A/B Usability Study: Research Guides

Background

On Tuesday, October 25, 2016, from 3:00-4:00pm, Emily Daly and Julie Riegel conducted an A/B usability test on the Duke Research Guide page (http://library.duke.edu/research/guides). By comparing Duke’s page to Northwestern’s (http://libguides.northwestern.edu/) and Stanford’s (https://library.stanford.edu/guides/topic) we were able to see what features work well for Duke’s page and how to improve other features.

Five students, four undergraduate and one graduate, were asked to perform a set of three tasks. At the end of the tasks, we conducted a post-test interview. The first task was exploratory, as we hoped to gain a better understanding of how students begin their research, and if their research process included visiting the research guide page. The second and third tasks were part of our A/B test, and asked users to navigate the interface of Duke’s research guide page in comparison with either Northwestern or Stanford’s research guide page. For a full script of the test, please see the appendix.

Questions we hoped to answer through this study:

1. How do patrons use the research guides page?
2. What do users like or dislike about the Duke’s research guide page? What works well, and what is confusing?
3. What features do users like or dislike about research guides at other institutions? What works well, and what is confusing?

Key findings

1. In the first task, none of the users started research by going straight the guide page, and instead opted to search using databases and sites that were specific to their fields. Two users started their search with Google Scholar, while other students started with trusted databases that they use regularly for their respective disciplines, like PubMed and NASA.
2. All but 1 user preferred Duke’s research guides to Stanford and Northwestern’s. The features that students particularly liked Duke’s choice to embed information within disciplines, so the options do not overwhelm the users upon first sight.
3. One user searched Duke’s search function organically, while the other 4 users were prompted by the moderator to search using it. Two users appeared confused by what types of sources the search pulled, and both assumed that the results were pulled from the entirety of the Duke Libraries’ website, rather than solely from the subject guides, because there were so many
results. After seeing the quantity of pages pulled, one user stated that she would probably not browse the pages because it would be too time consuming.

4. Though one user liked Stanford’s search function, a different user missed the search bar entirely and instead browsed the titles of the subject guides. The user who liked the search function appreciated the responsive script, and the way the search narrowed the information. However, he still preferred Duke’s system. Stanford’s tagging feature confused a different patron, who assumed that the tags would lead him to results within Stanford’s website, rather than to the subject guides exclusively.

5. All of the users who tested Northwestern’s system thought that the page was too cluttered. Two users did not find it useful to see both the course pages and the subject guides organized in the same spot.

Recommendations

1. Conduct a retest of Duke’s Research Guide page with Stanford’s page only to see how users navigate the responsive search function. While conducting the test, alternate the starting page between Stanford and Duke.

2. The users taking this test seemed perplexed by the search results offered by the search function on the Research Guide page.
   a. Two users assumed that the search yielded results similar to the ALL search, rather than exclusively to the subject guides. One option is to meet this user’s assumption, and convert the search to an ALL search.
   b. A different user suggested that she probably would not browse the data yielded by her search due the over-abundance of options, so another option is to limit the way the search shows data from different guide pages. Instead of showing all of the instances that the search term falls on each child page of each guide, simplify the search by grouping the results under the parent page.

3. Conduct a remote unmediated A/B test comparing the title “Research Guides” to an alternative title, like “Topic Guides,” (used by Stanford) “Research Databases,” or others. The exploratory portion of this usability test showed that many students start their search through Google Scholar, or directly through a database familiar to their field. This leads me to infer that emphasizing that the guides offer information on field-specific databases might catch the attention of users.

Appendix: Research Guide Usability Study Script
Thank you for agreeing to take part in this study.

We are trying to understand more fully how students, faculty and staff interact with research guides to find and use library books, articles, and other materials. Keep in mind that there are no right or wrong answers and that we’re testing a tool – not you.

Okay, first some general questions:

Are you an undergrad, grad student, faculty member, staff member, or visitor to Duke?
   a. If you are an undergrad, what year are you?
   b. For undergrads: What is your major?
   c. For grads, faculty, staff: What department are you in?

**TASK ONE: RESEARCH PROCESS**

a) Think of a research project you completed or began this semester. [If users didn’t conduct research this semester, ask them to consider a topic they’d like to learn more about, or suggest “climate change”, “food and globalization” or “African American dance.”]

b) Once you’ve thought of a project, describe the first thing you did to begin your research in this area.

c) Now, use this laptop to show us how you started your research.
Next, I’d like you to complete a short task using the Duke Libraries website (). It would be really helpful if you would share your thoughts and observations as you are completing the tasks, so try to think aloud as much as you can. Like I said, there are no right or wrong answers.

**TASK TWO: Finding Research Guides**

*(I will pull up the subject guide section of Duke’s page)*

You’re beginning research for your (Russian literature) class and have heard there are guides for doing research in many different subject areas. Use this page, http://library.duke.edu/research/guides, to find a guide that will help you start your research for your (Russian literature) class.

**Notes:**

**TASK THREE:**

*(I will pull up the topic guide section of Stanford or Northwestern’s page)*
So like Task 2, you’re beginning research for your (Russian literature) class and have heard there are guides for doing research in many different subject areas. Use this page, (either Stanford https://library.stanford.edu/guides/topic or Northwestern http://libguides.northwestern.edu/) page to find a guide that will help you start your research for your (Russian Literature) class.

Okay, that concludes our tasks. I have a couple of questions I’d like to ask you about your experience – feel free to leave this page open if you like.

POST-TEST INTERVIEW

1) What two things about Duke’s guide did you like best?

2) What two things about Duke’s guide did you like least?

3) What two things about (Stanford or Northwestern’s) did you like best?
4) What two things about (Stanford or Northwestern’s) guide did you like least?

5) You may have noticed that these pages are organized differently.
   a. What is your preference?

   b. Why?

6) Is there anything else you’d like to tell us about your experience with these guides?