

Putting the User First: The Importance of the Reference Archivist in Online Projects

By Cara S. Bertram

ABSTRACT: This article examines the role of the reference archivist in the development of online tools through usability studies. Combining examples from the University of Illinois Archives with insights from literature on the impact of technology on reference, it explores the value added by reference archivists in developing new access tools through their experience and diverse knowledge of archival theory, collections, access systems, and user interactions. It also considers the role of the reference archivist in standardized implementation of access tools in university archives to encourage successful discovery and usage of historical materials and to promote collections beyond the reading room.

Introduction

The increased online presence of university archives and their use of new technologies have allowed historical materials to become more visible to internal university stakeholders and to remote researchers. For many researchers, both external and within the university system, the website and database are all that they will see of the university archives, receiving access to finding aids, resource guides, digitized materials, and exhibits.¹ This means that reference archivists are increasingly dealing with the dynamic between the researcher and the archives' online presence. When researchers are unable to find what they are searching for using online tools, they often reach out for help from an archivist. This is when the reference archivist guides researchers through online finding aids, databases, and digital libraries.

As surrogates for the physical university archives and reading room, websites and access tools must be clear and easy to use. This can only happen if the contributions of reference archivists are central during the creation and implementation of new online access tools. Developers, who are often IT staff, librarians, and other archivists, cannot overlook the input of reference archivists and staff.² Reference archivists deal with researchers directly, conducting reference interviews, answering questions, and navigating the university's archival collection to aid in research. Through these interactions, reference archivists develop an understanding of how researchers discover online finding aids and digital materials. Reference archivists also understand the frustrations that users face and know the common questions that dealing with database and digital library interfaces raise. While not a substitute for public usability testing, the input of reference archivists can help to strengthen online tools for both archivists and users.

By combining the examples of internal usability testing of two software systems at the University of Illinois Archives with insights from literature on the impact of technology

on reference, this article explores the value reference archivists add in developing new access tools through their experience and diverse knowledge of archival theory, collections, access systems, and user interactions. It also considers the reference archivist's role in the implementation of access tools in university archives to encourage successful discovery and usage of historical materials and to promote collections beyond the reading room.

The Reading Room Online

In 1997, archivist Thomas Ruller, of the New York State Archives and Records Administration, wrote about the potential reach and impact that the Internet could have on reference services:

Imagine a tool that gives researchers 24 hour access to your archives from their homes, offices or local libraries. . . . Researchers who are not even aware of your institution will be discovering and using the information in your collections, adding new value and interpretation to these materials.³

Ruller wrote about how the New York State Archives and Records Administration was using the Internet to improve and expand user services, allowing users to review finding aids, send in questions, and request copies online and at all hours of the day.⁴ This emphasis on online catalogs and reference services is of little surprise to archivists today, but Ruller's article, among others, signals a fundamental shift in the traditional functions of the physical reading room to an online setting. With 24-hour access to information about the archives, along with finding aids and digital materials, a researcher's first impression of the archives often comes from its website and its online tools instead of the physical building and archivists at the reference desk.

In the years following Ruller's article, reference services have expanded from on site in the reading room to include online reference via e-mail and chat services. In 2008, Professor Helen Tibbo noted the rise in user expectations to be able to access digital materials and that online reference services were taking centerstage over face-to-face transactions as other functions of the archives became invisible to remote researchers.⁵ Tibbo pointed out the demand from users to access the archives online, a trend that has not tapered off. Professor Richard Cox also observed the change in how researchers use archives:

Both the access tools to materials and the collections themselves are available to anyone who can connect to the repository through an Internet service provider. Now, clients from anywhere in the world can view repository guides, bibliographic records describing collections, entire inventories, and images and sounds of collection materials remotely.⁶

Online access continues to increase, and self-service systems allow users both local and around the world to view materials and collection descriptions.

Many online tools have made self-service reference even easier for users. Instead of physical lists of box and folder inventories, searchable online catalogs, like Archon, ArchivesSpace, and Access to Memory, help researchers search across multiple finding aids and sometimes even across multiple collections. Digital libraries and other content display systems, such as the New York Public Library Digital Collections and the Densho Digital Repository, allow researchers to immediately access digitized content.⁷ Readily available resource guides, like the National Archives' Resources for Genealogists, provide valuable instruction and in-depth descriptions of resources to users without requiring them to contact an archivist.⁸ These tools make archives not just local resources, but global ones as well.

This change does not mean that the reference archivist is defunct, as e-mail has extended the reach of inquiring researchers. The University of Illinois Archives works through a high volume of reference inquiries; of the 3,089 researcher interactions⁹ during the 2016–2017 academic year, 1,785 were initiated by e-mail and all needed response from a reference archivist or staff. These e-mail inquiries covered requests including, but not limited to those 1) for high-resolution copies of images from the archives' image database; 2) for scans of documents and photographs not yet digitized; 3) for access to digitized, but offline, materials; 4) to schedule an appointment; and 5) for the intervention of a reference archivist for research help.

The questions and requests for help came from scholars, students, alumni, and genealogists from across the country and overseas, but also included university administrators, faculty, staff, and students located on campus. The number of external and internal stakeholders utilizing the University Archives' online presence makes the usability of access tools essential to engaging users and disseminating information about the collections.

An archives' online presence requires a reference archivist's input the same way setting up a reading room does. Like planning the layout of tables, unobstructed sightlines, and arrangement of self-service reference materials, the reference archivist must contribute to the functionality of the website and tools made available to researchers.

Reference Archivists and Usability

How have archivists approached the understanding of the usability of online tools? Some archivists call for redesigning finding aids to better suit user needs and an online setting.¹⁰ Tibbo stresses the need for user testing of the archives' online presence, emphasizing that sites need to be easy to navigate and understandable.¹¹ The same could be said about the databases and digital libraries that archives maintain.

Archivists have conducted numerous usability studies regarding online finding aids and databases utilizing the input of researchers and university students. Such studies provide valuable insights on users' research habits and frustrations, allowing archivists to refine tools and terminology to aid in the discovery of materials.¹² Chris Prom's 2004 study of

electronic finding aids utilized both expert and novice researchers, testing their skills at navigating through finding aids and focusing on their ability to look for collections and folders. The results confirmed that novice researchers are unfamiliar with archival hierarchies and terminology.¹³ Rachel Walton collected quantitative and qualitative data from users inexperienced with finding aids. The results revealed confusion over terminology and the lack of visual cues, and shed light on the navigation habits of the users.¹⁴ Morgan Daniels and Elizabeth Yakel performed a study on how researchers search for primary sources. They observed that archivists are sensitive to interface design, but are less focused on actual user behaviors and what makes a successful search. They urge that archivists must learn from successful search behaviors to help researchers locate archival materials.¹⁵ These studies, along with many others, are important to understanding end-user research habits, frustrations, and the accessibility of online tools. Many of these studies emphasize the need for clearer terminology, reveal confusion over archival hierarchies, and indicate users' frustration with large blocks of texts in finding aids. They also illustrate how researchers work around search problems, such as utilizing CTRL+F to find keywords in long finding aids and using Boolean operators.

However, adding reference staff as another study focus can augment the information collected from public users. Many archivists gather feedback from library or archives staff members for their usability studies, but rarely engage experienced staff. A study on the user end of ArchivesSpace by Yale University acknowledges that "users lacking basic familiarity with archival research can only provide minimum feedback on site usability and user experience for targeted searching."¹⁶ In its testing, Yale required users to have some archival research experience.¹⁷ This emphasizes the usefulness of receiving feedback from users knowledgeable in archival research as well as inexperienced users, but it does not expand on the value of involving archives and reference staff in the testing.

Little in the literature delves into reference-staff-driven usability testing in the development or implementation of archives access tools. This could indicate an assumption that archivists and reference archivists have already conducted such testing, or it can indicate that archivists and reference staff have already had a hand in the development of access tools. However, considering the wide range of access systems developed third parties, such as Archon, ArchivesSpace, Archivists' Toolkit, and Access to Memory, knowing who had a hand in the development, their institutional affiliation, and their background in archives and reference is not always possible. Reference staff cannot take for granted that tools developed by archivists and information specialists are instantly intuitive or user friendly.

What, then, is the place of reference archivists in the development and testing of access tools? Professor Wendy Duff laments that "Archivists' expertise is grounded upon knowledge of records and record creating activities. At the heart of archive theory is the record, not its secondary use nor the various types of researchers who visit archives seeking information."¹⁸ However, reference archivists focus almost solely on the secondary use of records and interact consistently with archives users, acting as guides for researchers accessing historical materials.¹⁹ Because of the nature of their work, reference

archivists are also active users of databases and digital libraries, frequently interacting with the public interface of these systems to locate relevant materials for other users. Because of this, reference archivists are in the unique position of understanding both archival theory and the needs of their researchers.

Wendy Duff, Elizabeth Yakel, and Helen Tibbo argue that reference archivists need three broad dimensions of knowledge to provide quality service: research, collections, and user interactions.²⁰ Many reference archivists and staff inevitably acquire these skills by communicating regularly with users, conducting research and answering questions, working closely with access systems and finding aids, and searching collections. This model of archives reference knowledge can help shape an understanding of what reference archivists can bring to usability studies, emphasizing their thorough understanding of archival collections, how archivists and researchers conduct research, and methods of interacting and engaging researchers.

In the same article, the authors express concern that trends such as MPLP and the increase of online finding aids and digitized collections may undermine reference archivists' collection-based expertise.²¹ While processing is a valuable way to gain knowledge of archival collections, some institutions delegate it to student workers, temporary employees, and limited-term project archivists. This concern also does not consider the expertise reference archivists can gain through extensive and varied research within collections on behalf of remote researchers. Collection expertise can also come from outreach activities, such as conducting research for exhibits, blog posts, and instructional activities. Researchers unsure about how to access materials or who are not finding what they are searching for are in many instances able to contact archivists in a timely manner. These trends do not limit reference archivists, but rather invite change and innovation.

This experiential knowledge gives reference archivists an understanding not only of the questions researchers ask, but of how to reach the answers, how staff shares information with users, and whether or not a database correctly displays collection information and metadata. These insights, the results of having one foot in the user experience and another in archival theory, are valuable assets in the creation and vetting of new access tools.

University of Illinois Archives Case Studies

In 2017, the University of Illinois Archives faced changes in its access systems and underwent internal usability testing of the University Library's Digital Library System and ArchivesSpace to ensure the quality of users' experiences. Reference archivists from University Archives helped to direct the testing, utilizing their knowledge of the collections and researcher interactions to guide the tasks. They also participated as testers in both studies. In the Digital Library System study, the tester group included University Archives reference staff, and in the ArchivesSpace study, testing included staff from University Archives, along with staff from University Library's Sousa Archives and

Center for American Music, the Rare Book and Manuscript Library, and the Illinois History and Lincoln Collections. The reference archivists directing these internal studies were able to leverage their own experiences and that of their colleagues, shaping the studies toward user services and emulating common reference procedures.

Methodology

Unlike other formal usability tests conducted by archivists with students, researchers, and the public, the two studies examined in this article were internal and informal. The purpose of the usability study of the Digital Library System was to provide feedback so that in-house developers could refine the system in its beta testing phase. The usability study of ArchivesSpace tasked the group with reporting on the feasibility of migrating the current database over to ArchivesSpace. This included a technical assessment, evaluation of the administrative end, and evaluation of the public interface.

Due to time constraints, neither study included a public user study, making the reference archivists' roles even more important as advocates for their users. An external usability test would have strengthened the evaluations of both systems, but the internal testing suited the needs of both informal studies. This does not mean that end-user testing is out of the question to further evaluate these or future tools. Further modifications applied to ArchivesSpace, which were not addressed in the initial study, could prompt another round of testing. The Digital Library System is also undergoing changes on its user end, and robust internal and external testing, in addition to the feedback provided by reference archivists, can help to further refine it as an access tool.

In both studies, Google forms with questions and tasks captured mostly qualitative feedback about the access systems being tested. Quantitative questions were presented to rank the test takers' experiences, such as the difficulty in completing a task and the intuitiveness of the public interface. They took the tests on their own time without observation by a test facilitator, working through the tasks independently and taking notes to bring back to group meetings.

The tests were designed not only to capture qualitative and quantitative data on the test takers' experiences, but also to encourage discussion within the test group about potential problems and positive features. An analysis of the results was done by group discussion, paired with a write-up of recommendations and reactions to the two systems.

Digital Library System

In phasing out CONTENTdm, the Preservation Services Unit of the University of Illinois Library designed the Digital Library System to display the library's digital collections, including visual and textual materials from University Archives. Internal testing of the system included six staff members from University Archives, including four reference archivists. A reference archivist led the usability testing within University Archives, assigning specific digital collections for evaluation to the staff based on their prior knowledge and experience with the collections. The reference archivist directed the test takers to go through basic functions of the system, such as downloading and

embedding files, while also leaving open-ended questions for qualitative observations and impressions (see Appendix A).

The questions on the test were relatively simple, but the answers revealed shortcomings in the public interface that could make user services difficult.²² The test takers noticed small things that might not strike a developer inexperienced with reference services, and their familiarity with the collections filled in the gaps of knowledge that a public tester would likely have. Drawing upon their experience in reference services, the test takers came up with several observations.

Knowledge of the collections led reference archivists to notice that there was no mechanism for displaying a collection's complete listing of subject terms in the sidebar for faceted searching. Instead, only the top 10 subject headings were accessible, even for collections that had dozens of them. Reference archivists familiar with the collections knew that there were additional terms, but could not find a way to access a full listing. Without a full display of all the subject terms, a public user might assume the collection had no more subjects and be misled as to its contents.

A familiarity with both research and user interactions allowed reference archivists to identify that the automatically generated citations lacked crucial identifying record series and box numbers. The citations instead provided the names of the digital objects, their permanent links, the University of Illinois at Urbana-Champaign Library, and the date the item was accessed.²³ None of these components led back to the original materials housed within the archives. Based on past reference inquiries, reference archivists noted that they often need to track down an original image or document within the archives based on a citation found in a publication. While the permanent link led back to the digital item, there would be no way to track down the item if the University Library changed its content management system in the future. A public user might not know that a citation was incomplete, but reference staff experienced in user transactions and the collections noticed the issue.

Reference staff also noticed that the digital library's URL remained static while they performed keyword or faceted searches for relevant content. This would impede the ability to share keyword results that pull multiple images or textual materials from within a collection or across many. This is a problem if a researcher wants to see all images relating to "homecoming," a broad and popular topic that pulled up 175 images from across numerous collections. A static URL hinders a user's ability to share search results with collaborating researchers and other stakeholders. It also impedes an archivist's ability to share results with a researcher by e-mail. Instead of sharing the results via a single link, a reference archivist would need to explain step by step how he or she arrived at the search results and trust that the researcher could emulate the process. This needlessly complicates a simple reference transaction.

After the testing, some of the feedback was incorporated into the digital library, refining it with the input from reference archivists. However, requesting earlier input from reference staff may have prevented some of the issues that reference archivists faced in the tests. Consultations with reference archivists could reinforce what elements are essential to answer day-to-day inquiries. Working out the bugs is an ongoing and collaborative process, as issues that did not occur during the usability testing have become apparent since the Digital Library System's public launching. Keeping open lines of communication between the Preservation Services Unit and reference staff continues to be an important aspect of improving users' experiences. Future improvements to the Digital Library System's user interface will involve consulting a group of stakeholders, which will include reference archivists.

ArchivesSpace

The University Archives and Special Collections staff participated in an another initiative led by a reference archivist to test ArchivesSpace for University Archives and other units. This study included nine staff members from units across the University Library's Special Collections Division: the University Archives, the Sousa Archives and Center for American Music, the Rare Book and Manuscript Library, and the Illinois History and Lincoln Collections.²⁴ The data from four separate Archon instances were migrated into a test ArchivesSpace database with no additional modifications added to it. The testing was structured into four phases, with the first three testing the public interface and the last evaluating the administrative interface. This article discusses a sample of the observations generated from phases 1 through 3: 1) Public Interface Task Completion; 2) Finding Aid Review; and 3) Public Interface Subjective Usability Assessment.²⁵ Over the course of testing, it became apparent that basic everyday tasks emulated by the test were burdensome even for experienced reference archivists (see Appendix B).

Test takers' understanding of common reference inquiries and interactions led to their concern that no easy way existed to browse thumbnails for digital images. Reference archivists knew that requests for high-resolution images make up a large portion of reference inquiries, and, with over 7,000 low-resolution image proofs in University Archives' current image database, the lack of thumbnails in search results would impede a researcher's ability to view a high volume of images quickly. Searching "Altgeld Hall," a striking-looking building on campus, came up with 144 results in the image database, making browsing easy for users. Furthermore, digital items in the ArchivesSpace database were disconnected from their original collections. Severing of digital objects from their originating collections makes it difficult to backtrack to the finding aid and to discover other related digital and physical materials for both users and reference archivists.

Test takers familiar with archival theory and the collections were confused by the database's tendency to bring up too many results. They became concerned when the database disregarded the intellectual hierarchy of archival materials, pulling up marginally related subject headings and creator records ahead of full finding aids. While

this may prove not to hinder external users, it did hinder the reference staff's ability to quickly locate finding aids and relevant materials, worrisome considering the volume of e-mail reference requests University Archives receives and the need for reference staff to quickly locate archival materials. In one example, trying to locate the Avery Brundage Collection, a heavily used and complex record series, was difficult as searching the name "Brundage" pulled up over 7,000 results. Among them were numerous subject headings, folders, individual items, and digital items, and the complete finding aid for all 442 boxes of the collection was found several pages into the search results. This significantly concerned reference archivists, who knew that researchers depend on full finding aids to navigate large and complex record series.

The test takers, who often guide researchers through finding aids, were also concerned that no easy way existed for researchers to browse the physical structure of the collections, making it difficult to identify folders and the boxes they came from. This would make answering routine requests from researchers needing scans from folders in collections comprising dozens to hundreds of boxes a difficult process.²⁶ The testing also revealed that links to PDF inventories of boxes and folders were buried in the finding aid's interface. These inventories are heavily used by both University Archives and the Illinois History and Lincoln Collections and far outnumber embedded EAD inventories. Located near the bottom of the page under an un-descriptive tab, these inventories were nearly invisible to the test takers, creating concerns over whether users would be able to easily find them.

The migration of Archon, the current collections management system used by University Archives, into the test instance of ArchivesSpace revealed many problems. The migration jumbled many of the identifying record series numbers assigned to collections. These numbers are crucial to the work of University Archives' reference archivists in locating and identifying materials for users. Record series numbers are also often used in citing archival materials in published and academic works. The data clean-up from the migration would take a great deal of time and labor to fix, but would be absolutely necessary before the database could go live.

The results of the tests on the user end of ArchivesSpace revealed the professional staff's frustration as they attempted to work through routine reference tasks. In their rankings of the user interface in phase 3 of the test, from 1 (negative) to 5 (positive), the average score never exceeded 3.²⁷ As reference staff and other archivists were unable to complete tasks or completed them with difficulty, they were not confident that public users and university stakeholders would be able to navigate the system with success.²⁸ At the very least, the difficulties that the reference staff faced would impact their ability to serve their researchers. The complexity created by having several repositories in one database system, each with many finding aids and digital objects, made the database a poor fit for the Special Collections Division. While the Special Collections Division could recommend improvements to ArchivesSpace developers, there was no guarantee that the input would be incorporated into the database. Based on the assessment gathered by archivists and the clear burden the database would place on the part of reference archivists,

along with concerns about migration and other administrative functions, the Special Collections Division recommended not to move forward with implementation.

Outcomes

Developers missed the observations made by test takers in both studies, among many others, which public users may also have missed. Thus emphasized is the need for input from both reference staff and the public. Knowledge of archival practices and an expertise in researcher habits allowed reference archivists to detect these issues and to articulate the importance of fixing them. These flaws in the access systems could hinder a user dealing directly with a database or in future interactions with a reference archivist. Something as simple as an incorrectly generated citation can make tracking down originals difficult or impossible, thus making a routine inquiry problematic. Experience in user interactions allowed reference archivists to anticipate the needs of their researchers and spot where the access tools could come up short.

Conclusion

In these instances of evaluating new access systems, University Archives reference archivists provided valuable feedback to help shape the development of one access tool and wrote recommendations about the implementation of another. Basic flaws in these access tools that hinder usability cannot be ignored, especially given the heavy use of online databases to disseminate the university's history by providing access to finding aids, born-digital and digital surrogates of records, sound recordings, videos, and images. Reference archivists must be consulted regularly in the development of access tools and in the testing of third-party systems.

The input from reference archivists and a basic understanding of the work that they do can help preempt many usability problems before databases and digital libraries end up in front of users. While reference archivists cannot predict every usability problem, their input would steer the access tools in a more user-friendly direction. Cohesive collaboration between IT specialists, archivists, and reference staff would mean that the access tools require less of a learning curve and that less work would be needed in the end phases of the project. Reference archivists can help emphasize the need for functionality of the access tool over the aesthetically pleasing or simplified forms that developers might desire.

Of course, the input of reference archivists is not a silver bullet for all usability issues. The deep familiarity that reference archivists have with the access system they currently use, their experience as professional researchers, and their thorough understanding of the structure of archives present other problems. They cannot replace important information that can be gathered from testing with general users. Usability studies with end users reveal how researchers experienced and inexperienced with archival databases approach their searches and work around faults in the system, what elements in terminology confuse them, and how much they understand accessing archives in general. Reference archivists cannot duplicate these results. The studies conducted by

the University of Illinois are not meant to encourage supplanting end-user studies, but rather to emphasize what reference archivists can contribute. For the best results, the input of and usability testing with reference archivists needs to be paired with thorough usability studies conducted with end users.

Reference archivists need a seat at the table in the development of online access tools and not just a one-off occasion for comments. Even before technical work on a project begins, easy steps can be taken to help focus the quest for usability. Developers can survey reference staff and find out what they like and dislike about current databases and digital library systems, utilizing basic questions such as

- What are the most common complaints or challenges about the current database that users relay back to reference staff?
- What elements of the current database are essential to reference archivists in their work?
- What elements in the access tool do reference staff find redundant or cumbersome?
- What elements can be added to help reference staff to aid researchers or researchers to help themselves?

This simple feedback can help guide developers, who may rarely interact with users, in creating a straightforward user interface. With the shift away from the card catalog and paper finding aids in the reading room, an archives' online presence is more important than ever, and it must be a positive experience to help demonstrate the worth and value of archives to its stakeholders. Rather than frustrating users and archivists alike, an interface developed with ongoing involvement by the reference archivist will enable archives to better serve all, especially those who access the archives remotely.

Appendix A: Digital Library System Evaluation

Questionnaire developed by Anna Trammell, University of Illinois at Urbana-Champaign.

1. Name of Evaluator:
2. Collection Title:
3. Was it easy to find and navigate to this collection in the DLS [Digital Library System]? If you had any problems, please describe them.
4. Navigate to or search for an individual object or to a few objects within the collection. Please describe your reactions, both regarding the usability and the general user experience.
5. Can you easily download a file or set of files?
6. Can you easily embed a file (if applicable)?
7. Is there basic metadata (appropriate to the collection or object) present? Is it displayed clearly?
8. Please describe any problems you see in this collection that should be addressed:
9. Please describe any positive aspects of this collection that may be applied to other DLS collections:

Appendix B: ArchivesSpace Usability Testing

Questionnaire developed by Jameatris Y. Rimkus, University of Illinois at Urbana-Champaign.

Phase One: Public Interface Task Completion

Complete each task and provide/keep detailed notes on the experience via this form. Include if you were able to complete each task successfully and if you were able to do so in the manner expected. Unless otherwise stated the University of Illinois Archives is the default repository.

1. In one sentence only, describe what you expect to find when you click on each category available in the navigation bar. Was your expectation met?
Yes or No.
- 2a. Locate a photograph of DOLLS in the University of Illinois Archives repository. What is the image ID for this photograph? Where can the original (physical) photograph be located/retrieved for use? Please locate the finding aid for the record series of origin.
- 2b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 Difficult
- 3a. Please locate record series 12/3/12 in the American Library Association Archives. What is the title of this record series? Are there restrictions associated with this series? If so what are they?
- 3b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 Difficult
- 4a. Please evaluate the record for the “Brannon, Mildred J., Photographs and Papers, 1988–1990” from the Illinois History and Lincoln Collections. Can you explain how to read this record to someone new to archival research?
- 4b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 Difficult
- 5a. What repository is the “Mario Savio and Alex Hoffman Correspondence” found in?
- 5b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 Difficult
- 6a. Please locate and access the digital surrogate of the 1867–1868 “Board of Trustee Reports.” What June date is on the first page of the report?
- 6b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 Difficult

- 7a. Please locate the “Arthur N. Talbot Papers.” What is the record series number?
What is the first item listed for box 1?
- 7b. On a scale of 1 to 5, how difficult did you find this task to complete?
Easy 1 2 3 4 5 *Difficult*
8. In a short paragraph, please provide a description of your first impression of this interface. How do you expect this system to affect your current workflow? What do you like and/or dislike about it?

Phase Two: Finding Aid Review

Please review each ArchivesSpace record listed for navigability and record your experience. It can be from the perspective of a researcher/user or a staff user.

1. Please evaluate the “Avery Brundage Collection, 1908–82” record.
2. Please evaluate the “John Philip Sousa Music and Personal Papers, circa 1880–1932” record.
3. Please evaluate the “H.G. Wells Papers, 1845–1945” record.
4. Please evaluate the “Champaign-Urbana Area Home Economists, 1945–2003” record.
5. Please evaluate the “Maurice J. (Mitch) Freedman Papers, 1996–2005” record.

Phase Three: Public Interface Subjective Usability Assessment

1. How intuitive was the public interface?

Not intuitive: I had a lot of difficulty using it

Very intuitive; nothing tripped me up

1 2 3 4 5

2. How easy was it to learn the interface?

Not intuitive: I had a lot of difficulty using it

Very intuitive; nothing tripped me up

1 2 3 4 5

3. How quickly could you accomplish the tasks?

Not intuitive: I had a lot of difficulty using it

Very intuitive; nothing tripped me up

1 2 3 4 5

4. Could you remember enough to use the interface effectively in future visits?

Not intuitive: I had a lot of difficulty using it

Very intuitive; nothing tripped me up

1 2 3 4 5

5. When you made mistakes, how easy was it to recover from them?

Not intuitive: I had a lot of difficulty using it

Very intuitive; nothing tripped me up

1 2 3 4 5

6. How much do you like using the system?

Not at all

A great deal

1 2 3 4 5

7. In a short paragraph, please provide a description of your first impressions of the ArchivesSpace Public interface.

8. How do you expect this system to affect non-staff users of the archives/library (faculty, students, members of public)?

9. What do you like and/or dislike about the interface?

10. Please note any data migration issues you found. If possible, provide a link to the URL of the problem record.

ABOUT THE AUTHOR

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NOTES

1. Helen Tibbo, "The Impact of Information Technology on Academic Archives in the Twenty-first Century," in *College and University Archives: Readings in Theory and Practice*, ed. Christopher J. Prom and Ellen Swain (Chicago: Society of American Archivists, 2008), 39.
2. This article uses terms such as "reference archivist," "reference staff," and "reference specialist" interchangeably. Not all archives use reference archivists or refer to reference staff as archivists, but the contributions of those who work in archival reference and actively interact with researchers are essential, whether made by dedicated reference archivists, lone arrangers, or other archives and library staff.
3. Thomas J. Ruller, "Open All Night: Using the Internet to Improve Access to Archives: A Case Study of the New York State Archives and Records Administration," *The Reference Librarian* 26, no. 56 (1997): 162.
4. *Ibid.*
5. Tibbo, "The Impact of Information Technology on Academic Archives in the Twenty-first Century," 37–39.
6. Richard J. Cox, "Machines in the Archives: Technology and the Coming Transformation of Archival Reference," *First Monday* 12, no. 11 (2007), <http://firstmonday.org/article/view/2029/1894>.
7. "The New York Public Library Digital Collection," The New York Public Library, <https://digitalcollections.nypl.org>; "Densho Digital Repository," Densho, <https://ddr.densho.org>.
8. "Resources for Genealogists," National Archives and Records Administration, <https://www.archives.gov/research/genealogy>.
9. "Researcher interactions" are defined as reference exchanges via e-mails, phone calls, letters, and on-site visits, and may not reflect the number of actual researchers served during the interaction; that is, a class visit may be counted as one on-site visit, but multiple individuals were served in that one interaction.
10. For further reading on restructuring finding aids, please refer to Richard Cox, "Revisiting the Archival Finding Aid," *Journal of Archival Organization* 5, no. 4 (2008): 5–32; J. Gordon Daines III and Cory L. Nimer, "Re-Imagining Archival Display: Creating User-Friendly Finding Aids," *Journal of Archival Organization* 9 (2011): 4–31; and Jane Zhang and Dayne Mauney, "When Archival Description Meets Digital Object Metadata: A Typological Study of Digital Archival Representation," *American Archivist* 76, no. 1 (2013): 174–95.
11. Tibbo, "The Impact of Information Technology on Academic Archives in the Twenty-first Century," 43.
12. For further reading on archives usability studies, please refer to Chris Prom, "User Interactions with Electronic Finding Aids in a Controlled Setting," *American Archivist* 67, no. 2 (2004): 234–68; Rachel Walton, "Looking for Answers: A Usability Study of Online Finding Aid Navigation," *American Archivist* 80, no. 1 (2017): 30–52; Morgan Daniels and Elizabeth Yakel, "Seek and You May Find: Successful Search in Online Finding Aid Systems," *American Archivist* 73, no. 2 (2010): 535–68; and Alison J. Head and Michael B. Eisenberg, "Lessons Learned: How College Students

- Seek Information in the Digital Age,” Project Information Literacy First Year Report with Student Survey Findings, University of Washington’s Information School (December 1, 2009), http://www.projectinfolit.org/uploads/2/7/5/4/27541717/pil_fall2009_finalv_yr1_12_2009v2.pdf.
13. Prom, “User Interactions with Electronic Finding Aids in a Controlled Setting,” 239.
 14. Walton, “Looking for Answers: A Usability Study of Online Finding Aid Navigation,” 43–44.
 15. Morgan and Yakel, “Seek and You May Find,” 564.
 16. Eve Neiger, Moria Fitzgerald, Tracy MacMath, and Jenn Nolte, “Usability Findings for Archives at Yale: ArchivesSpace Public User Interface” (New Haven: Yale University, March 7, 2018), 1.
 17. Ibid.
 18. Wendy Duff, “Understanding the Information Seeking Behaviour of Archival Researchers in a Digital Age: Paths, Processes and Preferences,” *Proceedings of the DLM Forum 2002* (Luxembourg, 2002), 332.
 19. George Bain, John Fleckner, Kathy Marquis, and Mary Pugh, “Reference, Access, and Outreach: An Evolved Landscape,” *American Archivist* 74, Supplement 1 (2011): 1–40.
 20. Wendy Duff, Elizabeth Yakel, and Helen Tibbo, “Archival Reference Knowledge,” *American Archivist* 76, no. 1 (2013): 86.
 21. Ibid., 92.
 22. University of Illinois Archives, “Digital Library System Evaluation” (Urbana-Champaign: University of Illinois, 2018).
 23. Ibid.
 24. Not included from the Special Collections Division was the Map Library, which does not currently utilize Archon and would not be impacted by the migration to a new third-party database.
 25. University of Illinois Library Special Collections Division, “ArchivesSpace Usability Report: University of Illinois” (Urbana-Champaign: University of Illinois, 2018), 1.
 26. Ibid., 2–4.
 27. Ibid., 5.
 28. Ibid.