out of 20 tasks were successfully completed, which means more likely than not participants were able to achieve their objective. However, many successfully completed tasks were completed with varying levels of difficulty. Some common themes emerged from task performance, including participants' tendency to heavily rely on the left navigation menu for website navigation and as a result, problems that arose typically stemmed from this bar. We also observed that the method the participants used to operate the computer varied, with some using the mouse predominantly while other choosing to use the keypad. Additionally, no participant took the time to read all paragraph fully, rather everyone skimmed the webpage for important information.

5. Participants' Impressions:

SUS Scores:

Table 4: Participants Individual SUS Scores

Participant	Score
1	72.5
2	35
3	82.5
4	60
5	52.5

Every participant was asked to fill out the System Usability scale at the completion of the test. We translated these into SUS scores represented in Table 4 above. 68 is generally considered the average usability score for a website. Only 2 out of 5 participants ranked this website above this benchmark while the remaining 3 ranked the website below it. In particular, participant #2 ranked the website extremely low even with having successfully complete 3 out of the 4 tasks.

Product Reactions:

Upon the completion of the usability test, we had participants fill out a product reaction card, which involves participants selecting adjectives to describe the website. The highest selected adjectives included comprehensive (3/5), dull (3/5), time-consuming (3/5), impersonal (3/5). Other adjectives selected multiple times included boring (2/5), busy (2/5), rigid (2/5), and sterile (2/5). From this brief analysis, it is clear that product reactions were more negative than positive. Throughout the usability test, many participants verbally expressed that there was a significant amount of text and information on each page which is highlighted with the comprehensive and time-consuming adjective selections.

We also observed our participants posture and body language reactions to using website. 4 out of 5 of participants were observed as being hunched over the computer screen while completing the assigned tasks. We also tracked the participants eye and head movements during the test, which produced varied results. Participant #1 for example, primarily kept her focus towards the left side of the page, while participants #2 and #4 had a lot of head movement across the screen. Other visible reactions we observed included frowning (participants #2 and #3), eye squinting (participant #3), and clenched fists (participant #2).

6. Key Usability Findings & Recommendations:

Throughout the usability test described above, there were several findings that are deemed as important to the usability of the University of North Carolina at Chapel Hill School of Information and Library Science website with regards to the tasks listed earlier. Many of these were common throughout the multiple participants that participated and proved to be substantial in regards to task completion. This section will highlight the key findings the team gathered during testing through the review of notes and video recordings, along with recommendations to implement changes.

- a. Participants utilized both the top global navigation bar as well as the left local navigation bar. While the top global navigation bar is static, the left local navigation bar would typically change based on the page the participant was currently on. Sometimes, this led to the participant missing information that was pertinent to the tasks at hand.
 - o The team's recommendation is to overhaul the navigation within the UNC iSchool website. Making each top navigation category more robust through the inclusion of the sub-categories in the left navigation could make the flow of navigation much easier and intuitive. Once implemented, it could be as simple as hovering over top navigation categories to allow the sub-categories to be revealed. Participant #3 noted that even subtle changes, such as having Admissions under each of the Programs options, would have been beneficial to their understanding and aided their task completion.
- b. Some participants were overwhelmed with the amount of information that was presented on some of the pages on the UNC iSchool website. This led to a case of information overload, as some participants simply skimmed pages and did not fully read the paragraphs that were presented to them.
 - o Limiting the amount of text per page would be beneficial, as it would allow users to skim and find the appropriate information much more quickly. Highlighting categories and links to resources, and limiting large blocks of explanatory information to specific pages (such as the Master's of Science in Library Science page). Participant #4 indicated that pages were cluttered with information and did not want to have to read it all to find the keywords to complete the task. These changes can be implemented by creating top-level categories for information on each page, highlighting those categories as links at the top of the page so users can quickly skim, and using those links to push the user to the section lower on the page.
- c. One participant utilized the search bar to find specific information about Admissions, which led directly to the page that had the necessary information to complete a task. In this way, the search function on the UNC iSchool website was found to be useful and led to the appropriate information based on minimal input compared to physically navigating the website.
 - o The team's recommendation is to highlight the search bar and make it a more prominent feature of the website. As it is currently, the search bar is off in the top right corner of the page and could be migrated into a more focal area to increase visibility for users of the website. This could allow users, such as Participant #2 who verbally expressed frustration about the navigation of the site, to search by keyword to find information if the user knows what they want and does not want to navigate the website for it.

7. Limitations & Conclusion:

The first major limitation we faced was the limited sample size of participants. Unfortunately, we were only able to test on five individuals, which severely limits the quantity of data that can be collected. This also caused our SUS score to have major anomalies when compiling our reported data, causing a potential inaccuracy. Secondly, all of our participants were female. This represents a heavy gender bias and creates a lack of male representation within the tests. This neglects a large population of potential users and would remove any credibility of the usability test, unless it was directly targeted at female users. Furthermore, within our test, all of the participants were students within two age ranges of 18-24 and 25-34 years old. Again, this creates a bias as this range of users can be considered computer proficient and may have an easier time navigating the evaluated site compared to those who are 45 years old or above. This is supported by our questionnaire where the daily usage of computers ranges from 5 – 12 hours per day. Because all of the participants were Master's level students, all of the participants can be considered to have a higher degree of education and proficiency in reading English, making the language of the page potentially easier to read over those who are not well educated.

Finally, the lack of methods to navigate a page may have been a potential limitation. We conducted the test with a laptop and a trackpad. From our observations, this seemingly was not a major issue, however if we were to increase our sample size, the test may need to accommodate for those who are comfortable with browsing with a mouse, touchscreen, or a pointing device. The reason for this is because a change in tools may alter how one would subconsciously navigate a page.

Thus, because of these limitations, it is in the best interest for this usability test to be repeated with improvements. For future usability tests, it is advised to collect data from a larger sample size of mixed genders, age groups and employment statuses. The data provided cannot be considered reliable if the participants were too similar as it may be considered a selection bias. However, we do believe that we were able to collect strong qualitative data from the communication and comments from the participants on the evaluated site. We reached similar conclusions on what we as the evaluators considered flaws within the site and having the participants experience those and comment on those further reaffirm the flaws of the tested site.

8. References:

Barnum, C. M. (2011). *Usability Testing Essentials: Ready, Set... Test*. Burlington, MA: Morgan Kaufmann.

Brooke, J. (1996). SUS - a quick and dirty usability scale. *Usability Evaluation in Industry* 189(194), 4-7.

McCloskey, M. (2014). Turn user goals into task scenarios for usability testing. Retrieved from <http://www.nngroup.com/articles/task-scenarios-usability-testing/>

Pernice, K. (2014). Talking with participants during a usability test. Retrieved from <https://www.nngroup.com/articles/talking-to-users/>

UNC School of Information and Library Science. (2014). Retrieved from <http://sils.unc.edu/>

WAI Site Usability Testing Questions (2003). Retrieved from <http://www.w3.org/WAI/EO/Drafts/UCD/questions.html>

9. Appendices:

Appendix A:

Background Questionnaire

Please fill in, or check mark the necessary field.

Question	Answer
1. What is your age?	<input type="checkbox"/> 11 or Younger <input type="checkbox"/> 12-17 <input type="checkbox"/> 18-24 <input type="checkbox"/> 25-34 <input type="checkbox"/> 35-44 <input type="checkbox"/> 45-54 <input type="checkbox"/> 55-64 <input type="checkbox"/> 65-74 <input type="checkbox"/> 75 or older
2. What is your gender?	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other
3. What is your current employment status? (Please check all that apply.)	<input type="checkbox"/> Student <input type="checkbox"/> Employed Full-Time <input type="checkbox"/> Employed Part-Time <input type="checkbox"/> Unemployed <input type="checkbox"/> Other: <ul style="list-style-type: none"> • Please specify: _____
4. If you answered "Student" in Q3, please indicate your current level of studies.	<input type="checkbox"/> Secondary School <input type="checkbox"/> College <input type="checkbox"/> Undergraduate Studies <input type="checkbox"/> Master's Studies <input type="checkbox"/> PhD Studies <input type="checkbox"/> Post-Doctorate Studies
5. If you answered "Student" in Q3, roughly how many times a week do you visit your academic department's website?	<input type="checkbox"/> More than once a day <input type="checkbox"/> ~Once a day <input type="checkbox"/> ~Once a week <input type="checkbox"/> ~Once a month <input type="checkbox"/> Less than once a month <input type="checkbox"/> Never
6. How many hours a day do you typically use your computer?	<input type="checkbox"/> Hours
7. Which operating system do you primarily use?	<input type="checkbox"/> Windows <input type="checkbox"/> Mac OS <input type="checkbox"/> Linux <input type="checkbox"/> Other (Please specify)

Appendix B:

Post-Session Questionnaire (SUS)

Thank you for participating in this test. Please share your experience with us by rating how much you personally agree or disagree with the statements below. 1 being you strongly disagree and 5 being you strongly agree.

This questionnaire is based on the System Usability Scale (Brooke, 1996).

1. I think that I would like to use this website again	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I found the information seeking process unnecessarily complex	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I thought the website was easy to use	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I think I would need the support of a technical person to be able to get the information I need	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I found the various pages within the website were well integrated	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I thought there was too much inconsistency in this website while seeking information	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I would imagine that most people would learn to use this website very quickly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I found the website very cumbersome to use	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I felt very confident using the website	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5
1. I needed to learn a lot of things before I could get going with this website	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 2 3 4 5

Appendix C:

Product Reaction Cards

Accessible	Creative	Flexible	Motivating	Sophisticated
Approachable	Difficult	Helpful	Organized	Straight Forward
Controllable	Exciting	Usable	Secure	Unpredictable
Comprehensive	Engaging	Intimidating	Responsive	Unconventional
Annoying	Dated	Fun	Not Valuable	Sterile
Busy	Distracting	Impressive	Personal	Time-Saving
Attractive	Disconnected	High quality	Overbearing	Stressful
Advanced	Customizable	Frustrating	Not Secure	Stable
Confusing	Entertaining	Intuitive	Rigid	Understandable
Comfortable	Effective	Ineffective	Professional	Unapproachable
Boring	Disruptive	Impersonal	Overwhelming	Time-consuming
Appealing	Desirable	Hard to Use	Ordinary	Stimulating
Compatible	Efficient	Innovative	Relevant	Unattractive
Complex	Effortless	Integrated	Reliable	Uncontrollable
Consistent	Essential	Irrelevant	Satisfying	Undesirable
Clear	Dull	Incomprehensible	Poor quality	Too Technical
Collaborative	Easy to use	Inconsistent	Predictable	Trustworthy
Convenient	Familiar	Useful	Simplistic	Unrefined

Valuable				
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Appendix D:

Note Taker and Observer Notes

Role of Note taker: Observes actions that the participant does on screen.

Role of Observer: Observes the physical actions, movements, and spoken words.

Participant #1 Notes: ~4:00min

[Note taker]

Task 1: 40 seconds

- Saw future students
- Used tool bar on left
 - Identified MLIS and MSLS
 - Missed dual degree completely

Task 2: 1 minute

- Was using left toolbar
- Had trouble on overview page
- Went to admissions and toolbar
- Saw that she needed the GRE
- Saw that she needed references

Task 3: 1 minute

- Clicked on careers
- Saw internships on the toolbar and found that page
- Used the toolbar to find the field experience page
- Identified 2 pages the internship and field experience page

Task 4: 1:30min

- Used the toolbar to go to admission and searched through page for contact info
- Thought she found it but it was to set up an appointment, so kept going
- Seemed to have a bit of difficulty at first, tried again and found *people page*
- Found student service people and identified Lara Bailey as the contact

Summary:

- Used the left hand toolbar almost exclusively for navigating
 - Therefore, most troubles that she arrived at was due to problems with the left-hand side toolbar
- Missed the Dual Degree option completely
- Seemed very competent and familiar with the format and navigation
- Observation: She went through *Future Students* which does not have Dual Degrees on the left hand side toolbar. If she had gone through *Programs*, the Dual Degree option is listed. This identified an inconsistency within the website.

[Observer]

- Steady gaze on the screen
- Lots of moving around the page with the eyes
- Not a lot of looking at the keyboard or mouse, mostly at the screen
- Gaze mostly on the left hand side of the screen
- Slightly hunched over, eyes close to the screen
- very quick skimming of pages
- time on page is very little, mostly looking at titles
- when lost on page, more likely to scan page further

Participant #2 Notes: Total time: 7:30sec

[Note taker]

Task 1: 1:10min

- Started at *programs*, immediately went to navigation bar and started at *graduate*
- Wanted to find a specific list within the page, so instead went to the navigation bar and initially believed the MSLS and MSIS as probably the only two.
- Also saw dual degree and checked it out
- Correctly identified all three

Task 2: 3:30min

- Used left hand navigation bar for MSIS.
- Initially missed the left hand navigation bar Admission sections
- Got confused started over at *homepage*
- From home page went to *future students*, scrolled through that page and didn't see anything. Expressed frustration verbally
- Went to sidebar toolbar and clicked MSIS and couldn't find anything on the page
- Went to *search bar* and searched admissions. Found it on first hit.
- Found GPA, found GRE
- Still classified herself as eligible, didn't read the GRE clearly

Task 3: 45sec

- Started at *MSLS page* and scrolled through that page for "coop or practicum"
- Saw field experience at bottom of page. Clicked on link to *Field experience* page.

Task 4: 2:00min

- Bottom right of page clicked the *contact button* but that opened email
- Went to *MSIS homepage* and looked through contact info and found an email at the beginning of that page.
- Wasn't satisfied so kept looking throughout the site. Went to *homepage* to try to find a contact page. Went to about page looking for this info.
- Then went to *programs* and *graduate*. Couldn't find a specific contact page so just went to the general contact email, number

Summary:

- This participant did not rely on the side navigation bar as much and she struggled significantly more as a result.

[Observer]

- twiddling with fingers.
- Went through questionnaire pretty fast.
- Very animated with hand movements
- Very much a one person discussion
- Frowns when can't find info.
- Lot of physical head movements.
- Hands curled and kind of like a claw
- Fast at tasks

Participant #3 Notes: Total time: 13:45min

[Note Taker]

Task 1: 2:30 min

- Started at *Programs*
- Found the *MSLS* and *MSIS* through the left hand side navigation bar and the mainpage box. Verbalized that she saw in two ways. Seemed to initially missed the Dual Degree option.
- Found all of the courses for each program (including the test you need to take beforehand)
- Missed the Dual Degree completely

Task 2: 2:45 min

- Started at the left hand navigation and saw the *admission link*. She noted that she wished admission was under each of the programs specifically.
- Clicked *admission* and started ruling through the page.
- Saw the average GPA, saw the GRE
- Noticed that there was a lot of information. Didn't really take the time to read through it all.

- Noted that she needs to take the GRE before she can apply

Task 3: 4 min

- Started with the left navigation bar as well and went to the *MSIS program*, scrolled through the *MSIS page* looking for information.
- Saw the field experience section at the bottom of this page and clicked the link to the *Field Experience* page.
- Found the *field experience* page and identified this as a way to get practical experience. Wished that they had listed kinds of opportunities available in the field experience. Kept looking for information of how this field experience program selects sites.
- Found recommended sites for the field experience program

Task 4: 30 sec

- Started looking at the top and bottom of the page because contact buttons are usually at these places.
- Then went to *people* and figured *staff* would be a good place to find someone.
- Located Lara Bailey as someone to contact quite easily.

Summary:

- Mentioned she liked the look of the website and seemed very professional
- More of a mixture of the side navigation and global horizontal navigation bar
- Spent quite a bit of time reading through the pages, more so than the others

[Observer]

- Sense of humor
- Quite talkative!
- Soft voice
- Hunched over.
- Browses mainly with arrow keys on still pages.
- Vocalizes details regarding admissions and her credentials.
- Lot of frowning or eye squinting.

Participant #4 Notes: Total time: 10:20min

[Note Taker]

Task 1: 2:00min

- Started from homepage and went to programs
- Looked directly on the page into the Graduate Students box. From here identified the MSLS and MSIS programs. Thought these were the only two, but wanted to double check so went to the left navigation bar.
- In the left navigation bar she saw the Dual degree program and went through all the dual degrees
- Correctly identified all 3 and very thoroughly.

Task 2: 3:15min

- From left panel went to MLIS
- Thought the page was too cluttered and didn't want to have read through it all
- After scanning the text didn't see any admission info, double-checked and still nothing
- Went back to programs page (from top bar)
- Still didn't see any admission requirements, was looking for links within the text
- Went to the left navigation panel and found the sub-heading under the MSIS heading. Found the information about the required information systems test. From here thought she was done, but did not come close to find any admission criteria

Task 3: 2:50min

- Started with financial information and saw assistantships, fellowships, other work opportunities. Found other links within the website to job postings.
- On left panel also saw career links and clicked this page.
- Was looking at employer resources from left navigation bar
- Never found field experience or co-op opportunities

Task 4: 2:15min

- Started programs from main navigation bar. Used left panel to see if there was a contact page. Thought this was inconsistent because other left navigation bars have contact info.
- Eventually at the bottom of the programs page saw a general email
- Went to MSIS program page and started reading through “massive” text looking for hyperlinked email addresses and eventually found it right at the top of the page.

Summary:

- Found that some pages were text heavy, didn't like having to spend time reading through
- Had a good use of both the top navigation bar and side navigation bar
- Completed #1 very well, but not #2 or #3 at all
- Noticed some inconsistencies

[Observer]

- Focused eye contact with moderator
- Found first tasks just fine and vocalized well!
- Left hand hovering over keys
- Right hand used for all navigation, touchpad only
- Hunched forward
- Head moves a lot/tilts to navigate
- Soft spoken

Participant #5 Notes: Total time: 17:50min

[Note Taker]

Task 1: 3:30min

- Looking at top bar, programs
- Clicked graduate at left side menu
- Using left navigation menu exclusively, navigating to each of the programs
- Confused as to where ARM concentration lies in graduate programs
- Went into application form for ARM concentration
- Navigated to post-master's
- Two graduate level + dual degree noticed
- Mainly using left hand navigation menu, going through hierarchy links

Task 2: 5:30min

- Now top navigation
- Noticed the zoom error on main page
- Future students navigated to
- Trying to find application process through admissions
- Hidden under requirements
- Added time due to battery dying

Task 3: 4:00min

- Home page → programs → msis
- Field experiences program
- Go through the page carefully
- Click through site to sites for the program
- Not necessarily directed to MSIS?
- How to register and registration process
- Doesn't really know if they completed task
- Careers page and internships
- Found contacts to ask questions
- Job list, but typically for people who have completed the program

Task 4: 4:50min

- Using back navigation within browser
- Using top navigation bar for “people”
- Going through menus that aren't necessary

- Bottom bar with contact info was viewed
- Looking at SLIS staff, administrative staff
- Doesn't see anything about applying
- Student services menu (within the staff page)
- Go to MSIS admission page to find contact info, found nothing of interest
- Graduate school application page dumped to new website
- Finding page again was difficult (contact page)

Summary:

- Struggled with navigation
- Found pages very text heavy and links were hard to distinguish
- Used both navigation bars based on use case
- Seemed as though they gave up on tasks as they got frustrated/confused

[Observer]

- Talkative. VERY TALKATIVE
- Hunched forward quite a bit.
- Navigates primarily with mouse cursor.

Appendix E:

Moderator Script

Introduction

Hi, my name is _____. Thank you very much for taking the time to meet with us. Your participation will help our team gather important and useful feedback for improving the website you will be working with today. As a prerequisite point, I'd like to let you know that we will be recording what happens on the computer screen as well as recording audio. The reason for this is to see the process you go through, both verbalized and through actions on the computer, while navigating the website to help inform our team of issues that may be present. It also allows us to review this data for a report that we could give our sponsor, with all data anonymized. I will also highlight the fact that we will absolutely not be filming your person at all. Are you comfortable with giving us permission to record the screen and to audio record the session?

Today, you will be working with the University of North Carolina at Chapel Hill School of Information and Library Science website. We will outline some tasks to accomplish on the website for you. As mentioned before, we really appreciate any and all feedback you may have, so we would like you to tell us what you are doing and your reasons for doing it. Try to externalize your thought process as you navigate through the website so that our audio recording and screen capture will create a full picture of what's going on. Please also note that we did not create this website, so don't feel afraid to speak your mind about anything as you work through the website. As you step through the website, please remember that we are trying to evaluate the website, and not you. If you struggle or have a hard time completing the tasks, that's OK. It doesn't mean you've failed, quite the opposite, it will give us a better ideas of where we can improve.

During this session, I will simply be sitting here with you as you go through the website, and I may ask you some questions from time to time. That being said, I won't be able to assist you with your task. Do you have any questions for me before we get started?

Before we begin, I would like you to fill out this Background Questionnaire to help us better understand you and your experiences. While you are filling it out, please tell us what you are writing down and the reasoning for the answers.

Thanks for filling that out and we appreciate your feedback.

Task 1

For these tasks, we would like you to imagine that you are a prospective graduate student who has recently completed their undergraduate degree applying to UNC's iSchool. You have completed a BA degree with a 3.4 GPA but you have not written any standardized graduate level exams. You are also an English-Speaking, American citizen.

The first task we would like you to attempt is to find program information about all available Master's level degrees offered through the UNC's iSchool. When you believe that you have finished your task, please let us know.

Task 2

We would now like you to determine whether or not you meet the requirements to begin the application process for the MSIS degree. When you believe you have finished this task, please let us know.

Task 3

For the next task, we would like you to find what options are available for gaining practical experience during your MSIS degree. When you believe you have finished this task, please let us know.

Task 4

For the final task, we would like you to find relevant contact information for someone who could answer any questions you have about applying to the MSIS program. When you believe you have finished this task, please let us know.

Closing

Thank you for participating in our test. Before you go, we ask that you complete two post-session documents: a questionnaire and these Product Reaction Cards, which will give you an opportunity to reflect on the tasks you were assigned and express how you felt the experience went for you.

(after participant has completed all documents)

Do you have any questions about the process you went through today?

Again, we thank you for taking the time to help us today. Your feedback is essential to help us improve the website for future users.

Appendix F:

User Persona & Tasks (Reference Card)

Target User Persona:

- You are a prospective graduate student applying to UNC's iSchool
- You recently completed a BA degree with a 3.4 GPA
- You have not written any standardized graduate level exams
- You are an English-Speaking, American citizen

Task 1: Can you find program information about all available Master's level degrees offered through the UNC's iSchool?

Task 2: Determine whether or not you meet the requirements to begin the application process for the MSIS degree.

Task 3: Find what options are available for gaining practical experience during your MSIS degree.

Task 4: Find an appropriate iSchool contact to follow up with for further admission questions.