

# Bringing User Testing to the Library

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## THE POWER OF LEARNING FROM YOUR USERS

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# OUTLINE

## What is user testing?

- Why should I test with users?
- What do I test?
- What am I testing for?

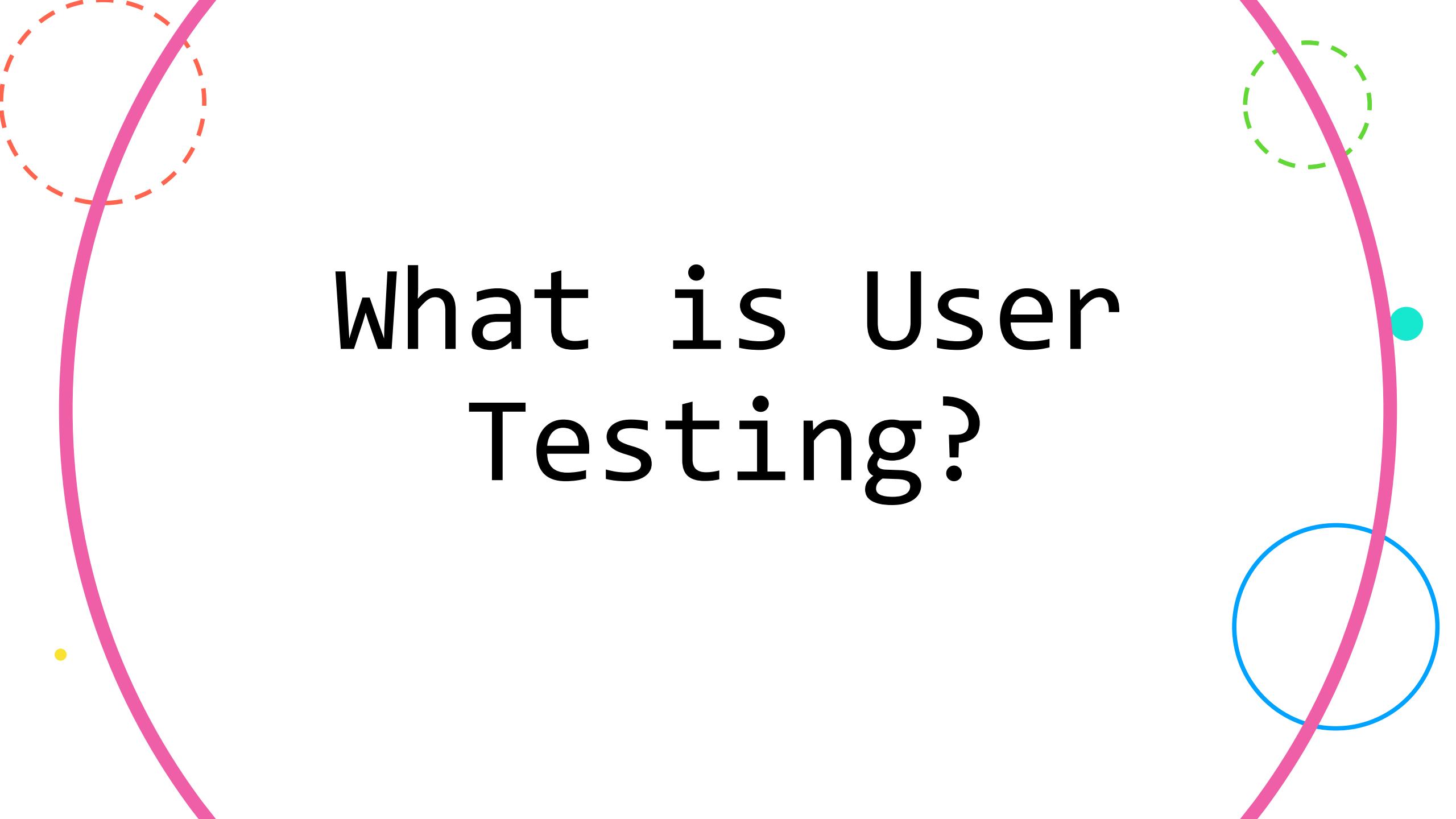
## Performing user testing

- Who do I test?
- Developing a test plan
- Running the test

## User Testing at Randall Library

## Lessons Learned & Best Practices

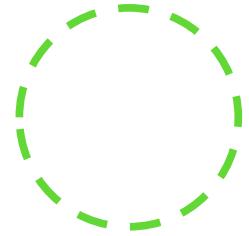
## References & Resources



# What is User Testing?



# USER TESTING IS



Evaluating a website, product, or service by testing it with users to see if you can improve ease of use.

3 components of user testing:

- Get a group of 3-5 representative users
- Have them perform tasks based on user goals
- Observer the users – watch what they actually do. Let them do the talking!

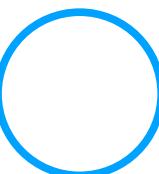
Never test the user! Participants, not subjects.

Only 3 or 5 users? Really?

- Steve Krug: 3 users, once a month
- Nielsen Norman Group: 5 users gets close to the user testing's maximum benefit-cost ratio
- Smaller tests, less expense (time, effort), more often

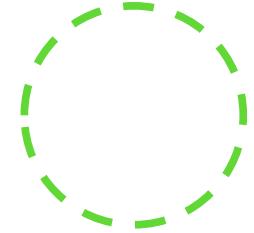
In-person qualitative testing focusing on insights, not accuracy.

- Informal and unscientific
- Identify problems quickly and *fix them*





# WHY SHOULD I TEST WITH USERS?



## Survival

“On the web, usability is a necessary condition for survival” – Nielsen Norman Group

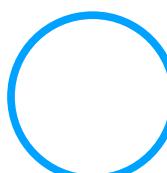
- No one has to stay on your website or use your product/service.
- What does your website say about your organization?
- Increased user satisfaction.

## Expense

What’s expensive about a usability problem?

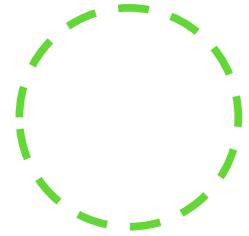
- Staff time
- Web development time
- User impact

Identify problems *before* they are coded and become expensive to fix.





# WHAT DO I TEST?



The old design before you begin with a new design



Other organization's designs. What are they doing right that you are not doing?



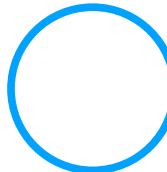
Paper prototypes, mockups or wireframes – early and often!



Multiple iterations of your design, increasing fidelity as you go.

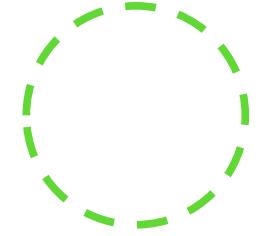


Final design





# WHAT AM I TESTING FOR?



What makes something usable? Nielsen Norman Group says it is:

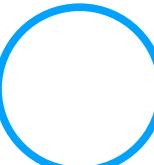
- Learnable – how easy is it to accomplish basic tasks?
- Efficient – how quickly do users accomplish tasks?
- Memorable – when returning to your site/product, how easy is it to become a proficient user?
- Errors – how many do users make and are they recoverable?
- Satisfaction – how pleasant is it to use?

## User Goals

- What do users want to accomplish? (Not what *you* want them to do)
- Turn goals into tasks that can be observed and measured.

## Start early! Test often!

- Discover problems before they become complicated and expensive (time, effort) to fix



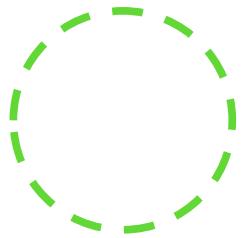


# Performing User Testing

USE WHAT YOU'VE ALREADY GOT!



# NEED/ NICE TO HAVE

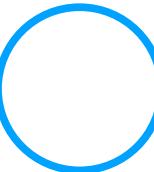


## You need:

- Facilitator/Observer/Notetaker
- Participants (and time/effort to recruit them).
- A consent form – especially if you plan to share your test results
- A test plan with scripts and scenarios (and time to develop the plan)
- A quiet room with chairs and a desk, and standard equipment
- Paper prototypes or a computer (with or without internet, depending on what you are testing)

## Nice to Have:

- A reasonable incentive or reward for participating.
- Screensharing software
  - Allow outside observers to watch the test in real time. You may need a separate room, microphone, and speakers.
- Screen recording software
  - Better than notetaking
  - Privacy concerns (and that consent form!)





# WHO DO I TEST?

You aren't testing users! You are testing a site or product. Users are participants, not subjects!

Find representative users for your website or product.

- Who are you designing for?
- Find users from your target audiences, but you don't have to be strict about it.

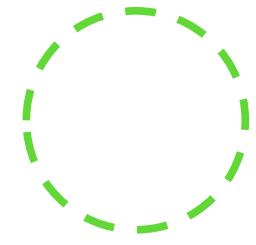
Are you well organized and enjoy talking to strangers? You are a recruiter!

- Write out a recruitment script.
- Explain what you are doing – what you hope to accomplish.
- Explain what the user will be asked to do.
- Explain the impact to the user.
- Set up a time and place to recruit.
- At the reference desk, during an activity or talk, at a table with a nice sign and an enticing bowl of candy
- Schedule appointments with your users and confirm them the day before.

Consider incentives- simple, reasonable rewards for participating.



# DEVELOPING A TEST PLAN



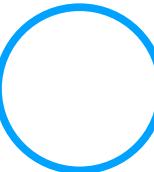
What goals do people have when they come to your website or use your product?

What part of your website or product needs help right now?

- Focus on specific areas instead of trying to tackle the entire site.

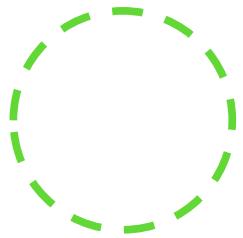
Goals > Tasks > Scenarios > Scripts > Plan

- Turn a user goal ("I want to read a book") into a task ("How do I check out a book?")
- Write a scenario for that task. You'll be presenting that scenario to the user during the test.
  - Phrase scenarios without giving clues to how to accomplish the task.
  - "Your friend recommended a book to you. Show me how you would find the book and check it out."
  - "Your friend recommended a book to you. How would you use the catalog to check it out?"
- Write your test plan
  - Include an intro script to be read to your user explaining the test and what they will be doing.
  - Ask some basic demographic questions- how often do you use the website? How often do you visit the library?
  - Number each scenario and order them. Be careful that one scenario doesn't clue in a user how to do something in the next.
  - In your notes section, write out all of the possible pathways the user could take to answer the question.





# RUNNING THE TEST



Remind the user, over and over: Think aloud. "Say what you are thinking. You can't hurt our feelings and you won't give wrong answers."

Take notes. Try to write down everything the user does or says (or use screen recording software).

Don't interrupt them during the task. Keep them thinking aloud.

- "What are you thinking?" "What are you looking at?" "What are you doing?"

Remind the user they can stop at any time.

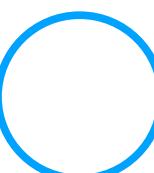
- Don't stop at the first sign of struggle, but don't let the user be miserable either.

After each task, encourage the user ("That's great! Thank you!"), but don't lead them ("That's right!"). Stay neutral.

Don't answer questions during the test. You will debrief after the test is over, if needed.

Follow up questions: how qualitative is your test?

- If you are being more rigorous and want to compare data, stick exactly to your scripts and scenarios.
- Or, ask questions when tasks are complete. "Why did you click there?" "What did you expect to see?"



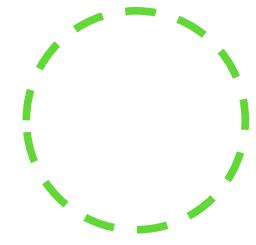
# Learning from Users

WHAT DO I FIX?

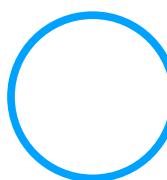


# PRIORITIZE

- Coding your data- transform your notes into insights. How can you easily compare and contrast one test to another?
- Make a list of the most serious problems the user encountered.
- Make a list of the things you can fix easily.
- Fix the easiest things as fast as you can.
- Don't get hung up on the big, unsolvable problems that require a complete redesign.



What simple changes can you make that most benefit the user?



# User Testing at Randall Library





# WHAT WE TESTED

## Search Results Page

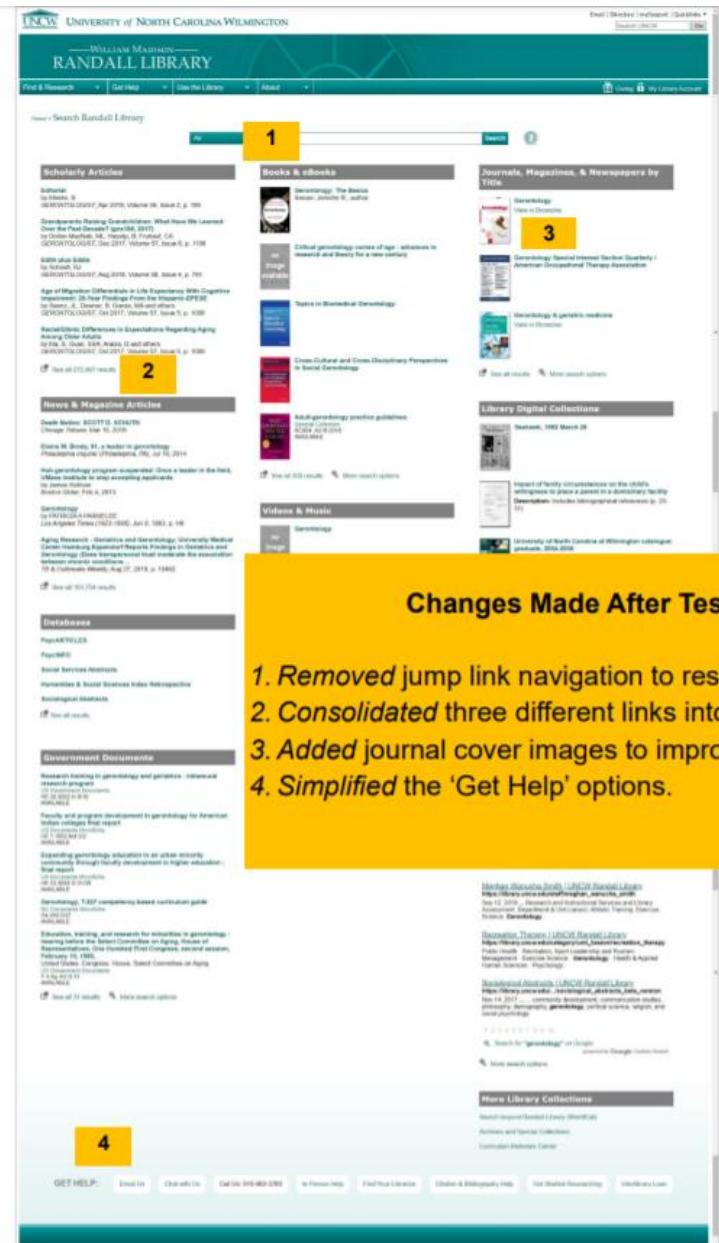
- 5 student volunteers, recruited on demand, or from classrooms, employers, etc.
- Tested live web results of our actual search
- No incentives

## New Homepage

- 5 volunteers recruited in-person, on demand
- Community members, faculty, undergrad and grad students, alumni
- Tested a paper mockup of our design
- No incentives

## Subject Guides (homegrown LibGuides)

- IRB Approval
- 8 student volunteers, with a formal recruitment strategy
- Tested live web pages
- Small incentive



# Usability Testing: Randall Library Search Results

## Goals of Usability Testing

- To test the usefulness of the search box layout.
  - On the library search box, do students use the drop down to scope their search results? [Question 1, 3, 4, 6]
  - Can students find the Subject Guides? [Question 2]
  - Can students find databases? [Question 7]
- To test the effectiveness of the layout and results options on the search results page.
  - Can students differentiate between various sections of the search results? [Question 1, 3, 4, 6, 7]
  - Can they navigate to more results when needed? [Question 1, 8]
  - Do they use the navigation bar jump links? [Question 5]
  - Do they prefer the look and feel of the NC Live bento results? [Question 8]

## Results Summary

### Testing

- Five students volunteered for testing. Two transfer students, two Master's level students, and one senior.

### Search Box Layout

- One user the drop down menu on the search box to filter their results. Most did not use the advanced search or library catalog buttons. Some browsed to them, then returned to the homepage to search.
- Finding subject guides was difficult. Most were not aware of the resource and did not navigate to or search for a guide. One user seemed to know that subject guides existed, but did not use the terminology "subject guides" or "guides".
- Surprisingly, when asked to perform subject-based research, most knew to look for a database. Users were comfortable browsing to and opening the databases flyout, although they did not often identify all of the options listed within it. Two users identified the By Subject database list on the homepage Database flyout.

### Search Results Layout

- Users were able to differentiate scholarly articles, databases, and journals in search results. Use of images for book results was described as helpful and useful.
- Users easily navigated to more results in the Scholarly Article box, although no user appeared to differentiate between the link options. Many just clicked the first link listed.
- One user used the navigation bar jump links. For that user, the screen was scrolled down so that the jump links were at the top of the browser window. Users primarily browsed search results by scrolling and were able to identify help options through the Get Help menu on the global navigation.
- Even though the NC Live site is more visually appealing, with good use of contrasting color and headings, most users preferred the search experience on Randall Library. This speaks to the comfort and security of known experiences. From their comments, users' familiarity with Randall Library search results influenced their choice.

## Question 1

You are a first-year seminar student (a freshman). You need to find information about your information literacy assignments. Where on the page would you click to find more information?

### Possible Actions:

- User clicks on "Undergraduates" in the audience navigation bar
- User clicks on "Find & Research" in the global navigation bar
- User clicks on "Get Help" in the global navigation bar

### Notes:

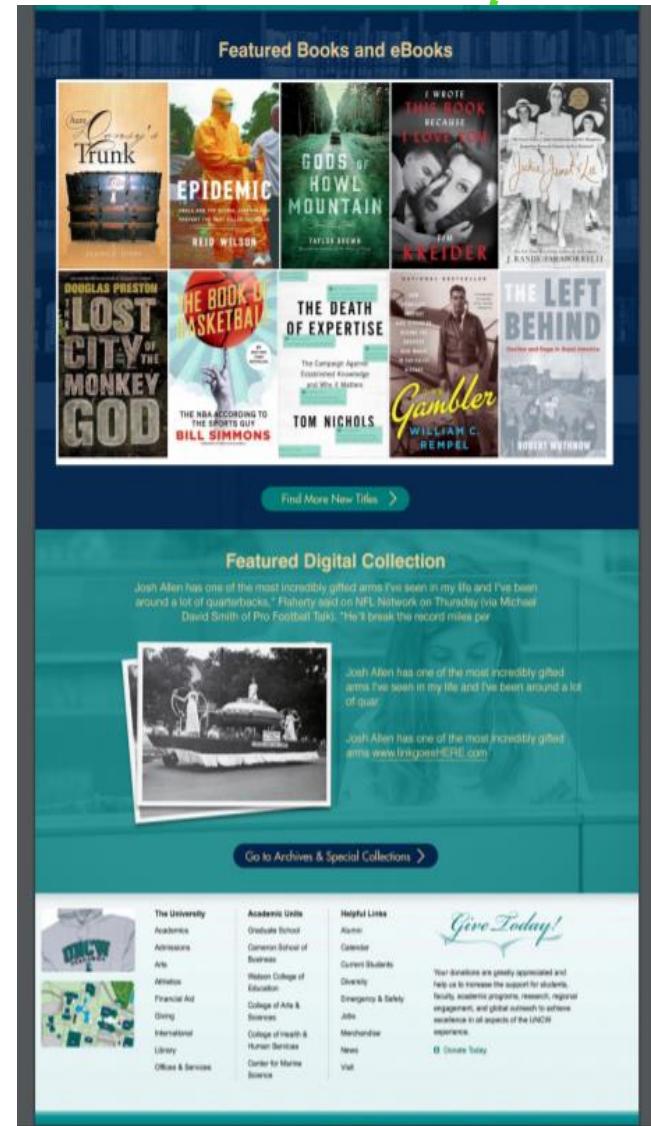
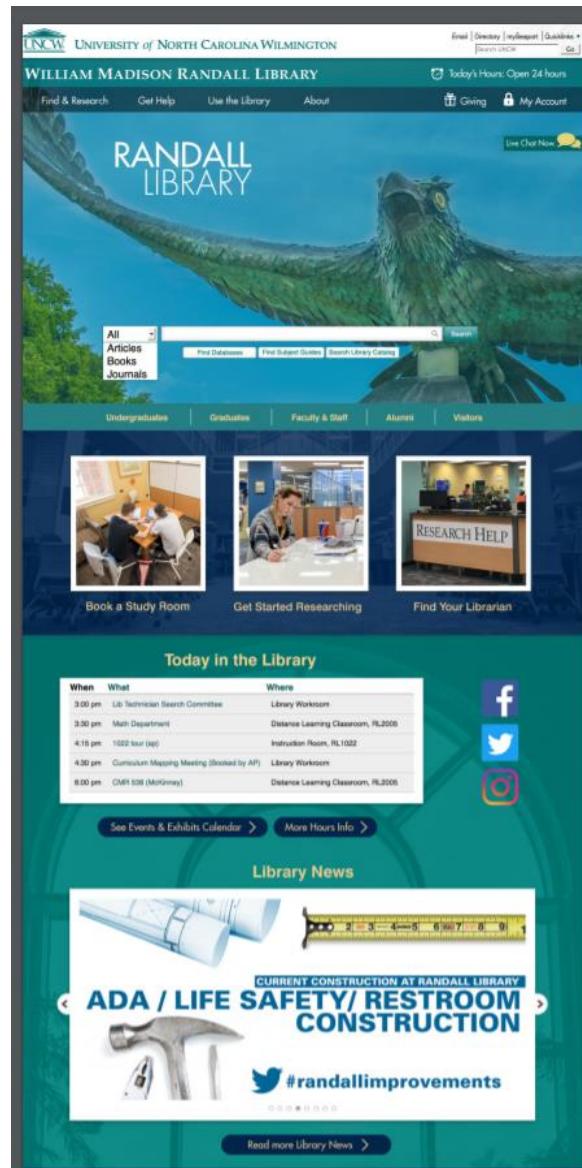
## Question 2

When is the library open today?

### Possible Actions:

- User browses to "Today's Hours" in header
- User browses to "Today in the Library". Clicks "More Hours Info" button
- User clicks on "About" in global navigation bar

### Notes:



A6						
		C	D	E	F	G
1		User Test				
2		Q4	Q5	Q5-1	Q5-2	Q6
3	User	001				
4	Task Actions	Browsed navigation first, selected Find & Research then read through options until reached Subject Guides	Easily selected By Course tab. Scrolled to course and selected guide.	Browsed back to Guides homepage. First looked at A's for Accounting. Then browsed to Business. Selected main Accounting guide.	Browsed to N's for Nursing. Selected main Nursing guide.	Saw "enter keyword" in PQ widget search box. Searches PQ widget search box for nurse burn out. Did not browse guide or read resource entries.
5	Completed Task	Yes	Yes	Yes	Yes	Yes
6	Performed Identified Actions to Complete Task	Yes	Yes	Yes	Yes	Yes
7	Identified Action	User navigates to Find & Research > Research Resources > Subject and Course Guides.	User selects By Course tab and then selects ENG 230 Guide.	User navigates to Business Topic, selects it, then selects the Accounting guide.	User navigates to the Nursing topic, selects it, then selects guide	User searches for articles using ProQuest database widget on the Nursing guide.
8						
9						
10	User	002				
11	Task Actions	Browsed to Find & Research navigation, reading through options. Browsed to Use the Library, identified Services subsection. Browsed to About. Said "Probably Get Help" and browsed there, found Subject Guides	Scrolls to English. Identified Women in Literature guide title.	Browsed back to Guides homepage. Selected Business. Selected main accounting guide	Browsed back to Guides homepage. Scrolls to Nursing. Ask which guide to select. Told to select according to user's preference. Selected Family Nurse Practitioner.	Tester directs back to main Nursing guide. Scrolls down. Scrolls back up. Searches PQ widget search box for nurse burn out. Did not browse guide or read resources.
12	Completed Task	Yes	Yes	Yes	Yes	Yes
13	Performed Identified Actions to Complete Task	Yes	Yes	Yes	No	Yes
14	Identified Action	User navigates to Get Help > Help Yourself > Subject and Course Guides.	User navigates to English topic, selects it, then selects the guide.	User navigates to Business Topic, selects it, then selects the Accounting guide.	N/A	User searches for articles using ProQuest database widget on the Nursing guide.
15						
16						
17	User	003				
	User Testing	Surveys	Data Tables 1	Data Tables 2	Data Tables 3	Browses guides homepage. Selects By



# LESSONS LEARNED, BEST PRACTICES, ETC.



IRB Approval is both easy and hard



Always take before and after shots!



Preferably one observer/notetaker and one facilitator



Incentives are nice, but not necessary



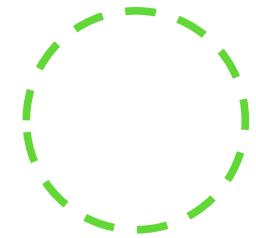
Log out of all programs (email, chat, Teams, etc.) on the computer you are using. Turn off phones.



Use common, standard technology



# REFERENCES AND RESOURCES



## Nielsen Norman Group

[Usability 101: Introduction to Usability](#)

[Usability Testing 101](#)

[Why You Only Need to Test with 5 Users](#)



## Usability.gov

[Usability Testing](#)



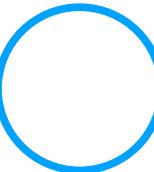
## Steve Krug

*Rocket Surgery Made Easy*

*Don't Make Me Think: A Common Sense Approach to Web Usability* (second edition)

Downloads from his website:

<http://sensible.com/downloads-rsme.html>





QUESTIONS?

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