LibGuides Usability Testing
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Temple University Libraries

Introduction

In Fall of 2015, the Code Rascals group conducted usability testing on Research Guides. The purpose of our usability study was to understand how undergraduate users discover and use resources in our Research Guides, address system-level usability issues, and to generate a list of best practices for guide creators. The first phase of the study was to conduct task-based usability testing of existing subject and course guides with five undergraduate participants. We created a list of research questions to guide the design of the usability tasks.

Methods

We recruited five participants. All were undergraduates. Two were first-years and three second-years. Majors represented included English and Secondary Education, Psychology and Italian, Actuarial Science (Fox School of Business), and Biology. One participant was undeclared. Three had previously used the library website to conduct research, and had previously attended library workshops. Two had neither used the website to conduct research nor attended library workshops. Two pilot tests were conducted with library student workers prior to the actual test to ensure the success of the test script.

Each test ran 35 minutes to 1 hour and took place in a breakout room in the Libraries’ Digital Scholarship Center. Our setup included a Mac laptop, mouse, and external monitor for the facilitators to observe participants as they navigated through the usability tasks. The sessions were also broadcast to a library conference room where other library staff gathered to observe the live sessions. We asked observers in the conference room to write down usability issues. Observers were also given the opportunity to ask follow-up questions of the participants. Two members of the usability testing team facilitated the test in the DSC breakout room while two others facilitated observation in the conference room. Sessions were also recorded using QuickTime, so that we could conduct a more

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1 The decision to start with five participants was based on findings from the Nielsen Norman Group that “the best results come from testing no more than 5 users and running as many small tests as you can afford” (Why You Only Need to Test with 5 Users).
thorough analysis later. Though each live session highlighted a number of usability problems right away, we wanted the ability to re-watch the sessions as this level of analysis provides rich insights that may be overlooked during the live session.

We asked participants to complete a series of tasks using the “think-aloud” method or to “literally talk us through what you’re doing and what you’re thinking.” Each participant explored Research Guides freely for 2-3 minutes and gave us their general impressions, completed seven research-based tasks in different scenarios, and completed an “XO” test where they circled things they liked and crossed out things they did not like on printouts of a subject guide and course guide in their major or minor. The full usability script with the tasks is available here.

**Observations & Best Practices for Guide Creators**

The best practices presented below are intended to help guide creators as they design new guides and edit existing ones. They appear in a matrix format mapped to the observations and data that support each of them. These best practices are based on our initial observations in the live sessions, discussion that occurred in the co-viewing room, and from closer analysis of the recordings conducted by the testing group during Spring semester of 2016. A more detailed report of what occurred in each session is available in the full report, appended here. This list is intended to be an evolving, live document that will change over time as we learn more about how users interact with our Guides. It should not be viewed as a finalized document.

Best practices are divided into four categories: Content & Design, Navigation, and Metadata. System-level recommendations are also included.
## Content & Design

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Observation</th>
<th>Supporting Data</th>
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<tbody>
<tr>
<td>Remove embedded content from external applications like Scribd.</td>
<td>External applications create confusion and may cause content to load slowly.</td>
<td>Scribd loads slowly. P2 said &quot;Oh is it showing up?&quot; as the APA style guide loaded.</td>
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<td></td>
<td></td>
<td>P2, P4, and P5 inadvertently clicked into the Scribd site once they’d located the APA PDF handout they needed. P5 navigated to a librarian resume within Scribd.</td>
</tr>
<tr>
<td>Review external content, such as video tutorials to ensure that content is relevant and up to date.</td>
<td>Users are attracted to video tutorials that may not ultimately help them find what they need.</td>
<td>In task 1, P2 and P4 spent time viewing and attempting to scan through video content for relevant information before deeming it unhelpful for the task.</td>
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<tr>
<td>For video tutorials, include only videos that are short and relevant.</td>
<td>Extraneous information, such as explanatory text boxes and video tutorials, distracts users from finding information.</td>
<td>In task 1, P2 and P4 explored a variety of links, including video tutorials and RefWorks, on the Citing Sources guide even though the APA tab was the more efficient option. P5 commented that she was &quot;looking for steps that show how I would cite in APA style.&quot;</td>
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<tr>
<td>Keep “Why” information to a minimum. Gather it in one box or tab.</td>
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<tr>
<td>Structure “How Do I” guides to be task-oriented and to help users find quick information quickly.</td>
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<td>Indicate in the link description or title if a link goes to a video.</td>
<td>Tutorial links on the Citing Sources guide do not indicate that they link to audiovisual content that automatically begins playing.</td>
<td>P2 and P4 clicked on links labeled “tutorial” and videos began playing. They also spent time viewing the videos before deeming them unhelpful for the task.</td>
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<tr>
<td><strong>Customize database descriptions to guide purpose.</strong></td>
<td>Users read database descriptions when deciding which resource to use.</td>
<td>P5, a novice user, in tasks 3 and 5 spent a lot of time closely reading database descriptions. In task 5, P1 commented that the name of the database &quot;GenderWatch&quot; made her think it would be helpful for the topic feminism; she read the database description once she’s in GenderWatch.</td>
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<tr>
<td><strong>Include language or visuals that instruct users how and/or why to use a database.</strong></td>
<td>Novice users may not understand how to use a database or what an article is.</td>
<td>When P5 clicked into a database, she was unsure what to do next and spent a lot of time scrolling through lists of databases.</td>
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<tr>
<td><strong>Suggest as few databases as realistically needed.</strong></td>
<td>Users exhibit a preference for familiar resources like JSTOR. Fewer options could help build familiarity with resources users may not be aware of.</td>
<td>In task 3, P1 and P4 selected JSTOR because it was familiar. P1 scanned the list of databases, but settled on JSTOR, commenting, &quot;I used this in high school and it's familiar.&quot;</td>
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</tbody>
</table>
| **Recommend fewer databases for course or assignment-based guides.**  
  • For subject-based guides, list no more than three best bets databases at the top of the page. | Users show a preference for familiar resources like JSTOR and for those that are listed first on the page. They are drawn to databases described as "Best Bets." | In task 5, four participants chose JSTOR or GenderWatch, the first two databases listed under "Recommended databases." One commented, "this one (GenderWatch) is first so I would probably pick that. It also says it's a Best Bet, so sounds good." |
| **Include language and/or visuals that instruct users on how and when to use an embedded search box (such as Summon search boxes).** | When presented with a search box and a list of databases, users don’t necessarily know when to use the search box as opposed to the list of | For tasks 3.1 & 3.2, some participants used a list of databases when a search box was present and vice versa. No participants stated any reasons for choosing one over |
Choose either an embedded search box or a list of databases.
- If you include a search box, ensure that it is highly visible. If you must include both, ensure the search box makes sense alongside a list of databases.

Some guides present a Summon search box and lists of databases without explanation of why both might be needed.
Whether presented on the same page or another page of the guide, users may overlook a search box when looking for articles.

In task 3, four participants used the “Find Articles” tab and scanned lists of databases, while only one immediately searched Summon to find an article on the topic public art. P1 expressed a desire to search, “here I wish I could search,” on a Find Articles tab when there was a Summon search box on the homepage of the guide.

Design guides so that they work for audiences with a range of research skill levels.

Novice users may not have a conceptual understanding of what an article is, and they may not know how to use a database.

P5 was repeatedly unable to locate articles and books despite being able to navigate to pages of guides with links to databases and the catalog. In task 3, P5 clicked on a Find Articles tab, and scanned the links on that tab, commenting that she was looking for “any articles that looked like it would relate to the public.” She then entered a database but did not search. P5 made it into the catalog to find a book, but was hesitant to select a book and finally chose a dissertation.

Provide multiple options for getting help.

User preference varies when it comes to how they want to seek assistance from a librarian.
P2 commented that she would want to talk to the librarian, P5 commented that she would visit the librarian in her office,
and P1 expressed a preference for email as the mode of communication.

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<tr>
<th>Indicate the response time associated with each method of communication.</th>
<th>Users may not know the turn-around time for various methods of getting help.</th>
<th>P5 commented that she would call if she needed to talk urgently, but if not she would probably email.</th>
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<tr>
<th>For custom database descriptions, select “Display beneath item title” for Description display (not the i/hover)</th>
<th>‘I’ icon is small and difficult to click. Users read descriptions when selecting a database.</th>
<th>In task 2, P2 clicks on the little “i” icon next to Aesthetics guide and nothing happens.</th>
</tr>
</thead>
</table>

| Be cognizant of what you are choosing as the first link to appear on a page or in a box | Users chose databases that are at the top of the list or page. | In task 3, P1, P3 and P4 chose databases at the top of a list or page. In task 5, P1, P2, P3 and P4 chose databases that were listed at the top of the databases list. |
## Navigation

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Observation</th>
<th>Supporting Data</th>
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<tbody>
<tr>
<td>Avoid tab names that do not have meaning to users across contexts.</td>
<td>Users may not understand the meaning of course or assignment specific language. A tab name on a course guide may hold meaning for a student in that course, but that does not mean it will hold meaning for a user who encounters the guide in a different context.</td>
<td>In task 5, the Find Known Articles tab was problematic. Despite this tab having a different purpose, P1, P2, P4 and P5 navigated to this tab to find articles even though there was a more viable option present for finding articles on a topic.</td>
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<tr>
<td>Use standard language for tab names such as Find Books, Find Articles, and Get Help.</td>
<td>Users understand “Find Books”, “Find Articles”, and “Get Help” tab labeling that we currently use.</td>
<td>In task 3, P1, P2, P4 and P5 navigated to the Find Articles tab to find an article and P1, P4, and P5 used the Find Books tab to find a book. For task 5.2, all five participants successfully navigated to the Get Help with Research tab.</td>
</tr>
<tr>
<td>Structure “How Do I” guides to be task-oriented and to help users find information quickly.</td>
<td>Extraneous information, such as explanatory text boxes and video tutorials, distracts users from finding information.</td>
<td>In task 1, P2 and P4 explored a variety of links, including video tutorials and RefWorks, on the Citing Sources guide, even though the APA tab contained the information they needed. After reading help content and watching tutorials, P2 returned to the guide homepage and said, “Oh wow I just saw the tabs, I didn't even look at the top.” P5 commented that she was “looking for steps that show how I would cite in APA style.”</td>
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<tr>
<td>If explanatory text in the</td>
<td>Users may not notice tabs</td>
<td>In task 1, three participants</td>
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<tr>
<td>Best Practice</td>
<td>Observation</td>
<td>Supporting Data</td>
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<tr>
<td>Use descriptive and ample tagging.</td>
<td>Users have difficulty selecting a guide to research a broad topic.</td>
<td>In task 2, all participants expressed uncertainty when selecting a guide to research public art in the absence of a subject or guide explicitly titled “public art.” Three participants looked for “public art” as a subject. This should help with discoverability of guides.</td>
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<tr>
<td>Tag course guides with relevant course topics.</td>
<td>Searching for guides on broad topics, such as public art, may not bring up related course or subject guides.</td>
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<tr>
<td>Apply subjects to guides.</td>
<td>Users have difficulty conceptualizing what guides are.</td>
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<tr>
<td>Include an explanatory guide title and description.</td>
<td></td>
<td>In task 3, two participants expressed further uncertainty that they were on a research guide when they arrived at the selected guide. One asked, “this Art History page is a guide that I can use for research?”</td>
</tr>
<tr>
<td>Links should be assets, not links in rich text boxes.</td>
<td>Some guides still contain links in rich text boxes.</td>
<td>No usability issues associated with this; however, this has been established as a best practice for ADA compliance.</td>
</tr>
<tr>
<td>For course guides, use the naming convention “Course Title: Course Code” to make lists easier to browse, e.g. Youth Cultures: EDUC 0817</td>
<td>It is overwhelming for users to scan the All Guides list for a specific guide.</td>
<td>Browsing the list for a specific guide was time-consuming and sometimes unsuccessful.</td>
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</tbody>
</table>
or Asian Behavior & Thought: REL 0811/ ASST 0811.

looking for course numbers and letters when scanning the All Guides list. She stated a preference for course code.

### System-level changes

Some issues, especially those related to discoverability of guides, will need to be addressed at the system-level through homepage customizations and system-level design changes. Recommendations to consider are below.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>System-level Observation</th>
<th>Supporting Data</th>
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<tbody>
<tr>
<td>Make the search box more prominent on the page and provide instructions.</td>
<td>Users may not notice the site search.</td>
<td>Only one participant used the homepage search to locate a guide in one task out of three where search would have been appropriate.</td>
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<tr>
<td>Possibly delete All Guides button.</td>
<td>Browsing the list for a specific guide was time-consuming and sometimes unsuccessful.</td>
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<tr>
<td>Remove the “i” for more information icon, or make it larger and easier to click.</td>
<td>‘I’ icon is small and difficult to click.</td>
<td>In task 2, P2 clicks on the little “i” icon next to Aesthetics guide and nothing happens.</td>
</tr>
<tr>
<td>Add number of guides to subject links to indicate that there are more options when the user clicks.</td>
<td>Users may not realize that there is a hierarchy in the page, because it’s not visible behind the accordion dropdown.</td>
<td>One participant expressed surprise that clicking on the Art subject link opened up a more detailed list of guides.</td>
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<tr>
<td>Clean up tags at system-level by removing duplicates and splitting tags with underscores into multiple words.</td>
<td>Participants had difficulty selecting a guide to research a broad topic. This should improve search functionality, so that guides</td>
<td>In task 2, all participants expressed uncertainty when selecting a guide to research public art in the absence of a subject or guide explicitly titled “public art.” Three</td>
</tr>
<tr>
<td>Consider a different layout of the Guides homepage. Subject categories may not necessarily be the best for discoverability.</td>
<td>tagged with course topics and other related terms show up in search results.</td>
<td>participants looked for “public art” as a subject.</td>
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<td>Maintain prominence of “Sources for Courses” and “How Do I” links on the homepage.</td>
<td>Having links to guide types broken out on the side navigation of the homepage helps users navigate to course and how do I guides.</td>
<td>In task 1, P1, P2, P3, and P4 used “How Do I” links to find the Citing Sources guide. In task 4, P1 and P4 used the “Sources for Courses” link to find the Audre Lorde Seminar guide.</td>
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<tr>
<td>Delete “By Librarian” link in navigation bar.</td>
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<tr>
<td>If we keep subject hierarchy on homepage, we may want to rethink presence of both subject expert and subject homepage links in blue area of dropdown.</td>
<td>Subject homepages and Subject Expert pages both appear in subject dropdowns. Both contain very similar information, and it is not clear to the user which to select. The Subject homepages also contain a tab with subject databases.</td>
<td>No specific usability problems occurred. We encountered this issue during analysis.</td>
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<tr>
<td>Remove link to LibCal Appointment page and replace with link to Ask/Help &gt; Appointments page on main website.</td>
<td>LibCal appointment page does not contain librarian subject specialties. Users have difficulty identifying librarian by subject using this page.</td>
<td>In task 6, P1 first tried the Schedule an Appointment link from the More Ways to Get Help box and was unable to locate the Religion librarian from this page.</td>
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The new subject specialists page contains librarians’ subject areas and a link to make an appointment.

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<tr>
<th>Action</th>
<th>Users have difficulty conceptualizing what guides are.</th>
<th>Two participants expressed further uncertainty that they were on a research guide when they arrived at the selected guide. One asked, “this Art History page is a guide that I can use for research?”</th>
</tr>
</thead>
</table>
| Brand guides as “Research Guides” with a new banner and descriptive information in the header section.  
  - Add something more descriptive to header to indicate that all pages here are considered Research Guides.  
  - Provide instructions about what the guides are and what to do from the homepage. |                                                         |                                                                                                  |
| Create a better hierarchy of text on all guides by increasing the font size of box headings. | Large headings allow users to quickly scan the page and identify sections of content that are most useful to them. | In task 5, the Recommended Databases section is presented in large font. Three of the participants navigated quickly to that part of the page once they landed. |
| Ensure that all personal chat widgets are defaulting to the RIS queue when the individual librarian is offline. | Users encounter offline messages when librarians are not signed into LibChat and monitoring their personal queues.  
  LibAnswers includes an option to set all chat widgets to default to a departmental queue when individuals are offline. | In Task 6, when P2 navigated to the Religion librarian’s profile box, the religion librarian was shown as offline (even though the RIS queue was online at the time). |
Future Research

We plan to continue improving LibGuides by building upon the existing best practices with further user research including card sorting and a second round of think-aloud usability testing. We are currently in the midst of analyzing a round of card sorting that took place in March of 2016. In those sessions, we asked four participants to group item-level guide content together, label the groups, and rank and arrange the content groups they had created. We hope that this data can inform how we structure and prioritize content on our guides and help us to standardize the labels that we use to describe resources, especially tab and box names. For the next round of usability testing, we plan to create two or three model guides based on findings so far and test the usability of those guides. At the conclusion of the usability study, we will create guide templates that reflect our best practices.

The “XO” portion of the first round of usability testing did not work well as participants were hesitant to cross out and circle items. If we repeat the XO test during the final round of think-aloud testing, we will ask that participants circle the three or four most important content items on each tab in order to try and get more useful results.
Appendix A – Detailed Report

Participants

Five individuals completed the test. Participants included five undergraduates, two first-years and three second-years. Majors represented included Secondary Education, Psychology and Italian, Actuarial Science (Fox School of Business), and Biology. One participant was undeclared. Three had previously used the library website to conduct research, and three had previously attended library workshops. Two pilot tests were conducted with library student workers, one undergraduate and one graduate.

Questions we hoped to answer

• What general layout improvements can be made to the Research Guides homepage to help users discover and locate a variety of guide types and content including course guides, subject guides, and “How Do I” guides?
• What are users’ behaviors with guide-level navigation?
• How does the amount of information affect the navigability of guides and success of the task?
• How do users find a journal article on a topic using a guide?
• How do users find a book on a topic using a guide?
• How do users find contact information for help from a librarian?
• What do users do with an embedded search box?

Tasks we asked participants to complete using Research Guides

1. You are writing a research paper for a course, and you have to provide a citation for a book using APA style. Start at the Research Guides homepage and find information that shows you how to format a book citation using APA style. Return to the Research Guides homepage after you find the information.
2. Your instructor has asked you to write a research paper about the topic: public art. You may be unfamiliar with this topic, and that’s okay. Just select a research guide that you think might help you research public art. Remain on the guide.
3. From the selected guide, find one article and one book related to public art. Return to the Research Guides homepage after you complete this task.
4. You are taking a course called Audre Lorde Seminar (WMST 3000). Your instructor mentioned that there is a library guide specifically for this course. Find that guide. For this task, do not use the search. Once you’ve located the guide, stay there.
5. For your Audre Lorde Seminar (WMST 3000), you have to write a paper. Your instructor has specified that you must find a scholarly article on the topic: feminism. Tell me your thought process while you find a scholarly article. Return to the Audre Lorde guide after you complete the task.

6. A librarian visited your religion class and told you that you could get research help for your paper. Find the contact information for the appropriate librarian.

7. Now that you know a little bit more about research guides, go to the main library website http://library.temple.edu. Locate the research guides from our website. Do not use the site search. Remain on the Research Guides homepage when you get there.

What layout improvements can be made to the Research Guides homepage to help users discover and locate a variety of guide types and content including course guides, subject guides, and “How Do I” guides?

In four tasks, participants were asked to begin their navigation from the Research Guides homepage and locate citation information, a specific course guide, a subject guide of their choice on the topic public art, and the contact information for the Religion librarian. In the course guide task, number 4, they were explicitly told not to use the search. Participants used a range of homepage navigation options including subject links and side bar links.

(1.1) Locate information that would help you cite a book in APA style.

- All participants successfully located information on how to cite a book in APA style. Four of them chose the How Do I link on the homepage and navigated to the Citing Sources guide. One visited the All Guides link, read through the guide list, and selected the Citing Sources guide. None of the participants used the homepage search box.

(2) Locate a guide that might help you research the topic public art.

- Four participants successfully located an Art guide. Three selected a guide from the Art subject link dropdown list. Another one selected the Art subject link, but then used the homepage search to locate a guide. The final participant selected the Art subject link and scanned the list, but the facilitator eventually had to intervene to guide the final participant to a guide.
- One participant clicked on the “i” that appears next to guide names in the dropdown for more information.
- One participant expressed surprise that clicking on the Art subject link opened up a more detailed list of guides. Participants may not realize that there is a hierarchy in the page, because it’s not visible behind the accordion dropdown.
• All of the participants expressed uncertainty when selecting a guide to research public art in the absence of a subject or guide explicitly titled “public art.” Participants expressed uncertainty about choosing Art subject heading. Three participants looked for “public art” as subject headings.
• Two participants expressed further uncertainty that they were on a research guide when they arrived at the selected guide. One asked, “this Art History page is a guide that I can use for research?”

(4) Locate the course guide for the Audre Lorde Seminar (WMST 3000).
• Four participants successfully located the Audre Lorde Seminar guide.
• To get to the guide, two selected Sources for Courses from the side navigation menu, one went to the Women’s Studies subject link, and two participants went to the All Guides link and browsed. One of the participants who went to All Guides did not find the guide.
• The participant who did not ultimately find the guide commented, while scanning the All Guides page, that she was looking for the course numbers and letters to see if she could find a match. She stated a preference for the course code.

(6) Start at the homepage and find the contact information for the Religion librarian.
• All five participants successfully located the contact information for the Religion librarian. Three participants started with the By Librarian button and were unable to find the information. Of them two, and one other, selected the Religion subject link and then the Subject expert link from the dropdown menu. The other two navigated off LibGuides via one of the left side bar links to the homepage to locate the information. One of them first tried the Schedule an Appointment link from the More Ways to Get Help box and was unable to locate the Religion librarian from this page (LibCal’s scheduling page).

The Pre-task asked participants to explore guides.temple.edu and give their impressions about that the page is about and what you might do here.
• Four participants comment that guides are arranged by subject or “major.” Each participant understands that the guides are meant to help with research.
• Participants clicked on Sources for Courses, How Do Is, and into Subjects. Participants commented that there were a lot of choices in each of these categories.
• Two participants noticed that they can get help from a person.

We observed that the page communicated to users that they can do things related to
research, courses, databases, major, and subjects. Each participant noted a potential use for the site that matched our intended purposes.

**Recommendations for system-level changes:**
- Provide instructions about what the guides are and what to do from the homepage.
- Make the search box more prominent on the page and provide instructions.
- Remove the “i” for more information icon, or make it larger and easier to click.
- Add number of guides to subject links to indicate that there are more options when the user clicks.
- Clean up tags at system-level by removing duplicates, and splitting tags with underscores into multiple words to improve search functionality.
- Consider a different layout of the guides homepage. Subject categories may not necessarily be the best for discoverability.
- Consider need for All Guides button.
- Make “Sources for Courses” more prominent as it works well.
- Delete “By Librarian” link in navigation bar.
- If we keep subject hierarchy on home page, we may want to re-think presence of both subject expert and subject homepage links in blue area of drop down.
- Remove link to LibCal Appointment page and replace with link to Ask/Help > Appointments page on main website; this link should go to the new subject specialists’ page once completed.
- Brand guides as “Research Guides” with a new banner
- Add something more descriptive to header to indicate that all pages here are considered guides
- Make box headings larger so that users can scan the page easily to find the content that is most useful to them. (design)
- Address headings at system level to create a better hierarchy of text on all guides.
- Ensure that all personal chat widgets are defaulting to the RIS queue when the individual librarian is offline.

**Best practices for guide creators:**
- Use descriptive and ample tagging.
- Tag course guides with relevant course topics.
- Apply subjects to guides.
- Include a descriptive guide title and description.
• Tag course guides with course codes.
• Be cognizant that students think in terms of major.
• Follow the naming convention that includes course code and course title to make list easier to browse, e.g. Race & Identity in Judaism: REL 0802 / JEWISH ST 0802

**What are users’ behaviors with guide-level navigation?**

(1.2) Locate information that would help you cite a book in APA style.

• Each participant used the Citing Sources guide with top-tab navigation to complete this task. All participants successfully completed the task by eventually selecting the APA style tab. Three participants chose the APA style tab right away, while the other two tried various links on the Citing Sources homepage before noticing the APA style tab at the top.

(3.1 & 3.2) Find one book and one article from the guide you selected to research public art.

• All participants used guides with top-tab navigation for both parts of the task. Four participants used a Find Articles tab to find an article while one stayed on the guide homepage and searched a Summon box. Three participants used a Find Books tab to locate a book. One searched Summon for a book and one remained in the database she used to locate an article.

(5) & (5.2) Find a scholarly article on the topic feminism. The Audre Lore Seminar guide includes side-navigation and previous and next buttons.

• Four participants selected Find Known Articles tab first, but eventually navigated to the Articles & Other sources tab. One participant selected the Articles & Other Sources tab first.
• One participants who selected Find Known Articles used the Previous button to get back to the guide homepage from Find Known Articles.
• Despite the Find Known Articles tab having a different purpose, four participants navigated to this tab even though there was a more viable option present for finding articles on a topic.
• For task 5.2, all five participants navigated to the Get Help with Research tab.

**Best Practices**

• Use tab names that have meaning to users across contexts (e.g. just because the tab name on a course guide may hold meaning for a student of that course, does not mean it will hold the same meaning for a user who stumbles onto the guide for a different purpose)
How does the amount of information on a guide effect the navigability of guides and success of the task?

(1.2) Locate information that would help you cite a book in APA style.

- Two participants selected a variety of links from the Why Cite tab, homepage for Citing Sources guide, including video tutorials that did not ultimately help them complete the task before selecting the APA style tab. Participants spent time viewing the videos before deeming them unhelpful for the task.
- Three participants also inadvertently clicked into the Scribd site once they’d located the APA PDF handout embedded in the guide. When viewing the APA handout, one participant expressed confusion about the naming of the APA guide “APA guide revised” and was not sure if it was the correct version of APA.
- Tutorial links and other information on the homepage of the Citing Sources guide distracted users from locating the information that would have allowed them to complete the task. Participants were attracted to video tutorials and explanatory text boxes that did not ultimately help them complete the task.

(3.1 & 3.2) Find one book and one article from the guide they selected to research public art.

- Three participants successfully located an article. Four participants used a Find Articles tab to find an article while one stayed on the guide homepage and searched a Summon box.
- Two participants selected JSTOR and commented on its familiarity, stating that they recalled using it previously. One of them commented that she wished she could search after she scanned the Find Articles tab on the Art History Guide before choosing the link to JSTOR.
- While participants navigated to database links that were familiar and/or appeared first on the page, we also observed participants reading database descriptions in order to make a decision about which database to select.
- When searching for a book, three participants searched the Diamond search box. One searched Summon and one first searched in Art and Architecture Complete, but then went back to find a database that included books.
- We observed that the homepages of the Art History and the Architecture guides both have Summon search boxes, though only on the homepage of the guide, not the Find Articles tab. The participant who searched the Summon box, did explore the guide beyond the homepage when seeking an article and book.

(5) The fifth task asked participants to use the Audre Lorde Seminar guide to find a scholarly article on the topic feminism.
• Four participants successfully located an article.
• Once on the Articles & Other Sources tab, three participants scrolled to the Recommended Databases section and chose JSTOR or GenderWatch, the first databases listed. Two participants chose the first link on the Articles and Other Sources tab which is a link to Database Finder in a rich-text box and ended up in the Database Finder. One of them did not ultimately find an article despite navigating back into the guide and scanning other tabs and database descriptions.
• Two made comments about selecting the first database listed, and one participant commented that the name of the database "Gender Watch" made her think it would be helpful.
• The large-font Recommended Databases header worked for three of the participants. They navigated quickly to that part of the page once they landed.

Best Practices

• Links should be assets not links in rich-text boxes.
• Avoid using external applications like ScribD that may create confusion.
• If using external content, it needs to be highly relevant and focused.
• If you link to a video you should note in the asset description or link title that it is a video.
• Video should be short and relevant to the task.
• Maintain external content such as videos. Make sure it is up to date and relevant.
• How Do I guides should be task-oriented and geared to helping user find quick info or complete a task, rather than offering extraneous links that may be deemed as helpful.
• Keep “Why” information to a minimum and gather it in one box or tab.
• If text in the page has the same label as a tab name, make that text a link (e.g. APA style in center box on Citing Sources guide) For custom database descriptions, select “Display beneath item title” for Description display (not the i/hover)
• Customize database descriptions to guide purpose. Include details that tell user how or why to use a database.
• For course or assignment-based guides recommend fewer databases. Make sure databases meet needs of course or assignments. Maintain a mindset that fewer options, for instance only listing one or two databases, could help build familiarity with other resources that students may not be familiar with.
• For subject-based guides, list no more than three best bets databases at the top of the page.
• When you embed a search box, include language that instructs users on when to use the search box.
• When embedding a search box and lists of databases, think about whether both are needed. Guide authors who include a search box should consider what that means for the rest of the content on the guide. How will users know to use the search box as opposed to the list of databases or vice versa?
• Be cognizant of what you are choosing as the first link to appear on a page or in a box.

**How do users find a journal article on a topic using a guide?**

(3.1 & 3.2) Find one book and one article from the guide they selected to research public art.

• Three participants successfully located an article on public art. Four participants navigated to the Find Articles tab and then to a database. One participant searched the Summon search box from the homepage of the Art History Guide.
• One failure occurred because participant did not have a conceptual understanding of what an article was. That participant clicked on the Find Articles tab and scanned the links on that tab. When on the tab she commented that she was looking for “any articles that looked like it would relate to the public.” She then enters a database but does not search.
• The other participant selected a dissertation from Summon as an article. It should be noted that he did select “journal article” to filter the Summon search, but due to a technical glitch the filter did not apply.

(5) Use the Audre Lorde Seminar guide to find a scholarly article on the topic feminism.

• Four participants successfully located an article.
• Four participants navigated to the Find Known Articles tab, but eventually navigated to the Articles & Other sources.
• Once on the Articles & Other Sources tab, three participants scrolled to the Recommended Databases section and chose JSTOR or GenderWatch, the first databases listed. Two participants chose the first link on the Articles and Other Sources tab which is a link to Database Finder in a rich-text box and ended up in the Database Finder. One of them did not ultimately find an article despite navigating back into the guide and scanning other tabs and database descriptions.
• Two made comments about selecting the first database listed, and one participant commented that the name of the database “Gender Watch” made her think it would be helpful.
• Four participants navigated to the Find Known Articles tab, but eventually navigated to the Articles & Other sources.
• One participant selected the Articles & Other Sources tab.
Best practices

• Be aware that your users may not have a conceptual understanding of what a database or article is.
• Design guides so that they work for audiences with a range of research skill levels.
• Make box headings larger so that users can scan the page easily to find the content that is most useful to them.
• Address headings at system level to create a better hierarchy of text on all guides.

How do users find a book on a topic using a guide?

(3) Find one book and one article from the guide they selected to research public art.

• All five participants successfully located a record for a book. Three participants used the Find Books tab and used the Diamond search box to search the catalog. Of these one participants selected a dissertation after the facilitator prompted her to make a choice. Another participant stayed in the database she had selected in the previous task and selected “book reviews” to filter her search. She selected a book review and then noticed that the source was a book review and went back to the guide. From the guide she selected the ARTBibliographies database because it mentions books in the database description. The final participant searchedSummon from the Art History guide homepage and selected a book.

Best practices

• Present a find books tab?option to help users find books

How do users find contact information for help from a librarian?

(5) Use the Audre Lorde Seminar guide to find a scholarly article on the topic feminism.

• All five participants went to the Get Help with Your Research tab. One participant commented that she would want to talk to the librarian, and one commented that she would visit the librarian in her office for help.

(6) One task asked participants to find the contact information for the Religion librarian from the Research Guides homepage.

• All five participants successfully located the Religion librarian’s contact information. Three participants initially selected the By Librarian guide list, but chose another path after seeing a list of librarian names presented without subjects listed. Two of them, as well as one other participant, selected Religion from the By Subject list and found Fred’s contact information on his subject expert page within LibGuides. The other two participants left LibGuides via the Visit Us link on the Guides homepage and found Fred’s contact information on the library website.
• When the participants found Fred’s contact information in Guides, we observed that his chat box was offline.

Best practices
• Provide multiple options for getting help.
• Individual librarians or staff should indicate the time associated with each method of communication.
• Ensure that all personal chat widgets are defaulting to the RIS queue when the individual librarian is offline.

What do users do with an embedded search box?
(3.1 & 3.2) Find one book and one article from the guide they selected to research public art.
• Four participants used a Find Articles tab to find an article while one stayed on the guide homepage and searched a Summon box.
• When searching for a book, three participants searched the Diamond search box. One searched the Summon search box on the Art History guide homepage.
• We observed that the homepages of the Art History and the Architecture guides both have Summon search boxes, though only on the homepage of the guide, not the Find Articles tab. The Research Art Objects guide has a Summon search box embedded next to a list of databases, but the participant who used that guide, selected a database to find an article, rather than searching Summon.

(5.2) Use the Audre Lorde guide to Find a scholarly article on the topic feminism.

This guide does not contain an embedded search box.
Appendix B – Usability Script

Adapted from *Rocket Surgery Made Easy* by Steve Krug

Hi [participant name]. My Name is [facilitator name], and I’m going to be walking you through this session today. This is [note taker name]. [Note taker name] will observe your actions during the test and take notes. [note taker name] may also ask a follow up question or two at the end if something needs more explanation.

Before we begin, I have some information for you, and I’m going to read it to make sure that I cover everything.

With your permission, we’re going to record what happens on the screen and our conversation. The purpose of the recording is to help us figure out how to improve the site by taking a more in-depth look at how the site is used. It won’t be seen by anyone outside of the project team. Our team consists of the two of us, and three other librarians and library staff. No one else will have access to the recording.

Do we have your consent to record?

Okay, I’m going to begin the recording now.

We asked you here today to help us test the Temple University Libraries online research guides, which are a part of the Libraries’ website. We want to see whether or not the guides on our website work as intended. Based on what we learn from you and the other participants, we’ll make improvements to the guides. The session should take about an hour.

The first thing I want to make clear right away is that we’re testing the site, not you. You can’t do anything wrong here. You don’t have to worry about making mistakes here today.

As you use the site, I’m going to ask you as much as possible to try to think out loud: to say what you’re looking at, what you’re trying to do, and what you’re thinking. This will be a big help to us.

Also, please do not worry that you’re going to hurt our feelings. We’re doing this to improve the site, so we need to hear your honest reactions.
If you have questions as we go along, just ask them. I may not be able to answer them right away, since we’re interested in how people do when they don’t have someone sitting next to them to help. But if you still have questions at the end, I’ll answer them then. And if you need to take a break at any point, just let me know.

[NOTE: If participant asks a lot of questions during tasks, respond with “Just do what you would normally do” and avoid answering directly.]

I also want you to be aware that there are additional staff members and librarians from Temple University Libraries viewing this session in another room. Today we have about [number of people in viewing room]. They can’t see us, but they can hear us and see the screen.

Do you have any questions so far?

Before we start, I’d like to ask you a few quick questions.

First, what is your major and department?

Have you used the library website to conduct research before?

Have you attended any library workshops since you’ve been at Temple? A library workshop would have likely included a trip to the library or a librarian visiting your class and discussing databases, conducting academic research, or something similar.

Thank you. That’s great. We’re done with questions.

[Open up research guides in the web browser at http://guides.temple.edu]

First, I’m going to ask you to look at this page and give me your impressions of it.

Take a couple of minutes to scroll and click on a link or two. After you look around, return to the Research Guides homepage. Tell me what you think this page is about and what you might do here.

[Allow participant to look around for 2-3 minutes at most.]

Thanks.

Next, I’m going to ask you to try doing some specific tasks using this page.
For the tasks, you are going to conduct research in different scenarios. You are going to use the library’s research guides to find information for each task. As you complete each task make sure that you “think aloud” as you look for the information required. Literally talk us through what you’re doing, what you’re thinking as you click around, like “I’m going to click on this link, because x.” I’m going to read each task out loud and give you a printed copy.

And, again as much as possible, it will help us if you can try to think out loud as you go along -- tell us what you’re looking at, what you’re trying to do, what you’re thinking, etc.

Task 1
You are writing a research paper for a course, and you have to provide a citation for a book using APA style. Start at the Research Guides homepage and find information that shows you how to format a book citation using APA style. Return to the Research Guides homepage after you find the information.

[Remind the participant to think aloud if they are hesitant. Ask follow up questions if you are unsure why they took specific actions, such as

“Why did you click x?”
“What are you feeling?”
“Are you frustrated?”]

Thanks, that was very helpful.

Task 2
Your instructor has asked you to write a research paper about the topic: public art. You may be unfamiliar with this topic, and that’s okay. Just select a research guide that you think might help you research public art. Remain on the guide.

Task 3
From the selected guide, find one article and one book related to public art. Return to the Research Guides homepage after you complete this task.

[Allow the participant to proceed until the task is complete or the participant becomes frustrated. You may end the task if the participant begins to spend too much time in a database.]
Task 4
You are taking a course called Audre Lorde Seminar (WMST 3000). Your instructor mentioned that there is a library guide specifically for this course. Find that guide. For this task, do not use the search. Once you’ve located the guide, stay there.

Task 5
For your Audre Lorde Seminar (WMST 3000), you have to write a paper. Your instructor has specified that you must find a scholarly article on the topic: feminism. Tell me your thought process while you find a scholarly article. Return to the Audre Lorde guide after you complete the task.

[Follow-up question] If you had a question about finding a scholarly article, show me where on this guide you might find help. Return to the research guides homepage.

[Allow the participant to proceed until the task is complete or the participant becomes frustrated. You may end the task if the participant begins to spend too much time in a database].

Task 6
A librarian visited your religion class and told you that you could get research help for your paper. Find the contact information for the appropriate librarian.

[Follow-up question] Tell me how you would you contact the librarian?

Task 7
Now that you know a little bit more about research guides, go to the main library website http://library.temple.edu. Locate the research guides from our website. Do not use the site search. Remain on the Research Guides homepage when you get there.

If you’ll excuse me for a minute, I’m going to see if the people in the observation room have any follow-up questions they’d like me to ask you.

[Unmute observation room folks to see if they have questions. Allow 5 minutes for follow-up. Note-taker may also be excused. If there are any problems with WebEx, the notetaker may go to 309 to ask if there are follow-up questions].

[Stop recording after questions have finished].

Task 8
Now I’d like to know more about what specifically you like and don’t like, or perhaps find confusing or missing from the Research Guides. We’ll look at two guides from your major(s). You will spend approximately 7-10 minutes examining each guide. You’ll comment on each page/tab of each guide. You don’t need to talk out loud during this portion.

Here’s the first page/tab of the second guide and task instructions.

[Hand the participant the task instructions and first tab of the guide]

• Draw a circle around the things that you like and might use.
• Draw an X through things that you do not like or seem unnecessary.
• If you don’t know what something is, draw a question mark next to it.
• Please make notes right on the page, and if something is missing feel free to add it by drawing using a post-it.

Please look at the entire page, from top to bottom, and be as detailed as you can. We’d like to encourage you to mark these pages up heavily.

[When the participant finishes a page/tab, give them another one. Continue for up to 10 minutes].

Here’s the first page/tab of the second guide and task instructions. Do the same thing you did with the first.

Do you have any questions for me, now that we’re done?

[Give the participant their gift card and ask them to complete the document stating that they received it].