The Mission

How do students experience the LibGuides and the A-Z Database List? How do they discover them, use them, and respond to the layout, organization, tone, and content?

The Study

1. We interviewed 11 students. Using Morae software, we captured their mouse movements as they navigated the LibGuides and A-Z List. Morae also records the conversation. We started the interviews by asking the students to show us how they researched a recent assignment. We watched to see if they navigated to the guides or database list without prompting. If they did not use these pages on their own initiative, we guided them to these pages and asked them to tell us their impressions, what they thought the guides and database list were for, and how they have used/would use them. We transcribed the interviews (over 40 pages) and read each other’s transcripts before discussing the key findings from the study. The participants in this study responded to recruitment ads placed in Courselink and on the library website. The students range from first year undergraduate to first year graduate level and are in a wide range of programs at U of G. Four of the students responded to the recruitment ad in Courselink. They came from FRHD 1100 and HIST 1250; courses we specifically targeted because of the high course guide usage data.

2. We scanned recently published articles on user testing of LibGuides. We integrated relevant findings from the research into our report below.

3. We used a website analytics software, Hotjar, to unobtrusively capture how users navigate a sample library guide. We chose the Cite Your Sources: APA topic guide because it is consistently one of the most viewed guides on our platform. From the Hotjar data, we created a heatmaps, scroll map, and video recordings that capture real users navigation behaviour.
Interview Results: What We Saw and Heard

What is the student experience of LibGuides?

- Few of the participants had used a LibGuide. Some of our participants had been shown a course LibGuide during an IL class. If the assignment was not due immediately they admitted that they promptly forgot about the guide.
- Only a few of the participants had seen a topic or subject guide before. Most had difficulty articulating the differences between the two.
- All of the participants used Primo as their main research tool. (cf Conerton & Goldenstein: To find information on a topic, most of the usability participants would use the library catalog, a database, or the discovery tool search box instead of a guide).
- Participants were surprised to learn that there was a course guide for every undergraduate course.

How do they respond to the layout, organization, tone, and content?

- The participants said it was difficult to orient themselves on the page of the course guides. They didn’t understand what they were looking at and what the purpose of the guide was. They guessed that it was to help them do research for their assignments, and so were confused when the links didn’t match what they expected to find for their assignments. Some told us they expected to see their course textbooks listed. We hypothesized that some conflated course reserves and course guides. They looked for a short explanation of what the guide was for and how to use it. (cf. Thorngate & Holden: Most participants are unable to identify the purpose of a given library guide).
- The participants found the 3-column structure difficult to read. They said it was hard to know where to start or how to identify the most important information. They preferred the simpler 1 column layout of the topic guides. (cf. Thorngate & Holden: Students are overwhelmed by cluttered layouts and struggle to find a focal point and multiple columns compound this problem. A three-column layout is the least usable. One participant said: “it’s hard to know which side to read.” Another said “It just hurts my eyes, ‘cause I’m trying to focus on one thing and everything’s right there.”).
- The participants liked the simple layout of the topic guides. They especially liked clear navigation and the ability to jump to the part of the page that answered their particular question.
- The participants did not see the value of topic guides that provided only high level, general information, like the topic guide on Background Information. They preferred the topic guides with detailed step by step instructions, like the guides for using Tableau. They wanted to see specific examples on pages where examples were appropriate, such as on the Annotated Bibliography topic guide.
- Some participants expressed some skepticism over the label “Top Picks.” “Whose top picks?” they asked. Similarly, students uniformly ignored the “Best Bets” selection of databases on the A-Z list which they said reminded them of Google sponsored ads.
- One of the most consistent and striking comments was confusion about the meaning of some of the terminology. In addition to being unsure of the meaning of “course guide”
“topic guide” and “subject guide”, they were confused about “background information”, “vendor/provider”, and “open access.”

- **Open access:** “That means they don’t charge us to read the articles, right?”; assuming only the resources with the “open access” tags were freely accessible.
- **Course guide:** “Textbooks?”; “Sounds a bit too general;” “Like, class guide?”.
- **Topic guide:** “If you just wanted background information on your topic? I guess I would type ‘light bulb’ [research topic] into the search.”
- **Subject guide:** “Maybe they focus a little more on general assignments and general places to start an assignment or find research that is different for each one. Although now that I’m looking at it, that could also be the same for topic, so i don’t know how to differentiate them.”
- **Background information:** “I think it’s geared to give you a background info, so maybe before school actually starts in the fall semester you could actually come here and brush up on it”; “I would just say information that is helpful for the course.”
- **Vendor/provider:** “I have no idea.”

(cf. Conerton & Goldenstein: The most frequent problem with jargon had to do with the guides themselves; students equated the term “research guide” with library databases; Sonsteby & Dejonghe: Participants often were confused and did not know where to go on a guide; they said the words on the pages did not match what they wanted to do. Be as specific as possible in naming tabs. For example, name a tab “Encyclopedias” instead of “Reference Sources”).

- The participants told us they thought all links on the course guides should be clearly relevant to their assignments in the course. They were confused by links that seemed extraneous or tangential, such as “Hack Your Learning.” The common response was: Just give me what I need for my assignment. (cf Thorngate & Holden: Usability is compromised when content is not appropriately scoped to the task at hand; Sonsteby. & Dejonghe: Sort sources by usefulness or relevance. Do not sort by alphabetical or numerical order).

**How do they discover the guides & A-Z database list?**

- When asked to find the guides, participants used Google, or the search box on the library website. One participant said he would have to refer back to the navigation instructions his professor had posted on CourseLink to find their course guide again.
- Some participants had been to the A-Z list before and were able to navigate there without much prompting. One student had found it by clicking on “Journal Articles” under “Top Pages” on the library homepage. She then found the small print “See all databases” link which directed her to the database list. Very few used the “Find” - “Database List” as a discovery pathway.
- When we showed the participants the LibGuides landing page they did not know what they were looking at. There was no orienting information. They scrolled through the long list of courses (and/or used Ctrl F) rather than use the search box. We suspected they did not know or remember their course codes.
Students expected search boxes on the main guides pages, on the A-Z page, and on specific guides to help them with their research topics. For example, students typed their particular research question into the search box on the top of the A-Z page. This search box only searches names of databases. (Conerton & Goldenstein: Several students used the search box [in LibGuides] to attempt to complete usability tasks, but were frustrated to get a list of guides for search results rather than answers to the prompts; Sonsteby & Dejonghe: Participants expected the search box in the guides to behave as a discovery tool, not as a search for other guides).

Web Analytics Results - APA Course Guide

We used the web analytics software, Hotjar, to collect information on how users navigated the APA Citation Style topic guide from October 18th to 19th, 2017.

1. We collected analytics from 1,000 unique visits (983 desktop, 5 tablet, 12 mobile) which we then translated into a heatmap and a scroll map.
   a. The heatmap uses colour coding to indicate the highest and lowest use areas on the guide. Users most frequently clicked on the very last link on the guide, “More APA Examples” (290 clicks). Fewer users clicked on the tab “More Examples” (63 clicks). Many users tried to click on headings and text in bulleted lists, which could suggest they expected them to be hyperlinked. Very few users clicked on the supplementary links found in the right hand column.
   b. Using the same data, we created a scroll map which shows on average how far users scroll down the page before exiting. The data shows that 50% of desktop users reached the bottom of this guide.

2. Lastly, we collected 100 unique recordings which captured users mouse movements in real time as they navigated the guide. We learned the average time on page was 2.8 minutes, with the longest being 19 mins and the shortest less than 3 seconds. The recordings are consistent with the heatmap and suggest most users scroll down to the bottom of the page and click on the “More APA Examples” link. Links to particularly interesting example recordings are below.
   - Common behaviour: http://insights.hotjar.com/p?site=660447&recording=909353253&token=b94d5e64fda510ac1032fad6bd0a1f16
   - Interesting mouse movements: http://insights.hotjar.com/p?site=660447&recording=909219768&token=8db1ff53d66ea9b4d944d5dd28321d0
   - Mobile user: http://insights.hotjar.com/p?site=660447&recording=909435569&token=f2842a19cf147872aaaf891f2f0913502
UX Librarians’ Takeaways

- Participants in this study use Primo as the starting point (and often the only place) for their research, and they seem content with what they find. If the library wishes to position the guides as the starting point for student research, this may be a challenge. Primo is familiar, easy to use, and gets the students what they need. We need to consider the guides in light of Primo. How do they complement one another? How are each positioned on the library website? How are each positioned in library instruction?
- How can we make sure guides are kept up to date and highly relevant to course assignments? (Can we prioritize quality and relevance over quantity of guides? Can we work more closely with faculty?).
- How can we make our language more specific and better match student expectations?
- How can we better orient students on the course guides? (E.g. short explanatory sentences, reduce to 1 or 2 columns).
- Can we put the resources they need most at the forefront? (E.g. Articles first; background information is less important to the students).
- What purpose are the subject guides serving? How is this different than the database list?
- How can we promote the breadth of topics covered by LibGuides? Often students land on one course guide and then never revisit the platform again primarily because they don’t understand what LibGuides are and how they can be helpful beyond a specific course guide.
- The database list is variously called “databases”, “database list” (under Find), and the page itself is called “A-Z Databases”. Moreover, the database list includes more than databases (e.g., reference works, full text primary source archives, etc.). How can we make language on the website more consistent, more specific, and more descriptive?

Debrief with Melanie, Lindsey, and Kailey

Some results confirmed what we already know:

- Fewer columns (1-2) is preferred to 3 columns on LibGuides.
- There is too much information on some of the guides.
- The Ask Us “Click to Chat” widget is too big.
- The terms “topic”, “course”, and “subject” are confusing to students.
- “Course guides” is often confused with “course reserves.”
- Items on course guides should be in order of relevance to students and their assignments.
- Students do not know what “background information” means in the context of the course guide.
- Students need some descriptive or explanatory text on the guides to help them understand what they are looking at and how it is intended to be used.
- Students expect the search boxes on the LibGuides platform to be discovery tools.
- Students perceive course guides as “help guides” and conflate the guides with other sources for help, like Search Tips in Primo.

We were surprised to learn:
- Students interpret the Best Bets icons on the A-Z list as they do Google Ads and skip over them.
- Graduate students (especially those who completed an undergraduate degree at U of G) may be seeking out course guides for their graduate courses.
- There is some inconsistency on the library website in how guides are described (course guides, library guides).
- Students both challenge the authority of the library (e.g. Best Bets: Says who? For whom?) and believe that information found on the library website is more authoritative than information found through Google.
- Students scrolled through the list of guides, rather than using the search box to find their course guide.
- Students did not mention that they would like to see more images or graphics on the guides. They did not find the guides too bland or boring. This contradicts feedback from peer helpers.
- Students seem to use the term “class” more than “course.”
- Students do not remember their course codes, which makes it hard to search by course code.

Challenges:
- Limitations of the LibGuides platform, such as the labels “course”, “subject”, and “topic.”
- How to nudge content creators to modify guides base on evidence that:
  - If a student has a poor experience with one guide, it will discourage the student from seeking out other guides. We must ensure that all guides are current and relevant and tailored to the courses.
  - “Background Information” does not register with students.
  - Most important links (for completing assignments) must appear first on course guides, which often means subject database will appear first.
  - Guides must be kept clean and simple to be useful.

What we can do next:
- Remove the Best Bets from A-Z database page.
- Explore how LibGuides can be more visible on library website.
- Explore how LibGuides can appear more integrated with the library website (i.e. library website framing the guides).
- Explore the usefulness of creating graduate course guides.
- Explore integration of course reserves into course guides just as the integration of course guides into course reserves is already underway.
- Prioritize the most relevant resources on course guides and put them at the top. More generic sources (such as Oxford Reference, etc.) are a lower priority.
Consider including course textbooks on course guides.

Consider adding more explanatory text to help orient students on the guides. Example: Not finding the articles you need for your assignment in Primo? Try searching these databases...). If a specific item (such as a book) is on a course guide, explain why the item is there, and how it is relevant.

Consider linking to the A-Z database list on course guides. Students may want the flexibility to choose their own databases and not be limited to those selected on the course guide--especially if the course gives them a lot of flexibility to choose unique topics to research.

Consider creating a better landing page for LibGuides that helps orient users to what they are looking at.

Ensure that all links to guides on the library website use consistent language.

Consider changing the links on the library webpage from “course guides” to something better understood by students, e.g. “class guides”, “class resources”, (?). Better differentiate course guides from course reserves.

Continue to position the guides as a form of outreach. Even if the guide is not formally presented in a course, these guides reflect the library’s value to students.

Review the posters about LibGuides in bathrooms--students didn’t understand what they were and even when they intended to follow up, they didn’t remember to check the website once they left the bathroom. :)

Further reflect on how to position the guides for students when Primo seems to be students’ starting (and ending) point in research.

Consider creating a video explaining the use, purpose, and breadth of guides.

Work with UX team to study new LibGuides template in 2018. Perhaps train peer helpers to conduct some of the research.

UX team share results with C& C and IL teams.

References

