ENGAGING USERS THROUGH ACCESSIBLE AND PEDAGOGICAL GUIDES

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Link to slides:
Collaboration and Thanks!

Thanks also to:

• Karen Matson, Veronica Vold, James Whisenhunt, and Meg Spivey (UO Online)

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• Yoo Young Lee (U. of Ottawa)
Outcomes for Participants

- Articulate difference between pathfinder and pedagogical guide design
- Apply knowledge of text accessibility to LibGuides, specifically for graphics
- Draw or sketch out an aspect of the research process (fun for you and your students/users!)
What is the purpose of a Guide?

A curated list of "best bet" sources

Guidance and support that reflects the "Nature of Inquiry"
The Origin Story

The graphic that caught my eye...
Picking a Research Topic
Narrowing Down to a Specific Question

**General Topic:**
"I’m interested in World War Two."

**Reference Sources**

"I’m interested in Tank Warfare in World War Two."

**General Histories**

"I’m interested in Tank Warfare on the Eastern Front during World War Two."

**Specific Histories**

"I’m interested in Tank Warfare during the Battle of Kursk."

**Secondary Sources**

"I’m interested in the differences between German and Soviet Tanks in the Battle of Kursk."

**Primary Sources**

Source Levels for these types of questions:

**Paper Topic:**
"Was the design of the Soviet T-34 Tank a deciding factor in the Soviet victory at the Battle of Kursk?"
The Research Process Graphic

Figure 2. Infographic of the research process in the pedagogical guide (Stone et al., 2018).
Watch and Learn...
Classroom Experience: Accessibility as Inclusion
Two Approaches

Traditional Pathfinder vs. Pedagogical Process-Driven styles
Comparing two approaches: Navigation

### Pathfinder guide traits
- Library Special Collections
- Newspapers
- Maps
- Government Information
- Social Statistics & Data
- Reference Sources in the Social Sciences and Humanities
- Film & Video Collections
- Image Resources

### Pedagogical guide traits
- Home
  - Welcome!
  - The Research Process
- 1: Your Question
- 2: Background Information
- 3: Find Materials
- 4: Read & Evaluate
- 5: Organize, Write, & Cite
Pathfinder-style guide

Basic Research Tips
These are a few tips for conducting research. Please check out the UO Libraries’ "Getting Started with Research" guide for more detailed information.

Background Reference Research
- Get started by familiarizing yourself with basic concepts and facts about your subject. The reference resources listed on the various specific guides above will provide much of this information.
- Take note of important information: basic timelines, names of major individuals, locations, relevant institutions and/or government agencies, and so on to use as keywords for your further research.
- If there are particular theoretical or interpretative frameworks or concepts used by scholars of your subject, take note of those as well.

Search Strategies
- Research is a process. You will not find everything you need in the first search. Research requires iterating on your subject. Retry searches if you initially come up with too little material, or too much. Note new keywords and topics you discover as you search and read your works. Pay attention to what is being cited in the works you are reading, and track down the sources they cite for your own work. Give yourself time to search out sources, read those sources, and potentially do further, new searches as you learn more.
- Keywords: Before any search, select key terms that describe your subject. Proper nouns (people’s names, geographical locations, etc.) are strong, but consider other terms that when associated together are likely to describe your topic.
- Synonyms: Do not stop with your initial keywords. Frequently the terms that initially come to mind are not those used by scholars to describe the event.

Subject Headings: Library catalogs and article databases often include specific, formally defined tags to items about similar topics to each other.
- In the LibrarySearch catalog the full descriptions of titles include a section for "Subjects," which follow the Library of Congress’s rules for assigning subjects to books. For example, the Subject for World War II is "World War, 1939-1945." Subjects also combine terms according to formal rules to differentiate specific sub-areas of a subject, to denote a title about a specific location or time period, etc. So, for example, "World War, 1939-1945 – Canada" is assigned to books about Canada’s involvement in World War II. Note the specific subject headings applied to titles you are using for your work.
- Other resources, like the America: History and Life and Historical Abstracts databases, will also include Subjects, Topics, or similar headings in their item descriptions that are different from Library of Congress Subject Headings, but have a similar function, linking related titles using formal descriptive language. Note the Subjects/Topics/etc. applied in each resource you use.

Advanced Search: The "Advanced Search" in LibrarySearch allows you to perform more sophisticated searches as you go. You can combine a Subject Heading with keywords, for example, or an author with keywords (excellent for searching for specific sources produced by a prolific scholar). Get creative and dial in your research focus as you go.

Evaluating Sources
There is a lot of information out there, much of it of questionable value. There is much historical information out there marked by strong ideological or other biases, which can lead to misinterpretation or even falsification of events. When evaluating sources make the following considerations to account for these biases.
- Is the research backed up? Citations exist, in part, to ensure honesty and transparency in our scholarship, allowing us to see where an author found their information, and how they came to their conclusions. For serious research, secondary sources lacking a clear citation system are therefore suspect. This also can apply to works aimed at popular audiences, which may not include formal citations but should clearly identify sources for quotes, statistics, and so on, frequently with links to the original sources. Works that rely excessively on assertion of "facts" without citation or anonymous and/or unidentified quotes are suspect.
- Who is the author? What organization(s) (a university, a government agency, a think tank, etc.) is the author affiliated with, or sponsored by? Author biases and book prefaces or acknowledgments will often explain much of this information, and can help you to situate the work in the larger conversation.
  - Some authors, publishers, research sponsors, etc. use neutral sounding names to hide deep biases or advance palpatory false historical narratives. For example, the Institute for Historical Review uses a neutral-sounding name and professional presentation style to distribute works downplaying or denying the Holocaust. A little time searching for the organization on open internet resources (Google, Wikipedia, etc.) can expose bad actors behind seemingly "objective" works.
- "Peer Review": The foundation of academic publication is a process called peer review, where publications are sent to other scholars in their field to evaluate whether or not a title meets basic standards. Peer review can be difficult to identify for books, but when searching in article databases like America: History and Life and Historical Abstracts you can see whether or not a journal that published an article follows a peer review standard or not, and can even narrow search results to only those from peer reviewed journals. Peer review is not flawless, but by no means guarantees that a work is 100% accurate, but it does give you some assurance that the title has met basic standards.
Pedagogical-style guide
Critiquing Traditional Approaches

"Ultimately, when we construct LibGuides around the resources that the librarian thinks the student should know about in order to ace their research paper, we attempt to simplify the processes of research. Yet, as Freire points out, this is problematic because it positions research as a transferral of information, rather than as an act of exploratory and liberatory meaning-making."

Hicks, 2015
Universal Design for Learning

- **Multiple Means of Engagement**: Stimulate motivation and sustained enthusiasm for learning by promoting various ways of engaging with material.

- **Multiple Means of Representation**: Present information and content in a variety of ways to support understanding by students with different learning styles/abilities.

- **Multiple Means of Action/Expression**: Offer options for students to demonstrate their learning in various ways (e.g. allow choice of assessment type).
Graphic Design

A luxury...
Importance of Drafts
Importance of a Graphic Designer on your Team
From a Table to a Graphic

Organizing Your Research - Avoiding Plagiarism

Avoiding plagiarism means ensuring you give proper credit to those whose ideas you are borrowing in your own work through citation. One great way to track where you get your ideas is to keep good notes during your research process.

The best way to organize your research is to find a way that works for you! Here are some suggestions:

A table showing several options for organizing research:

<table>
<thead>
<tr>
<th>Notes</th>
<th>Spreadsheet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Note cards" /></td>
<td><img src="image2" alt="Spreadsheet" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Journal</th>
<th>Reference/Citation Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Research journal" /></td>
<td><img src="image4" alt="Reference/citation manager" /></td>
</tr>
</tbody>
</table>

Whatever approach you choose, consider highlighting useful search words, subject headings, and keeping track of where you found your information sources in case you or another researcher needs to go back to verify the information you cite.
Making Complex Graphics Accessible
Accessibility Tips

Headings
• Use the built-in heading options in the document or webpage style

Bullet Points
• Use the built-in bullet point option in your word processor or on the web
• Do not use the hyphen (-) or asterisk (*) for this purpose because it will not make sense to screen reader software

Text and Fonts
• Use a sans serif font (without the little “tails”) like Arial, Calibri, or Helvetica
• Make embedded PDFs readable using Adobe or a similar tool to recognize text (using OCR technology)

Links
• Use descriptive links rather than “click here.”
  E.g.: information about descriptive links from UO Communications

Use Alt Text for images
• Describe images in PDFs and webpages by using the Alt Text field
• Use your judgment when describing an image; explain how the image fits the document's context. For decorative elements, you can simply state that it is decorative (alt text: “decorative element”)
• For more information, see guidance from WebAIM for Alt Text (or Axess Lab Alt-texts: The Ultimate Guide)
• For longer graphics, consider creating a text description and linking it to the graphic.... (see next slides)
Accessibility and Springshare™

Box Type: Tabbed

Guide Navigation Layout
Alt Text Isn't Enough

It would be ideal to create the graphic in html as accessible from the get-go, but if you are using another tool like Canva or Piktochart, these are the steps to follow...

Research is a Process graphic appears in the Getting Started with Research guide.
Alt Text for Navigability & Continuity

Example of Alt Text for Infographic:

"Research is a Process" infographic: Follow the "long description" infographic link for a web accessible description.
Steps for creating an accessible infographic description

1. Create your graphic and upload it through the LibGuides Image Manager - add some alt text, e.g.: "Research as a Process" infographic. Follow the "long description" infographic link for a web accessible description.

2. Type a phrase below (or above) the graphic that uses the title of the graphic and explains there is a long text description for accessibility, e.g.: Long Description of "Research is a Process" for Web Accessibility.

3. Go to the Text Descriptions of Images in Guides guide (all instruction librarians can edit this guide) and create a new page (not just a new box), and write/type out the text version of the graphic.

4. Once your page with a text box is completed, you'll need to copy the box's link. To get the link to the box with the long/text description of the graphic, click the Edit option on the desired box (pencil logo in LibGuides) to open the Edit Box menu.

5. Click on the second tab, 'Box Link & Widget Code,' and copy the link.

6. Next, go to your graphic and paste the link over the phrase that uses the title of the graphic and explains there is a web accessible option.

>> Demo with the Getting Started with Research guide.
What About Assessment?

How do we know if this approach to guide design is better?
Crazy Egg Heat Map
A Study from Lee & Lowe, 2018

**Emotional Response Frequency**

![Graph showing emotional response frequency.](image)

*Figure 6. Emotional response frequency based on reactions to the research process, using databases, and using the assigned library guide.*

**Usability and Learning Experience**

![Graph showing usability and learning experience.](image)

*Figure 5. Average usability and user experience score for the pedagogical and pathfinder guides.*
Get User Input

• Ask your students/users; ask your employees
• Work with a UX group in your library to design a study
• Put a comment or feedback box in your guide
"Drawing not only enables students to examine their assumptions and misconceptions, they also provide librarians with a means to assess what students have learned. Before and after drawings exemplify this."  
_Brier & Lebbin, 2015_
Guide views

Guide Tracking - Total Views

1 guides, 9910 views, 8 months

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3188581 | Getting Started with Research | 591 | 2200 | 1713 | 535 | 1263 | 1008 | 1041 | 1483 | 9910
Diversity, Equity, Inclusion
**IDEAL**

<table>
<thead>
<tr>
<th>I</th>
<th>Inclusion: Cultivating a more welcoming and respectful environment for all.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Diversity: Developing and implementing equitable strategies for recruiting, retaining and advancing cadre of student, faculty and staff, with a wide variety of backgrounds, talents, perspectives and experiences.</td>
</tr>
<tr>
<td>E</td>
<td>Evaluation: Using assessment and measurement strategies to evaluate our process in meeting university’s goal of equity and inclusion.</td>
</tr>
<tr>
<td>A</td>
<td>Achievement: Ensuring that our policies, processes and practices provide access for all to achieve their personal best.</td>
</tr>
<tr>
<td>L</td>
<td>Leadership: Develop, nurture and coach leadership to facilitate inclusive environments as well as the resources for success.</td>
</tr>
</tbody>
</table>
Critiques
Cognitive Overload?
"...in the UX field, in order to minimize user tension, progress trackers show users their progress along the way by presenting information in chunks as well as in logical and numbered steps. [...] users see a clear path to completion, thereby minimizing cognitive overload (Babich, 2016)."

Lee & Lowe, 2018
"A comparison of click performance shows that students using the Short Version of the guide took more mouse clicks to complete all five tasks than students using the Long Version."

_Bowen, Ellis & Chaparro, 2018_
"In creating LibGuides that define research through its resources, we unconsciously reinforce academic power dynamics, limit dialog and marginalize the student voice from the very academic conversations that surround them."

**Hicks, 2015**
Invite your Users into the Freireian Dialogue
Welcome to My Class/Guide

1
00:00:06,000 --> 00:00:11,000
Olah Lemnos Mayama BRONWNYN Maxson so I love undergraduate engagement librarian

2
00:00:11,000 --> 00:00:16,000
Ellerby butat gadhia thematic de-list Bunyoro Poltergeists You studios' Latino Americanos

3
00:00:16,000 --> 00:00:21,000
cce in LA you. Oh see, I'm was their status in that three mystery asado
Too Prescriptive?

What's the alternative? A pathfinder?

"It was not until I limited my search to wordpress.com and then traced a bunch of links and pingbacks that I could even start to gather a sense of the conversation round the topic. Yet, ironically, it is exactly this twisting, infuriating and (occasionally) joyful process of research that is stifled by the way that most librarians structure and organize their LibGuides."

*Hicks, 2015*
Final Thoughts
Questions & Considerations

- How can librarians take a critical approach to guides?
  - Talk about info privilege;
  - Talk about “authority” of sources in new ways
- How can our guides better reflect the “nature of research” (Hicks)?
- Can we find balance between intellectual freedom while also complying with accessibility standards?
- CC licenses, open content are helpful both on graphics and whole LibGuides (make yours a 'community guide' in Springshare).
- More studies are needed retention of IL practices and guide usability
Tech Tools

Open or Freemium
• Piktochart, Canva, etc. for infographics
• YouTube for videos and captioning
• CVSimulator (App) simulates color vision deficiencies
• WebAIM Contrast Checker
• ChromeLens extension (for Chrome browser)
• Text Inspector and Readable for accessible writing for the web (English)

Subscription / Licensed
• Adobe Illustrator (graphic design)
• Panopto (video)
References


1. Various screenshots from articles at the UO Libraries' website, UO Libraries' LibGuides, and from some of the cited references in this presentation.
2. Sage on Stage from EIT.edu
3. Haren, S. "Picking a Research Topic" graphic. Wichita State libguides (No longer available online).
4. Screenshot of IUPUI University Library's YouTube Channel
5. Accessibility as Inclusion from Wilson Language
6. UDL Brains from CAST http://www.cast.org/our-work/about-udl.html#XmL_Ki2ZPNZ
7. Prototypes of student employee infographics for UO Libraries' website
8. Pencil icon from Noun Project
10. Screenshot of UO's Panopto video with captions
11. Open Lock icon from Wikipedia
12. Profile outline with question mark icon from Noun Project
Questions?

- Please ask in the chat
- You're welcome to follow up with me at bmaxson@uoregon.edu