



Guiding Special Collections Users through Multiple Discovery Platforms

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For: Boston Public Library

Evaluation Study Design and Materials
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Study Approach

[Study Design](#)

For our evaluative research, we are aiming to conduct usability testing as well as qualitative assessment to understand whether the new designs for the Special Collections part of BPL are effective. We will focus on the filtering and navigation changes as these were the biggest alterations we made to the user flow on the website. The goal is to test unfamiliar users for a 2 week period both remotely and in-person depending on availability. Qualitative assessment will help us determine if our aesthetic design choices help make the Discovery Tools and the Search & Discover features more intuitive to use. Usability testing will entail users evaluating our high fidelity prototype specifically for both aesthetic and comprehensive changes.

Research Questions and Metrics

The main pages that we are evaluating relate to our four UX and design requirements: general navigation, Discovery Tool navigation (Search & Discover page), Requesting Material navigation (Planning Your Research Visit page), and improvements in aesthetics. We are focusing on these main pages and issues because, not only are they essential aspects to finding and requesting materials through Special Collections, but these improvements in our design were based on previous research. Therefore, we hope to iterate and improve as needed based on this second round of testing.

For our requirements pertaining to aesthetics we are using Qualitative assessment to get user feedback about our improved design. For general navigation, Discovery Tool navigation, and requesting materials navigation requirements we are using usability testing to determine if patrons are successful in finding and requesting material in an efficient manner.

Requirement	Research Question	Metric	Why this metric?
Aesthetic and Emotional Requirement	Do the improvements in organization and aesthetics with images and descriptions help patrons better	User Feedback	User Feedback will address this question because it will show us that the images and other aesthetics clearly communicate its given purpose as it relates to navigation and usability.

	understand the tools and information provided by Special Collections?		
General Navigation Requirement	Can patrons easily understand and navigate to the correct Special Collections page to find the information they are looking for?	Completion Rate, Time to complete	These metrics address this question because it will demonstrate to us that patrons can easily understand our navigational improvements with icons, breadcrumbs, and feedback to navigate through Special Collections.
Discovery Tool Navigation Requirement	Does the Search & Discover page allow patrons to successfully determine the right Discovery Tool to find what they are looking for?	Completion Rate	This metric addresses this question because it emphasizes our improvements in organization, aesthetics, and filtering as it relates to successfully determining the best Discovery Tool for finding what they are looking for.
Requesting Materials Requirement	Can patrons more easily understand how to request materials after finding what they are looking for?	Completion Rate, Time to complete	These metrics will address this question because it will clarify if improvements in the presentation and hierarchy of information help users successfully request their desired material and make an appointment to see it in person

Procedure and Materials

[Study Design](#)

Qualitative Assessment

This portion of the test will be comparing the new, Figma prototyped pages of the Special Collections website with the active website as it is currently. We will first ask participants to compare images on the BPL website and our prototype in order to see whether the changes made help user comprehension of website materials and catalogs. This will be an updated version of our sorting test from the mid fidelity prototype testing with additional images based on feedback we received from those participants. The goal of this is to meet our goals of making the Special Collections website more intuitive to use as an unfamiliar user and increase scanability.

Users will also be asked to compare the images on the high fidelity prototype with that of the current BPL website. The next tasks involve comparing font sizes and icons followed by the new “step-by-step” instruction in the Visit Us section of the Special Collections website. Finally, we will have users compare the footers, tags, and breadcrumbs that we added to our prototype to see if they improved their ability to access information and navigate through the tools.

The interview script will ask users to reflect on the different versions and determine which one is easier for them to understand. Aesthetically, we are also asking users which design is more visually appealing. Materials for this interview are primarily the BPL website, the Figma prototype, and Zoom for any remote interviews.

Usability Testing

The usability test will start with a short introduction to the study and Boston Public Library website. We will ask screening questions about their experience with library materials and research for demographic purposes.

The tasks for this section will include users going through the prototype to access the redesigned pages and making judgments about how easy it is to find them and access information. Our interview script is an adapted version of our initial user research script in order to evaluate how effective the changes made to the website were to improve user concerns. Materials for this interview are the Figma prototype and Zoom for any remote interviews.

Recruitment

In order to conduct the user testing, we are hoping to recruit participants with varied experiences with technology. As with our initial user research, having a diverse group of users that range from those with experience using library search engines and research tools to those without much background in research will help inform us about how accessible the prototype designs are. Rather than focus on library knowledge specifically, we mostly want to ensure that a wide range of users are included based on their technology usage.

We will be recruiting participants through reaching out to the UMich community as with our initial user research testing. Our goal is to find people both familiar with libraries and unfamiliar that come from a diverse age and technology background. This will be done through mostly email outreach. Our contingency plan is to use convenience sampling if time and material constraints become an issue. Users should be mostly unfamiliar with the BPL website. This will be our primary focus group to attempt to reduce bias related to the previous website.

Our team will also inquire with our BPL contacts about potentially testing with familiar users remotely. If this is possible within our time limit, we will alter our study design to limit the amount of familiarizing tasks and emphasize the comparison questions to see what changes familiar users prefer from one version or the other.

Analysis

Demographics

After consulting with BPL Special Collections librarians, we decided to limit our search to those with research and library experience within the UMich community due to the limited scope and time of our usability testing period. We conducted testing with students that either worked at the UMich, used BPL services before, or had some experience interacting with library systems. Our sample consisted of 3 qualitative assessment participants and 9 usability tests. Additionally, we reached out to working professionals who had some experience with library requesting services and research processes.

We attempted to mitigate bias by alternating whether we showed the current BPL website or our prototype screens first for the qualitative assessments. Additionally, we tried to recruit those who had some knowledge of library systems in order to more accurately judge comprehensibility compared to other platforms or services.

Research Statistics/Findings

After conducting our usability tests and qualitative assessments, we came together to compile our research findings. From our usability tests, we calculated the success rate of the tasks and connected them to our previously mentioned UX requirements.

Design/UX Requirement	Task	Completion Rate
Discovery Tool (Search & Discover)	Navigating to the “Search & Discover” page (and finding the discovery tools)	6/8
Discovery Tool (Search & Discover)	Using the Filter System to narrow in on correct tools to search	4/8
Discovery Tool (Search & Discover)	Finding a department's searching guide	8/8
General Navigation	Finding where to go if one has a question	8/8
Requesting Materials	Learning about how to make a Reading Room appointment	8/8
Requesting Materials	Following appointment instructions to Aeon Reading Room Account page	7/8

Furthermore, we came together to use affinity diagramming (refer to Appendix B) to find consistent themes across our interviewees. Our results gave us a set of small adjustments to be made as well as new features that showed improvement in user experience.



We were able to find numerous similarities between our participants and matched these to our UX Requirements. We focused on issues of navigation, aesthetics, material requests, and discovery tool adjustments in order to determine which prototype additions were most well received.

Design/UX Requirement	Research Finding
Discovery Tool (Search & Discover)	<p>Discovery Tools</p> <ul style="list-style-type: none"> Confused about the difference between Archives Discovery Tool and Archives Department Wanted increase in pic size on “Search & Discover” page in proportion to TOC <p>Filter/Tags</p> <ul style="list-style-type: none"> Clarify filter system and allow users to apply the filter <ul style="list-style-type: none"> Thought pressing tags would limit the tools shown Confusion about what some of the tags are

<p>Requesting Materials</p>	<p>Making an Appointment</p> <ul style="list-style-type: none"> • Appointment steps a little too spread out • "I was looking for headers for each step to make it more clear and easy to figure out what's next" • Photos need more emphasis to make the text and outlines readable and stand out
<p>General Navigation</p>	<p>Understanding What Special Collections is</p> <ul style="list-style-type: none"> • For About Us, maybe put "Who We Are" before the "Mission" to give more context on what Special Collections offers • Follow up with Links and have video after quick links • "About Us" on the Special Collections homepage should be more concise and specific. <p>Navigation Bar</p> <ul style="list-style-type: none"> • More space between navigation bar and page content • Confusion with wording of sections and ... • Users didn't immediately go to Search & Discover. Went to Use Our Collection first to find materials <p>Table of Contents</p> <ul style="list-style-type: none"> • Table of Contents on Search & Discover needs to better represent the hierarchy of information • Asked if Table of Contents is clickable • Wanted space between the TOC links <p>Prototype Functionality</p> <ul style="list-style-type: none"> • It would be cool if there were some hover elements • Individuals tried to use buttons or press links that weren't prototyped <p>Breadcrumbs</p> <ul style="list-style-type: none"> • Thinks breadcrumbs should be on home page to maintain consistency
<p>Design Aesthetics & Emotional Response</p>	<p>Iconography</p> <ul style="list-style-type: none"> • "Because I am a fast reader, I would look to the icon immediately" • The 3 arrows under use our collections "why are the 3 arrows part of the navigation menu?" instead or arrows different icons, maybe more color

Our qualitative assessments particularly addressed the Design Aesthetics & Emotional Response Requirement. It helped us evaluate the effectiveness of different images and descriptions on the website by asking users to choose their favorite from a random set for each department and discovery tool. We also asked users to compare between the current BPL website and prototype to distinguish which they found easier to navigate and understand as users primarily unfamiliar with BPL Special Collections processes.



Design/UX Requirement	Research Finding
<p>Design Aesthetics & Emotional Response</p>	<p>Images</p> <ul style="list-style-type: none"> ● "I like the images because they are warm and inviting" ● Liked images with people in them over those without <p>Descriptions</p> <ul style="list-style-type: none"> ● Thinks descriptions for the discovery tools could use

	<p>more detail (ex. Digital Commonwealth)</p> <p>Navigation</p> <ul style="list-style-type: none"> • No images at the top of About Us so not that aesthetic or eye catching. Images to go with the tabs • It's unclear whether or not the menu is for the whole site or just Special Collections. It's also not immediately apparent what is in person and what is online • "Because I am a fast reader, I would look to the icon immediately"
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Data Analysis and Insights

Our insights from the qualitative data that we found were summarized in a few key themes:

Usability Test Insights	Qualitative Assessment Insights
<ul style="list-style-type: none"> • Improve hierarchy of Information of Special Collections Home • Headers for each step in How To Make An Appointment • Table of Contents better match hierarchy of sections on pages • Make page to apply tag filter and narrow down search • Distinguish between Archives discovery tool and Archives Department • Rethink wording of section headers to better distinguish between content • Make About Us/Home more clear with images and reordering of images 	<ul style="list-style-type: none"> • Images should be warm editing style and colors • Images have people interacting with content • More detailed descriptions • Improve Use Our Collection arrow icons • More spacing in Table of Contents

According to our affinity diagramming exercises, there was the most room for improvement in the general hierarchy of pages and contents. In other words, the clarity of the distinction of page elements and the relationship between page elements. This mostly

manifested in the discovery tools/departments, “How To Make An Appointment” steps, and table of contents.

Adjustments to Final Design

The adjustments to our final design will be primarily informed by the suggestions and common themes found in our final round of usability testing and qualitative assessments.

Some changes we plan to make include:

- Introducing headers to make step by step directions to reading room reservations easier to follow
- Make a collection of suggested images for BPL
- Edit selected images to exhibit consistent warmth, saturation, sharpness, etc.
- Alter table of contents on each page to better reflect page content and structure
- Add functionality for “apply” button for tag filter

These changes will ultimately increase the usability of navigation, improve image quality, and generally refine the prototype so that it is ready to hand off to our clients. Introducing headers to step-by-step directions for reading room reservations and altering the table of contents on each page will help make content more easily scannable and make content hierarchy more intuitive. By making a collection of suggested images for BPL and editing selected images for warmth, saturation, sharpness, etc., we will make images more descriptive, consistent, and visually appealing. Lastly, in adding functionality for the “Apply” button for tag filter, we will tie up any loose ends in our prototyping and interactions on Figma.

Appendix

Appendix A

[Study Design](#)

[2nd Round Usability Testing / Qualitative Assessment](#)

Appendix B

[BPL Figma Jam File \(Affinity Diagrams, Use Case Scenarios, Other Ideation\)](#)

[BPL Figma Design File \(Personas, User Flow, Style Guide, and Wireframes\)](#)