What Are We Doing with the Website: Transition, Templates, and User Experience in One Special Collections Library

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At the Eberly Family Special Collections Library (SCL), we have found that our website is often the first place a researcher will look to learn about our repository. Our online web presence is a business card, our chance to make a positive first impression. While our library, among others, has devoted time and resources to the development of new access tools and discovery layers, we have learned that our online presence also needs updates, revisions, and improvements. New tools and access points are valuable, but we can also improve existing tools even as we look forward to new developments in access and discovery.

Through conscious efforts to include end users' feedback in our website design decisions, we create more effective online tools. Our website is a crucial component of our efforts to direct users to our collections, and to publicize our services and programs. In this same vein, our end users can contribute to this design partnership through dedicated user experience testing. The SCL experimented with collaborative decision-making with its website committee, as well as with user experience testing in order to support our requests for additional web development work from the Libraries' Information Technology department (I-Tech). Through this process, our library gained a more holistic understanding of the needs of online special collections and archives users; we also learned how to communicate more effectively between the department who worked with end users (SCL) and the department performing the actual web development work (I-Tech). While development work was limited to working within the mandatory web template, our user experience testing and the efforts of our internal website committee resulted in a better online experience for our stakeholders, based on the feedback we received from usability testing. Although our website is always a work in

progress, we feel that we were able to develop practical ways to adjust to a website migration within in a dispersed and hierarchical information technology environment.

Review of Relevant Literature

The difficulties of conducting a specialized literature review for this topic became increasingly apparent as work progressed on this case study. While there are many articles, publications, and online resources that discuss user experience and library web design, there is little recent research on the status of web design for special collections and archives audiences, or practical guides on how to manage a website migration or transition within a large library system for those who don't have web development expertise. However, the extant body of research does reveal certain trends. One such emerging trend is the implementation of user experience (UX) testing when introducing new library services or technologies. As UX is still a developing area of professional practice, there are "a large number of general UX definitions,"[1] rather than a codified statement of all that UX encompasses. The Usability Book of Knowledge defines "user experience" as "[e]very aspect of the user's interaction with a product, service, or company that make up the user's perceptions of the whole."[2] Once again, however, the existing literature speaks to the library profession at large and is not tailored for the archival or special collections environment.

The intersection of literature about web-based services and archives tends to focus on social media outputs. For example, Whittaker and Thomas talk about the interactive opportunities that social media tools offer, allowing special collections librarians to interact with end users and colleagues and create a community that centers on an institution's cultural heritage holdings.[3] This highlights the weakness of a library website, which is typically static and not a venue for interaction between institutions and users. To engage effectively with users, a library website must connect seamlessly with other online platforms. Though a library's website is not interactive in the same way as social media, it is the first place that a researcher will look after finding a repository on social media or through a Google search. Thus, while social media strategies are critical, it is also important to maintain a navigable, intuitive website.

Just as the profession strives to be "open, transparent, user-centered, and flexible,"[4] so too should our website presence focus on and respond to users' needs. We may already embrace user-centered approaches in our social media strategies, but we also need to incorporate these principles into basic website design. Hence, the need arises to engage more proactively with usability testing as web development work moves forward. Indeed, too often, "the user narrative and the importance of simplicity are overlooked in Web interface design."[5] Usability testing is one way to ensure that websites focus on users' needs as a primary objective.

Chen and Gross focus their recent usability study on Search User Interfaces, or SUIs, highlighting the need for greater consistency in usability frameworks and standards, noting that "the term user experience (UX) [is used] as both a displacement and synonym of usability to denote the broader aspects of human experience with products and services.[6]" In this linguistic shift, the emphasis is now placed on the user. This is an important distinction to remember; in creating content for special collections and archives websites, we often post what we think a researcher needs to know. Again, as we move forward with any web design project, the user experience should be the central focus. Existing literature illustrates the ways in which "UX is proving to be an invaluable method in providing deep insights into what the user values about the library . . . which can only be a good thing in an environment in which the customer is key, engagement is essential, and continual improvement is the norm."[7]

Priestner and Borg have gathered a number of perspectives on how to create a user-focused web presence to illustrate the editors' and authors' belief "that user experience should naturally sit front and centre for us librarians as our number-one priority.[8]" These chapters present methods for applying user-centered design to both virtual and physical spaces. While these are geared towards the library environment generally, the anthology authors focus precisely on different strategies for ensuring that user experience is considered during all decision-making that affects users, a practice that can easily be extrapolated to the special collections and archival environments.

The Challenge

Keeping these tenets of user experience in mind, it becomes apparent that several of the issues are universally experienced by archival and special collections practitioners at multiple institutions. For example, special collections librarians and archivists do not always have technical web design expertise, and web designers do not always understand the special collections environment. While we share the same goals (pointing users to information that is easy to access, easy to understand, and can quickly inform information-seeking behavior), we approach these from different perspectives.

A review of the literature revealed that while social media strategies and digital collections are the usual ways in which archivists and special collections libraries have addressed online presence, the foundational online presence—the website—has not been addressed explicitly. Websites don't need to stand alone as the only online tool that can be used to communicate with stakeholders; however, it would be helpful if we could stop thinking about the website as a lackluster tool that needs to be heavily mediated or bolstered by other online tools, such as YouTube, Twitter, Flickr, or a host of other social media applications. What follows is a general assessment of common website issues we encountered, as well as a discussion of the approaches that our special collections library used to mitigate them.

There are several reasons that website development has proven particularly problematic for the SCL, as part of a larger library system. The first is that while we utilize a discovery layer well suited to print and electronic books, journals, and streaming media, our primary source collections have not integrated easily into those platforms. Our ability to request materials from the finding aids requires linking out separately from the discovery layer to a different platform. Through the years, the SCL website had grown cumbersome with links, subpages, and other content that was buried deep within the site's pages. We felt that our special collections web pages often tried to do too much and lacked a clear information hierarchy and purpose. Our institution is fortunate to have an I-Tech department, though they must handle competing resource needs and allocate time accordingly. Each campus, branch, and subject library's webpage was migrated using a set template. The new web template was

rigid and flat in order to maintain consistent navigation among the many components of the Libraries. The SCL website was migrated in September 2016.

I-Tech team members were transparent about the migration process and invited feedback from the Library community, particularly from the websites' product owners.[9] This communication structure allowed us to communicate clearly with I-Tech stakeholders about the unique needs of a special collections website. However, though both I-Tech and SCL understood the unique needs of the SCL, many of the unforeseen consequences of the migration became apparent only after completing the migration. Because of the size of the existing website, we were unprepared for the loss of content we experienced due to migration; the new web template and the complexity of the old content were not optimally compatible.

The Committee Approach

Working with a committee comprised of stakeholders can be productive, especially if those on the committee have a pragmatic approach and understand the immediate needs facing the institution. As part of a strategic reorganization in the SCL, members of the department were assigned to certain committees tasked with functional responsibilities. The SCL website committee is comprised by the website's product owner (the author and committee chair), the digital archivist, a curator, a research services team member, an instruction and outreach team member, and the digital scholarly product specialist. This ensures that all sectors in the SCL have a representative voice on the committee and can determine how the department represents itself to internal and external audiences. Though "design by committee" can pose challenges, it can also harness the expertise and institutional memory of colleagues and stakeholders.

The website committee found that articulating goals and timelines before the work progressed was helpful for us. By defining what we wanted to do with the website, we avoided the common pitfall of attempting to do too much with a website. A website is good for some things. It isn't a great fit for other purposes, so creating a defined scope before work began was helpful. The committee chair asked committee members to think about a statement of purpose for why our SCL website exists. The statement of purpose attempted to refine the website's

intent, as it was clear that the SCL webpage tried to do too much in its previous iteration. As a group, the committee determined that the purpose of our SCL website should be to provide 1) a way to search collections 2) a means to request collections and 3) a method to contact SCL staff for further information. This allowed us to take on the issue of addressing what was essential to the SCL's online presence; we were able to form a clear, straightforward approach by interrogating our perceptions of what was integral. This also allowed us to add direction to the broad scope of the committee's charge, which was "to review and make recommendations for the website (and other forms of online presence) such that access, collections, and promotion are well suited for our closed stacks setting and unique services." The statement of purpose allowed the committee to stay in scope of our charge, and to recommend a streamlined approach to make needed changes. Prior to the formation of the website committee, curators could ask for the creation of content at their discretion, which created deep pockets of information. This was helpful for researchers and for the SCL staff who knew where to search for this content, however, it created inconsistencies between curatorial units' web presence.

The past practice of design by committee produced some snags, because "[w]hen you seek opinions, people go into critique mode. But the website has not been made to be critiqued! It's been made to be used. When you ask someone to look at the site, this person is not seeing it in the way a passerby would. They are looking to find fault. The request creates a bias for critique."[10] As a result, the SCL website committee chair decided to address emerging criticism of the new Drupal website by focusing the approach on function and usability. Therefore, the next step in the iterative approach to updating and refining our web presence was to undertake a survey of peer institutions' special collections websites. Each member was tasked with evaluating the websites of regional and national peer institutions' special collections and archives. We assessed other Big 10 repositories, as well as the Ivy League institutions, and our state-related university peers: Temple University and the University of Pittsburgh. To focus our inquiry on the short-term and long-term improvements we hoped to make with our own website, we used peers' websites to answer the following questions:

1. What search functionality is provided on the website?

2. Is there the ability to browse collections or content?

3. How do patrons access navigational tools for collections?

4. What features seem to work well on this website?

5. How do researchers request material? (AEON, internal catalogs, or other tools?)

6. What features work well?

7. How does the website manage expectations for the research visit?

8. How does the website make it clear to patrons what is collected by the library or archives unit?

9. How does the institution announce exhibits, lectures, or new acquisitions?

In aggregate, our findings suggest that researchers often default to emailing staff if they aren't able to determine how to request materials or schedule a visit to the archives. The use of freely available web tools, such as Flickr, Google Forms, Twitter and blog platforms are frequently employed to perform functions that aren't supplied by the home library's web template infrastructure. These tools are also used to communicate about events and new acquisitions, as well as to gather information from instructors about class visits to the archives. In some cases, news and events appear on the main website; communications with target audiences are clearly an important outreach method. Our committee found that when navigating websites, it was helpful to have information about collections that was easy to locate. Placing collections at the front and center of the website resulted in less frustration for even our group of experienced users. We also found that search features for collections worked best when they were obviously positioned. Browsing capabilities from the main websites are not commonly provided on the websites we surveyed, including our own. The ability to browse is offered through lists of finding aids, through subject guides, or digital collections, but those frequently required linking out to other platforms. We also discovered that search options differed widely; the option to search was not always connected to the ability to request collection materials.

This survey exercise illustrated that our website was comparable to those of our peers. Furthermore, the findings of the website committee reversed several members' negative perceptions of our own website because it placed our institutions' challenges in the larger context of the challenges encountered by the field at large. This further helped us articulate what our website should do and provided the members of the website committee with other concrete examples of the similar issues faced by archival institutions, and the solutions that those institutions explored. The survey also provided templates for exemplary models, which offered aspirational goals for the members of the website committee to add to our charge.

User Experience Testing

As we acclimated to our new website, we observed that what worked for internal audiences didn't always meet the needs of external users. For example, our original search function was located on a webpage that required additional navigation in order to locate it. This was not intuitive for external users, so SCL staff developed workarounds to help researchers. User experience (UX) testing can provide a repository with clear feedback about the weak points in their online presence for various user groups. Because a good website should be able to stand alone, without requiring mediation by the organization it represents, it can be useful to watch a user struggle or succeed with a site's navigational prompts. The SCL website committee created a task list for users that covered several functional areas: basic or logistical information, information-seeking, specific targets, and open-ended feedback. With the help of the User Experience Librarian, who planned to run the tests during a part of her user experience program, we parsed the original task list (See Appendix I) into a series of six questions that would be feasible to answer within ten minutes, the maximum length of time the User Experience Librarian anticipated test subjects would be able to contribute to the testing. We asked the following of our test participants:

1. Can you find the Special Collections' Library webpage from the PSU Libraries' page?

2. Can you tell us what the Special Collections Library is, or what is its purpose?

3. What time does the Special Collections Library open on weekdays?

4. Go to the Special Collections search page. Search for "protest posters." What are you finding?

5. How would you email the reference staff with a question?

6. What do you think about this website? Please share anything that comes to mind.

For this task list, we targeted undergraduate students, an audience with whom our Special Collections Library hopes to work more closely. We randomly recruited volunteers to participate in the UX testing during passing periods between classes; we conducted the testing at a location next to the circulation desk. The seven volunteers all gave consent to have their screen actions and voices recorded, but no other information was collected from participants.

Several of the key pieces of feedback that we received while conducting UX tests with Penn State students included the following:

- Google indexing is an important way to drive traffic to the Special Collections website for both experienced and novice users.

- Students default to searching, rather than scanning the site for headings or other relevant cues.

- Generally, Special Collections and archives were unfamiliar to these students, so there are educational tasks to complete before searching can begin, for example, an introduction to Special Collections and its unique role in the Libraries. All but one of the students we interviewed had never visited Special Collections.

These user-focused tests revealed that there are broader issues that impact the website's effectiveness for certain user groups. For example, these undergraduate participants indicated a clear preference for searching the site over browsing for the relevant content. Thus, we now know that search behavior is something to incorporate into future design decisions.

We also attempted to conduct user experience testing with SCL travel grant recipients. These researchers received research stipends to visit SCL during the summer months and had more extensive expertise with various research methods. While we were only able to complete

one user experience interview with a travel grantee, it did highlight a key difference between students and those familiar with Special Collections. Experienced users are comfortable digging into various site areas and are willing to spend more time with a website. However, our website structure still posed some problems for even experienced researchers. For example, requesting archival or rare books materials required some additional dialogue with Research Services staff through telephone calls and emails. The connection between how to search and request materials is not intuitive; the travel grant researcher was able to provide concrete feedback on where the process was breaking down. While this was not a function of the website, specifically, it raised important concerns for researchers using the SCL's online interface.

Conclusions

In the iterative website migration and development process employed at Penn State, we learned that we needed to be deliberate about what development changes we recommended for the SCL website. Bearing in mind that the university libraries' upper administrative levels selected the website template and determined the deadline for implementation, we knew that a complete redesign of the website was out of the question. Instead, our efforts emphasized the goal of augmenting the existing web template to ensure it was functional for both external and internal stakeholders. Working within the confines of the template gave us clear boundaries between which to focus our attention: working with a proscribed template allowed for creativity with limits. From our work as a committee, as well as with our user experience tests, we determined that our special collections website should always include access points to search collections, a way to contact staff, and a means to request collections for research.

With our user experience testing and our collaborative work as an SCL website committee, we worked to ensure buy-in and engagement from both constituents and the individuals who work with our collections and in our spaces. Through close partnerships with our information technology department as well as the Library Assessment Department, we were able to advocate for the needs of our internal and external stakeholders. We also benefited from each member of the SCL's website committee gaining experience as user experience test subjects, in surveying peer institutions' websites, as well as in designing task

lists with which to test our own website. As a committee, we were able to embrace stakeholders' perspectives, while maintaining transparency about how and why decisions were made. While work on the website is far from complete, our approach as a committee has better positioned our Special Collections Library to embrace the changeable and evolving nature of the online environment.

Appendix I: Task List for UX Testing

Basic or Logistical Information

- Can you find the Special Collections' Library webpage from the PSU Libraries' page? Please describe.

- Can you tell us what the Special Collections Library is, or what is its purpose?

- What time does the Special Collections Library open on weekdays?

- Can you find information about food and beverage policies in Special Collections?

- Where could you find information on where Special Collections is located, or where you might park?

Information-seeking

- Are you able to find collections that relate to railroad history in the Special Collections Library? Please describe the steps that you are taking.

- Please find a book from the Charles Blockson collection. Please describe the steps as you find this book. Please request the book when you find it.

- For travel grantees: please find material from your research area.

- Go to the Special Collections search page. Search for "art education." What can you tell us about the search results that you see?

Specific Targets

- How would you contact reference staff with a question? How would you contact the Coal and Coke Heritage Center Archivist?

- If you were a professor and wanted to hold a class in Special Collections, can you find how you would do that?

- How much does it cost if you wanted to request copies or scans from material in Special Collections?

- Please describe for us how you register as a Special Collections Researcher.

Open-Ended

- What do you think about this website? Please tell us what you thought.

About the author

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Notes:

1. Walton, Graham. "What User Experience (UX) Means for Academic Libraries." New Review of Academic Librarianship 21, no. 1 (2015): 1.

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3. Whittaker, Beth M. and Lynne M. Thomas. Special Collections 2.0: New Technologies for Rare Books, Manuscripts, and Archival Collections. Santa Barbara, Calif: Libraries Unlimited, 2009.

4. Jimerson, Randall C. "Archives 101 in a 2.0 World: The Continuing Need for Parallel Systems." In A Different Kind of Web: New Connections between Archives and our Users, ed. Kate Theimer, (Chicago: Society of American Archivists, 2011) 329.

5. Riley-Huff, Debra A. 2012. Web accessibility and universal design: A primer on standards and best practices for libraries. Library Technology Reports 48 (7): 30.

6. Chen, Tsangyao, and Melissa Gross. "Usability Modeling of Academic Search User Interface." Lecture Notes in Computer Science Design, User Experience, and Usability: Understanding Users and Contexts, May 14, 2017, 18. doi: 10.1007/978-3-319-58640-3_2.

7. Appleton, Leo. "User Experience (UX) in Libraries: Let's Get Physical (and Digital)." Insights 29, no. 3 (2016): 226.

8. Priestner, Andy and Matt Borg. User Experience in Libraries: Applying Ethnography and Human-Centred Design. (Abingdon, Oxon; New York, NY: Routledge, 2016), 8.

9. At our library, a product owner is responsible for making decisions about web content, collaborating with developers about changes and updates, as well as providing strategic direction as needed. This term has been adapted to refer to the contact person for the various web products and development work at Penn State Libraries; it comes from the Scrum model of agile web development workflows. For more background information on the term "product owner," see "What is a Product Owner," Scrum.org. Accessed 3 January 2018. https://www.scrum.org/resources/what-is-a-product-owner.

10. Macomber, Laurie. "Why Web Design by Committee Doesn't Work." Bizwest 35, no. 17 (2016): 13.