



2020

Montpelier Digital Collections Project Whitepaper



NATIONAL
ENDOWMENT
FOR THE
HUMANITIES

Written By: Mary Furlong Minkoff
Contributions By: Ben Kirby & Hilarie Hicks,
3/31/2020

Contents

- Introduction to the Project 2
- MDCP Workshop 2
 - Goals and Structure of Workshop..... 2
 - Information Gathering. 3
 - Group Discussions..... 3
- Results of Workshop 5
- Specific Collection Needs. 5
 - Archaeology..... 6
 - Research and Archives..... 8
 - Architecture and Historic Preservation. 10
 - Decorative Arts and Museum Collections..... 11
- Specific Needs of Different Audiences..... 12
 - General Public: Adults..... 14
 - K-12 (K-16) Teachers and Students..... 17
 - Museum and Research Professionals..... 20
- Design & User Interfaces..... 24
 - “The Flower Groups”: Design & User Interfaces 24
 - Roots Group: Database Organization. 27
- MDCP Survey 28
- Digital Engagement..... 41
- Post-Workshop Meetings 42
- Conclusions/Next Steps 44
- Appendix I: Workshop Participants..... 46
- Appendix II: Workshop Schedule 49

Introduction to the Project

The Montpelier Digital Collections Project (MDCP) is an effort to create a multidisciplinary, publically accessible, online collections management database that meets the needs of humanities scholars, museum professionals, and the general public. The NEH-supported planning phase of this project consisted of three major components: 1) a 2 ½-day workshop, 2) an online survey, and 3) post-workshop meetings. The purpose of each activity was to gain information from a variety of experts and potential users about how to design the MDCP. Going into this project, we knew what we wanted the MDCP to be; however, we were uncertain how best to organize and present the collections information in the database and through its user interfaces to make it usable and valuable to a variety of audiences. In order to create a product that meets the needs of its end users, we thought it essential to bring together all potential users, including scholars, digital humanities experts, museum professionals, and public stakeholders, to share their opinions, experiences, and lessons learned through designing, managing, and using physical collections and digital projects. While this initial phase of the MDCP was specifically focused on Montpelier's collections, our hope is that the system we create through this collaborative work can be adapted and used by other sites, particularly former plantation sites responsible for large and diverse collections.

MDCP Workshop

Goals and Structure of Workshop

The MDCP Workshop was held July 29-July 31, 2019. Forty-four people were in attendance, including Montpelier staff, members of the Montpelier Descendant Community (most of whom trace their ancestry to people enslaved at or near Montpelier), volunteers in the Montpelier Research and Archaeology departments, and professionals and scholars from 22 institutions including museums and historic sites, academia, and non-profit organizations. (See Appendix I. for a full list of participants and their affiliations.) The workshop was organized over 2 ½ days and featured lectures, tours, and discussions. (See Appendix II. for the workshop schedule.)

The workshop had two goals: to gather information about the specific needs of each collection (Archaeology, Architecture & Historic Preservation, Archives & Digital Media, and Museum Objects & Decorative Arts), and to address the needs of each potential audience (Adult Public, K-12 Students & Teachers, and Museum & Research Professionals). To do this we divided the workshop into two primary activities: information gathering and group discussions.

Information Gathering. The beginning of the workshop focused on sharing background information about Montpelier's collections, collections management systems, and digital presence. This was done through short presentations from Montpelier staff about their collections. Montpelier staff also led attendees on short tours of the main House, *The Mere Distinction of Colour* exhibition, and the reconstructed landscape. The purpose of these tours was to allow participants to see how our staff works together to draw on the information and objects in the four different collections to reconstruct, furnish, and interpret the buildings and landscape. We also wanted attendees to see our physical collections to get a better understanding of their size, scope, and variety. This allowed us to talk about some of our unique collections management issues, including archaeological artifacts that are curated in place (meaning they are still buried in the ground), the enormous size of many of the pieces of the Architectural Collection, and the multiple ownership of objects within our curatorial and research collections.

The second aspect of information gathering was to learn about digital humanities projects undertaken by our attendees. (See Appendix II. for the list of presenters.)

Group Discussions. The second component of the workshop was group discussion. This was primarily composed of breakout sessions. Participants self-selected prior to the workshop which groups they would participate in for all the breakout sessions. For each session questions were posed to the groups as a whole, participants brainstormed individually in their journals and discussed their answers in their groups, and finally the groups reported out to the entire workshop.

The first session was focused on the specific needs of each collection type: Archaeology, Architecture & Historic Preservation, Decorative Arts, and Research & Archives. For this session, participants who are responsible for managing or using

collections as part of their work gravitated to the groups specifically discussing those needs (e.g., archaeologists gathered in the Archaeology Collections Group). Participants who did not regularly deal with collections as part of their work went to the groups that held a particular interest for them or to fill out some of the smaller groups. For example, Descendants who participated in archaeological excavations went to the Archaeological Collections Group, and a Montpelier staff member from our Development Department went to the Architecture & Historic Preservation Group.

The second set of discussions focused on how different audiences would find and use the Montpelier Collections Database. These breakout sessions were a direct response to the “if you build it they will come” attitude that was prevalent in early digital humanities projects and was discussed during Edward Ayers’ keynote address the first night of the workshop. In addition, the idea of incorporating potential users into the design process in order to create the best possible product and buy-in among these constituent groups was a guiding force in selecting workshop participants, creating the survey, streaming the workshop online, and engaging with social media throughout the process.

Three different audience groups were identified for discussion. These were: General Adult Public, K-12 Students and Teachers, and Museum and Research Professionals. Within these larger groups were specialty subgroups such as descendants, volunteers, collectors, and graduate students.

Just as they did for the collections breakout sessions, participants self-selected into discussion groups. Again, participants tended to select groups relating to the work or a personal area of interest. We organized these group discussions in a “round-robin” format. Participants ranked their first and second choices for which audience discussion group they would join (Adult Public, K-12 Students and Teachers, and Museum and Research Professionals). They went to their first choice group and discussed each question prompt and recorded their discussions on an easel pad. The participants then rotated to their second choice group and repeated the process there. One member of the original group stayed behind to explain the notes from the previous group to the new group and draw connections between the conversations. This person also presented the group’s discussion from both rotations to the workshop as a whole.

Lastly, participants returned to either their first or second audience discussion group to envision what the database, its web platform, and associated digital interpretive materials would look like. For this round we asked them to not only to list their ideas, but to draw or storyboard what this project would look like.

Results of Workshop

The workshop was successful in meeting its goals of gathering information about the specific needs of each collection and audience. The information gathered through lectures, group discussions, and one-on-one conversations ranged from the most granular details to big-picture concepts. It included technological, research, and interpretive ideas. The ideas were sometimes contradictory, but more often complementary. The overall attitude of the group was excitement for the potential for this project, with an edge of nervousness about how it was going to get done. The size and scale of the collections, along with some participants' personal history of attempting to work collaboratively with professionals in other fields without much success, felt daunting for some. However, by the end of the workshop, many participants shared how impressed they were by Montpelier staff's ability to work collaboratively and genuinely get along by checking their egos at the door. This feedback alleviated concerns about working collaboratively; however, the size and complexity of the collections remains a concern.

Specific Collection Needs.

Each group, Archaeology, Research and Archives, Architecture and Historic Preservation, and Decorative Arts were asked to center their discussions around these four questions:

1. What do we, as professionals using an internal system, need our collections management tools to do? (Stick to your collection.)
2. Pretend the public has nothing to do with this - in a perfect world, what would your management tool be able to do? What would it look like? How would you interact with it? Get into the weeds - how many pictures of one nail do you want? How many angles? How zoom-able, download-able, cite-able?

3. How could your work and your collection benefit from interacting with other collections? Be specific.
4. What problems can you imagine arising from collections interacting with each other?

Archaeology. During their conversation, the Archaeology Group bounced back and forth between the four assigned questions. However, the group listed several technical and practical components that would be necessary for archaeologists to use this system. Several overarching themes arose, including:

- the importance of preserving context
- the need for integration and flexibility of information and data systems
- the debate on the use of this system as a research database, collections management database, or both.

Several of the archaeologists were concerned about the ability to protect and include the archaeological context of the archaeological artifacts. The archaeological context, which comes from the associated spatial information, relationship with other nearby artifacts, soil descriptions, wear and use of artifacts, and archaeologists' interpretation of this data, is what gives artifacts their meaning. For archaeologists, it is the amalgamation of all of this information that is most important to them. Because of this, some archaeologists were wary of having artifact data available to non-archaeologists to use because of the fear of misinterpretation. A widely supported suggestion was to organize the database systems into a “**core plus**” structure. “Core plus,” as suggested by the participants, would be a modular system where the databases for each collection share a core set of attributes and language, but are expanded to include specifics to that field or collection (see Database Organization section for more details). It was even suggested that making our data accessible to other departments could lead to less collaboration, because the archaeologists would no longer be serving as gatekeepers. However, the fears expressed by some members of the archaeology discussion group are not shared by the Montpelier Archaeology Staff. We see the sharing of data as the first step in collaborative conversations, where the archaeologists can skip the “gatekeeper” role and go straight to interpreting and

explaining the archaeological data. Nevertheless, we wholeheartedly agree about the importance of context and incorporating contextual data into the database.

Because of this, the Archaeology Group included the ability to connect archaeological artifacts to geospatial data and other data management systems as an essential need. Ideally these connections would be dynamic and allow for additions and changes in one system to be reflected in the other. The Archaeology Group wants data to be easily exported and imported into commonly used formats, such as Comma Separated Value (CSV), in order for it to be used in other systems. While integration with other archaeological data was of primary interest to this group, they also wanted the artifact data linked to interpretive digital platforms like blog posts and digital exhibits. The archaeologists also wanted links to items in other Montpelier collections, such as documents referencing an artifact found or decorative arts object that matches the archaeological fragment, as well as non-Montpelier collections and sources for reference and comparative purposes.

The Archaeology Group also emphasized the importance of having built-in flexibility in a database. Because making new discoveries is inherent to the discipline, the ability to add new items and ask new questions is essential for preventing the database from becoming dated instantly. Specifically, the Archaeology Group wanted flexible yet structured metadata schemes, the ability to add new fields and catalog types, and to design their own queries.

This wish list led to the discussion of whether this database will be a research database, a collections management database, or both. Currently the Montpelier Archaeology databases are primarily research databases that are flexible, integrated, and well developed enough to produce robust relational queries. However, they do not function as a collections management database. Therefore, the concern is developing the collections management component while not losing the current research capabilities.

Pulling from Discussion Questions 1 and 2, the Archaeology Group listed many technical, procedural, and practical elements they would want the database to include. These are:

- A system for error checking data entry and minimizing errors through use of controlled vocabulary (possibly in drop down menus), that is limited by a hierarchical system (e.g. the descriptive fields of each object would be limited by its material)
- All data should be searchable and exportable
- Multi-user system with low learning curves making it easy for students and interns to use
- Cloud-based system and storage
- Somebody to translate between developers and archaeologists
- The ability to search by image
- Have a way for users to make their own “collections” that would be self-curated. No limits on these collections should be imposed
- Does not get bogged down
- Capacity to link other images

The Archaeology Group also suggested detailed user guidance. This includes:

- Making the written protocols for entering content into the database accessible
- Trainings for users and contributors
- Links to departmental manuals/guides relating to the database content

Research and Archives. The Research and Archives group organized their discussion around each of the four guiding questions. This was the largest group and had the most participants that regularly work creating and using digital humanities projects. The group included both archivists and users of archives who approached the questions from different starting points. For example, while the professional archivists in the group were very specific about the types of searches that exist in digital archives and wanted to include all of them (because each provides a different way to approach the data), the users of archives were concerned with ease of use, but had less specific ideas about tools and terminology.

In answering the question as to what they, as professionals using an internal system, needed from their collections management tools, this group emphasized the importance of standardized metadata and consistency in reporting, searches, and having a robust internal user interface. They wanted the ability to define user roles and

to view digital files and surrogates. They recommended using Encoded Archival Description (EAD), an XML standard for encoding archival finding aids. The arrangement and context should be plainly visible. There should be capability for multilingualism and transliteration. Linear-on-the-fly testing (LOFT), usage, and circulation location were mentioned among assessment tools.

When asked what a management tool should be able to do and how they would interact with it, the group identified a number of search capabilities that should be incorporated:

- Full Text Indexing: allows for searching the entire document text, not just metadata or keywords
- Fuzzy Search: looks for words with similar spellings
- Wildcard Search: lets you look for words that differ by one or more characters within the word
- Lucene Search: “is a full-text search library in Java, which makes it easy to add search functionality to an application or website. It does so by adding content to a full-text index”
- Multi modal discovery
- International Image Interoperability Framework (IIIF): a set of shared specifications for using, sharing, and manipulating image data
- Optical Character Recognition (OCR): a technology that recognizes text within a digital image and makes it searchable

The group also discussed data entry, which should be simple, intuitive, and user-tailored, with good documentation and an attractive front end. It should be affordable, sustainable, secure, and easy to update. There was a brief discussion of community-contributed content and how it could be vetted.

Regarding the third question, how collections can benefit from interacting with each other, participants mentioned Linked Data, the ability to search across repositories, and agent disambiguation. They also discussed, Social Networks and Archival Context (SNAC), which is an end user interface that allows users to create, edit, and search XML records using Encoded Archival Context. They noted the importance of robust context, as reliable references allow for richer discovery, remixing,

and aggregation. They wanted dynamic reporting of related content with remix, sort, filtering, and faceting.

The fourth question looked at potential problems arising from collections interacting. The participants noted that normalized metadata has to be good. There can also be problems with related content and copyright issues, as well as correct citations. It's important to maintain the histories of data abstraction (What has happened to this data?). Events monitoring was another concern, as was money.

Architecture and Historic Preservation. Like the Research and Archives Group, the Architecture and Historic Preservation Group organized their conversation and notes around the discussion questions.

In answering the first question, what internal users need from their collections management tools, the first requirement was to capture the narrative, not just the physical description. In the words of one participant, "The base data lives in the database, but the story lives in the head of the curator." The next requirement was to be able to visualize the date through photos, drawings, and showing change over time. Three stages were identified: inventory (capturing basic information), tracking, and showing the significance/story. For Montpelier, it is important to facilitate study of the 1844-1901 period (after the Madison and before the duPont ownership periods). It is also important to tie an architectural object to the location of its removal (building, room, and feature). There could be a virtual reality/visual/spatial component to place objects in space (e.g., [IMLS-supported "Bringing the Restoration of President Madison's House of Storage and into a 3D Environment" project.](#)) Finally, the ease of use was stressed.

Regarding the question of an ideal collections management tool, this group felt that the tool cannot be all things to all people. Rather than going overboard with descriptions and photos, the first priority should be organizing and high-level description. It should capture and translate various numbering systems and identifiers. The collection should be organized by building/room/etc., not just sample number. The group wanted the ability to search by location, object, type, keyword, and collection/department, with a site-wide taxonomy, and the ability to exclude from search results. The question was raised whether to formalize the collection according to AAM standards, or at least to work toward that end goal.

In discussing how collections could benefit from interacting with each other, the first advantage would be the ability to do keyword searches across collections, for example, to be able to search on “Temple” in the archaeology and document collections. Interaction would provide greater context so that staff could easily find data to inform current decisions, as well as finding the data that informed past decisions.

Several disadvantages and complications of interaction were noted. Different fields are needed, and different views are needed. At some point, there can be so much customization that the system is not meeting best practices. Standard rules would need to be established across departments (e.g., keywords and naming conventions). Architecture and landscape have to be considered as being part of the collection, which are managed by multiple divisions. However, part of the project is establishing best practices for dealing with these “disadvantages,” not just for Montpelier but for other museums that face these same challenges.

Decorative Arts and Museum Collections. The Decorative Arts and Museum Collections Group focused their discussion on Question 1, “What do we, as professionals using an internal system, need our collections management tools to do?”

The group identified a number of capabilities that the system should have, including the ability to create parent records, do batch updates, and generate label copy. An important component would be the inclusion of Nomenclature, the standardized taxonomy used in the museum field. Tracking locations, provenance, maker, date, technique, materials, and physical descriptions are additional essential fields. The system should be able to record publication information, reference notes, multimedia, conservation notes, exhibition history, and appraisals/insurance information. It should allow for digitizing paperwork from accession files. It should be keyword searchable, record relationships to objects and people, and allow for making notations and using designations/tags.

The group agreed that there would have to be standard procedures for using the system, and a way to enter the date/person for different editorial permission levels. The system should:

- have a way to have tasks assigned in a time-sensitive manner for collections projects.

- be able to give loan notifications.
- have good user design with drag and drop features.
- be aesthetically pleasing.
- have different views for cataloging records.
- allow users to create custom reports.
- allow administrators to establish what field components would be publically accessible.
- be cloud-based
- be able to handle both catalog-quality and publication-quality photos, and video and audio for objects
- allow for materials to be connected to the records, including conservation reports and exhibition materials
- be searchable by theme, place, or person

This group also recognized the importance of working with other Montpelier departments that do not regularly deal with collections. For example they suggested making sure the Communications and Marketing Department had access to the database and its contents, in order to promote it and use its content for other promotional materials and publications. They also stressed working closely with the Education and Visitors Services department to make sure that we are telling unified stories digitally and on property.

Finally, this group noted the need for a full-time database administrator, and observed that different data has different needs.

Specific Needs of Different Audiences

The majority of the second day of the workshop was spent discussing the different needs of our potential audiences. We identified three general audiences - General Adult Public, K-12 Students and Teachers, and Museum and Research Professionals - and workshop participants self-selected into groups to talk about each audience. We asked each group to center their discussions around four questions:

1. How can this database best serve your audience/users? What is your audience looking for? What are their needs?

2. What is the best way to communicate with them while they are on the site?
3. What “nitty-gritty,” practical, or technical components does this audience require?
4. How can we reach them?

From these discussions, it became apparent that the needs or wants of some audiences were in direct conflict with the needs or wants of others. For example, the groups discussing Museum and Research Professionals expressed a desire to be able to develop private accounts within the system, utilizing usernames and passwords, in order to save searches and to create curated personal collections that they could save and share. This was particularly important to museum curators from outside institutions who viewed the MDCP as a resource for researching objects and accessing materials to borrow for exhibitions. However, this contradicted the needs and wants expressed by the K-12 educators, who saw log-in requirements as a barrier to use for their students and fellow teachers. Setting up accounts and remembering usernames and passwords would take up too much class time, making the MDCP unfriendly to teachers trying to use it in the classroom.

Because of these contradictions, some workshop participants suggested that we needed to rank or prioritize different users over others. The thought was that we cannot make everyone happy, so we need to figure out who we need to make the most happy. However, the Montpelier staff thinks it is essential to the success of the project to make the Digital Collections Project equally friendly to the public and professionals. Because of this, we would like to strive for creative work-arounds for these perceived contradictions. For the example above, it would be possible to create multiple entries to the collections, some with log-in requirements and some without.

There was also some disagreement about what sub-groups of people fit into each category. These discussions were primarily centered on how college students fit into the three categories we established. While all three groups lumped graduate students into the “Museum and Research Professionals” category, each group thought undergraduate students fit within their category. Even the “K-12 Teachers and Students” renamed themselves “K-16 Teachers and Students.” Because of this, the Montpelier

staff will need to consider the unique needs of undergraduate students that cause them to straddle several categories without really fitting into any of them.

General Public: Adults. One of the first steps for this group was to figure out who actually made up the audience of “General Adult Public.” The discussion group identified two main categories of potential adult users based on their motivations for coming to the site: “Purposeful Searchers” and “Casual Browsers.” While Purposeful Searchers would come to the database first, looking for specific collections-related information, the Casual Browsers would be drawn into the collections database through online interpretive materials such as blogs or virtual exhibits.

Among the Purposeful Searchers, the group identified several sub-audiences that they thought would make up the core users of the general public, including:

- *Participants in Montpelier’s Archaeological Expedition Programs.* People come from across the country and internationally to participate in the [Archaeology Expeditions](#). They tend to be middle-aged women with a pre-existing interest in archaeology.
- *Antiques Enthusiasts.* These are “Antique Roadshow” fans including antique collectors, historic craftsmen, and non-museum professionals who use historic furnishings to inform their work, such as interior designers.
- *Descendants.* Descendants of enslaved people at Montpelier or other nearby or similar plantations. Descendants are particularly interested in objects they can connect to their ancestors and the names of individual enslaved people.
- *Family Historians & Genealogists.* This group has overlap in interest with the descendants of the enslaved, including a specific interest in names of individuals.
- *Historical, Archaeological, & Architecture Society Members.* Avocational researchers with a particular interest in local or regional history, archaeology, and architecture, who would look to our collections to better understand their own.
- *Bufs & Enthusiasts.* History buffs, Madison enthusiasts, and other non-professional researchers. These are people who regularly read popular historical non-fiction and watch the History Channel. This category is “everyone’s dad.”

There are several sub-audiences that were identified with the category of Casual Browsers. These are generally people who are already online, often already looking at

Montpelier-related content, but are likely to get drawn into a deeper dive into the collections:

- *Montpelier Visitors*. Prior to coming to Montpelier, the majority of our visitors look at our website for basic information to plan their trip and often to book tickets ahead of time. Many of the visitors also get drawn into our interpretive and research content while they are online. Likewise, following a trip to Montpelier, visitors could go back to learn more about a particular piece of information they learned while on a tour or take a deeper dive into a subject they found engaging.
- *Social Media Followers*. These are people who are already engaging online with Montpelier content. Through targeted posts and links, social media followers can be directed to the database to engage with the collections.
- *Donors, Sponsors, and Funders*. Potential and current funders, particularly individual philanthropists and representatives of foundations or other funding organizations, do research on organizations and projects before deciding to give. The opportunity to explore the collections online could entice gifts related to specific interests and give general information about the variety and importance of our collections.

There are several demographic groups that fall within the above audiences that would need some special considerations:

- Senior Citizens
- People with Disabilities
- Parents, Grandparents, and Families
- People who are unable to travel to Montpelier

Participants also urged us to remember that we could get “Unexpected Audiences.” These are groups of people that we have not yet considered. It is important to remember that new audiences exist, so having a flexible system that can be easily adapted or added to is important.

Despite the variety of people within the general adult public audience, the discussion group felt that all of them would benefit from connecting the objects to stories, digital exhibits, and narratives. They thought that this would be a way for the general public to find the database as well as learn from it. The group emphasized the

use of story to contextualize the search results as well as bring in users from other Montpelier outlets, such as social media, Montpelier's [Digital Doorway](#) blog, or search engines. This would be a way to connect our content to current cultural moments (e.g. the musical *Hamilton*) and Montpelier events. The General Adult Public Group was also interested in narrative content about the process of creating the database. They felt that the discussion of process was “where scholarly and public voices meet,” because it shows how we know what we know and allows the audience to engage knowledgeably with the material.

One essential way to connect the general adult public audience to the database is to show how objects were used in the past, emphasizing the human interaction with objects. This would take the context development beyond text narratives to include animation, 3D modeling, videos, and photos.

For the technical needs of the general adult public, familiarity and ease of use were essential. The group emphasized the need for clear language, the ability to explore without having to know particular keywords or search terms, and cited Google, Amazon, and Netflix, as sites with easy search mechanisms. The General Adult Public Group wanted the ability to do hierarchical searches or search with parameters, including filters (time, era), topics, and collections.

The General Adult Public Group preferred search results to appear as thumbnails with the ability to toggle between grid and list displays. They also wanted suggestions for similar or related content with a “you might also like...” or “other users also looked at...” Whatever the search format, it is essential that the user is successful on their first search attempt in order for them to continue to engage with the site.

Accessibility was also an important consideration. This included making sure that the digital content is ADA Section 508 compliant as well as making it mobile friendly, so it can be accessed by visitors while they are on property.

Support for using the database and understanding its content was essential for the General Adult Public Group. They want clear directions of how to use the database, including use cases, tutorials, and user guides in multiple formats including captioned video and text. The General Adult Public Group wants clear use policies for individual objects and for the site as a whole and suggested including an “ask a curator” dialog

box, email, or contact form that would direct them directly to either the database manager or specific collection manager.

Just like the Museum Professionals group, the General Adult Public Group recognized that not all information was appropriate for a public audience. Likewise, they wanted the ability to save, share, and download their searches and database content. Unlike the museum professionals group, they did not need high resolution images.

K-12 (K-16) Teachers and Students. Like the General Adult Public Group, the K-12 Teachers and Students Group started by defining who is included in this category. They expanded the group to “K-16,” incorporating undergraduate students and teachers into their discussion. They also thought that the national significance of Montpelier expands the audience of K-16 Teachers and Students to include the entire United States. This means that the K-16 audience includes some that will never come to Montpelier, while others may use this as pre- or post-lessons for a field trip. The K-16 Teachers and Students Group identified several sub-audiences including:

- Undergraduate Students & Teachers
- Public School K-12 Students & Teachers
- Homeschool K-12 Students, Parents, & Teachers
- Private, Charter, or other Independent School K-12 Students & Teachers

Within these subgroups the age and reading level, as well as the teacher’s comfort with the content and style of teaching, affects how students and teachers will approach and use the site and database. For example, younger students will need more direction from their teachers, while older students will have more autonomy utilizing the database and its content. Thus, in order to best serve teachers and students, the collections system needs to include:

- Resources specifically designed for teachers
- Curated guidance & models for how to use this database in the classroom
- Freedom to send students on their own path of discovery
- It needs to be as easy to use as possible
- Kids need to like it

Like the general adult audience, the K-16 students and teachers would need multiple points of entry to the database. The group suggested stories tied to particular

people (e.g., Paul Jennings), places, or things. Curated collections, virtual exhibits, and virtual tours could also serve as entry points. The group also emphasized utilizing audio, video, and other non-text formats to convey content and context.

Accessibility was also a primary concern for the K-16 Teachers and Students Group, with particular concern with different reading levels. To accommodate this, a microsite specifically adapting the narrative content and database for students was suggested. Specific interpretive and guiding materials designed by grade level (K-3, 4-8, 9-12, +12) would be essential for this microsite. This includes: a glossary, teaching tools, curriculum, ready-made lesson plans related to curriculum standards such as C3 HUB or Next Generation Science Standards, and supplemental materials such as textbooks. Because of this, the writing on the website needs to be done at multiple levels, so it is accessible to students at different reading levels, students with vision and hearing impairments through audio with closed captioning, and non-native English speakers and readers. The group also provided examples of platforms, such as <https://newsela.com/>, that translate written content into multiple reading levels in a destigmatizing and successful way.

Accessibility also means making the site free and easy to use. This includes making the system entirely web-based and not requiring the download of any software or other elements to make it run and avoiding log-ins and passwords as much as possible, because the log-in process takes up a lot of class time. Accessibility also means making the site compatible with the technology most frequently used in classrooms (currently web-based ChromeBooks).

The group also wanted ways to make the digital experience physical. This includes the ability to download and print database content in both 2-D and 3-D formats.

Because the K-16 Teachers and Students Group identified a lot of specific needs for both teachers and students, they suggested working with focus groups of both to develop and test the K-16 material. Focus groups centered around specific grade levels, subjects, or readability levels should all be utilized.

The K-16 Teachers and Students Group also recommended building in support for database users including:

- Live online chat with curators and/or technical support
- Direct phone and email with curators and/or technical support
- FAQs
- “How To” tutorial videos

The K-16 Teachers and Students Group wanted contact information for connecting the content of the database to experiences at Montpelier, including:

- Field trip coordinators
- Education coordinators
- Experts from departments whose collections are in the database

For the database itself the K-16 discussion group suggested including education-specific tags and fields, such as grade level, that make searching easier for teachers and students.

Reaching the K-16 audience will primarily occur through connections with teachers. It will be important to leverage partnerships, organizations, and professional conferences to spread word. This includes national organizations, such as:

- National Council for the Social Studies (NCSS)
- Society for Information Technology and Teacher Education (SITE)
- National Council for Geographic Education (NCGE)
- International Society for Technology in Education (ISTE)
- Google Apps for Education Summit (GAPE)
- National Council for History Education (NCHE)
- Association for the Study of African American Life and History (ASALH)
- National Science Teaching Association (NSTA)
- American Association for the Advancement of Science (AAAS)
- National association of independent scholars (NAIS)
- International Baccalaureate (IB)

Local and community organizations are also important for reaching students and teachers; including:

- YMCA & YWCA
- Boys & Girls Club
- Home school networks

Outreach through social media, online discussion groups, blogs, and websites geared toward teachers is another way to let teachers know about the database. However, getting teachers comfortable enough to use the system in their classroom and students interested in using it may require more direct interaction, including:

- Education camps for students relating to the database and its content
- Webinars for teachers
- In-person workshops for teachers

These in-person programs should be held in the summer months and provide teachers with the necessary continuing education credits they need for re-licensure or promotion.

Museum and Research Professionals. Unlike the other audience discussion groups, the Museum and Research Professionals felt that their audience was well defined and did not identify sub-audiences. It should be noted, however, that the individual needs of researchers and museum professionals will vary depending on their field of study, area of expertise, and occupation. Many of the differences between these groups were identified in the discussion of the specific collection needs. However, this group identified two primary reasons that Museum and Research Professionals would use this database. First, to do research on specific objects, people, places, or documents. Second, to look for objects that could be loaned to them for exhibits or scientific testing. Museum and research professionals will primarily come to the database to find connections between Montpelier's collections and their own collections, sites, and research. Therefore, including contextual information on the site, regional, and even national levels is essential. Finally, the group recognized that many of their needs require a level of access that would be different from a casual public user or a Montpelier employee.

When asked how this database could best serve their fellow museum and research professionals, it became evident that for this audience "more is more" as long as it is easy to find and understand. The professional audience wants to take deep dives into many details about the objects in the collections, their contexts, and Montpelier as the housing institution. Access to these details would make fellow Museum and Research Professionals more likely to use our collections for exhibits,

research, and interpretive materials, much of which is off their radar because it is difficult to access. This is especially true for items that someone would not expect to be included in our collections because they are outside of our primary periods and subjects of interpretation. These “hidden collections” could find new life through their presence online. Therefore, the Museum and Research Professionals group wants full access to all of the object details that can be shared without violating confidentiality requirements.

When first approaching the collections database, the Museum and Research Professionals Group wants a portal to the database that includes a comprehensive introduction and overview of Montpelier, our collections, and the organization of the database. They also want some tools to help them better understand the collections, specifically ones that are outside of their area of expertise but may contain useful information for their work, including:

- Collection “snapshots” that quickly and visually summarize what is in them
- Finding aids that are specific to each collection.
- Glossary for professional jargon associated with each discipline/collection
- Pre-curated “top hits” displayed as a suggestions before searching
- Suggestions and links to the locations of additional information

Within the database, they want many of the same pieces of information, but on a more detailed level than would interest the general public, such as names of people (including variations), and names of places (including both the historic and modern names). In addition, they want more object-specific details and the “insider” information, such as:

- Essential cataloging information, dimensions, locations, provenance, and citations
- Accession and other tracking numbers
- Clear designations between physical and virtual collections
- Which repositories house the collections
- Status of object: availability and accessibility for study or loan

Many of the identified needs of the Research and Museum Professional audience include legal and technical components that assist in borrowing, reproducing,

referencing, and using the collections. This information needs to be clear and easy to find. Specifically, the Research and Museum Professionals group wants:

- Statement of Allowable Uses
- Copyright, Rights, and Restrictions
- Fee Schedule
- Citation Guide

Much of this information is outlined in the [Montpelier Collections Management Policy](#). While including the entire Collections Management Policy as a resource on the website could easily be done, highlighting these specific policies and statements would help users of the site find and follow them.

The Museum and Research Professionals group talked about how they wanted the database to work through searches and queries of the database. Their needs include advanced searching capabilities, filters, and the ability to search multiple types of data, including geographic or shape data. They want to be able to cross reference between the different collections. They want to be certain that the data and associated multimedia content is continually accessible, so regular site maintenance, including proper file hosting and storage and checking links to make sure they work, is essential.

Likewise, the Museum and Research Professionals group emphasized the need to save and share the data, including images, scans of documents, and citations. This includes making multimedia files and data downloadable into common formats (e.g., CSV), so it can be used in other systems, such as ArcGIS, Microsoft Access, or citation software like [Zotero](#). They want to be able to save their searches and make, save, and download their own “collections” of materials from Montpelier’s database. Likewise, the Professionals would like to share their information with other users of the site through the ability to share their own “collections,” submit blog posts about their work, and do crowd-sourced work to expand the database and its associated digital materials.

The ability to communicate with Montpelier staff that is responsible for the care and study of these collections was an essential component for the Research and Museum Professionals group. They wanted easy access to immediate communication with fellow museum professionals through an “Ask the Librarian/Curator” style text or video chat that would be supported by the collections-related staff, and direct contact

information for Montpelier's museum staff if they have questions about or difficulties querying information from a particular collection. It was very important to them that a museum professional user can easily message another Montpelier museum professional, rather than getting sent to an IT person or generic help email.

The Museum and Research Professionals group also identified important ways to let people know about the database and encourage them to use it. They suggested developing a marketing plan to organize the promotional efforts both at the launch of the database and throughout its lifetime. This plan should include a strategy for monitoring the site users through robust web metrics and Google analytics. This data could be used as an important tool for understanding current audiences and reaching new ones.

The core of the marketing would be done through the professional networks of the Montpelier staff and workshop participants. Much of this work can be done at the annual conferences of professional organizations like the American Alliance of Museums (AAM), through poster and paper presentations about the database and research we have done using it, and talking directly to our colleagues about it. Direct marketing of the database can be done through digital and physical promotional materials that can be distributed through listservs, direct emailing, social media, tabling events at conferences, and paper mailers. The emphasis on postcards, brochures, flyers, stickers, and swag was surprising coming from a digitally focused group, but they explained that the amount of email they receive is so overwhelming that a well done postcard or piece of swag can cut through the noise of information they receive on a daily basis. The Museum and Research Professionals group identified several other related professions, including librarians, art historians, filmmakers, and economists, that would be interested in using this database.

The Museum and Research Professionals group suggested several ways to encourage continued use by the professional audience after launching the database system. These include conducting workshops to teach professionals and graduate students how to use the system, training professors to incorporate the collections and database into their undergraduate and graduate instruction, and offering fellowships or grants for researchers who utilize the collections and database system. They also

suggested working with partners, like the Library of Virginia, to promote and expand the use of the collections and database system.

Participants suggested components to be built into the database system itself that would encourage use, such as application program interfaces (APIs) that would allow it to talk to other software systems and broad cataloging terms that would be understandable by professionals of multiple disciplines.

Design & User Interfaces

For the last round of break-out group discussions, participants self-selected into either their first or second choice audience group. We then asked each group to envision what the database and user interfaces would look like for their particular audience. We asked them:

- Given the audience considerations we've talked about, and our own professional needs, what does this new database look like?
- What is it capable of?
- Storyboard out a few pages.
- Get as far into the weeds as you can!

The groups varied in how they approached this activity. Two groups followed the directions very closely and produced several drawings and outlines of what different pages would look like. We nicknamed these two groups "The Flower Groups," because they focused on the design of user interfaces. Another group went in a completely different direction, earning them the nickname "The Roots Group," as they focused on the database organization and structure.

"The Flower Groups": Design & User Interfaces. Two considerations were the driving forces of these groups, namely that the database: 1) needs multiple forms of entry to serve the multiple types of users and, 2) must be accompanied by curated content, stories, and interpretation. To help create a product that will be most appealing and useful to users, these groups suggested that we design it to be used on multiple platforms, utilize responsive design, and do research on potential users. They reminded us that the design process does not stop after the website is created, and that continuing to research and engage with users would be essential.

The Flower groups developed example pages for the database, including the primary landing page and examples of pages for specific users/audiences. (See images).

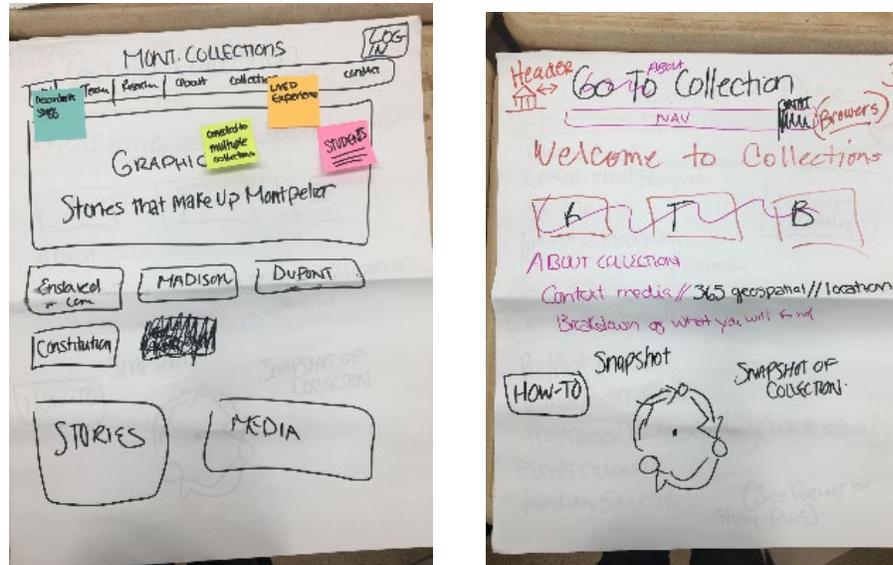


Figure 1. Example designs of landing pages by the Flower group

This includes an example of a landing page specifically for teachers, which features a navigation bar and:

- Curriculums/ Lesson ideas
- Age Groups
- National History Day
- Resources, Primary Sources
- Constitution
- Common Core Standards
- Pre-Post Review
- Videos/Tutorials
- Programs (Teacher & Children) (link to stories)
- Events Calendar
- Funding Sources

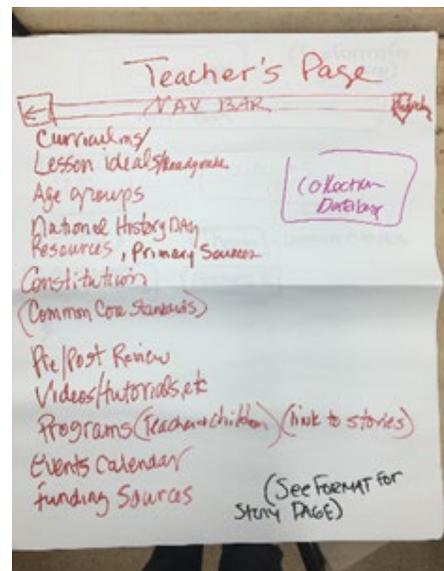


Figure 2. Example teacher landing page.

And an example of what an interpretive or story page would include:

- Navigation Bar
- Search Bar
- Curated Object Collection
- Written story
- Video
- GIS Map
- Sample searches
- “How To” use the database

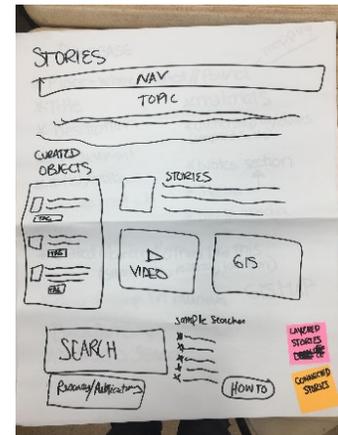


Figure 5. Example of interpretive page.

Roots Group: Database Organization. This group focused on the organization of the database. The group suggested creating a modular system, with four databases, one for each collection (decorative arts, archaeology, archives, and architecture), to feed into one superstructure. (See image for a diagram of the suggested structure.) For this system, the superstructure would:

- Allow access to all databases
- Have an outward-facing public system
- Have local ontology

The collection module would have the flexibility to allow each department to establish a system that works best for them, and fields that meet the specific needs of each collection. However, each of these collection modules would utilize a common language/shared vocabulary and would share some identical fields in order to allow for cross-collection searches. This would allow for connected searches and special search features such as suggestions for other content that a user may also be interested in or related objects from a different collection.

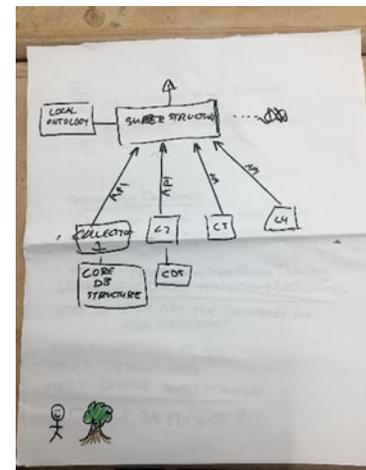


Figure 6. Design of possible database organization.

The “Roots” group also carried their discussion beyond the structure of the database, to the structure of the project itself. They outlined the following steps for completing the MDCP.

- Step 0: Hire Project Director and staff
- Step 1: Determine the databases and data structure
- Step 2: Catalog all the objects that will be the content of the database
- Step 3: Develop APIs to connect modules or existing databases to superstructure
- Step 4: Develop Superstructure

Along the way, considerations should be made for how to take on such a large project. For example, the group suggested working on the project collection by collection or by user group.

MDCP Survey

As a way to gather input from a wider group than just the workshop participants, we created a survey to learn how different stakeholders might use a digital collection at Montpelier. The survey was distributed to our network of museum professionals, academic scholars, teachers, and other stakeholders including the general public. The first section of the survey gathered demographic and occupational information about the respondents, while the second section gathered information about familiarity and ideal conditions for a digital collection. The survey can be found online at <https://www.surveymonkey.com/r/PFWPRC9>.

There are several things to note about the structure of this survey. For the most part results from the questions are qualitative instead of quantitative, with the exception of ordinal data collected in the frequency, familiarity, and element importance categories. The ordinal data can be converted into numerical form to get averages for each of those questions (e.g. on average how familiar are the respondents with digital resources). The qualitative data was instead examined for trends using word clouds (for the free response questions), or plotted as histograms to examine trends in the data (for questions concerning demographic information).

As of March 2020, the survey has been completed by a total of 254 respondents. The occupational breakdown was skewed heavily towards the two categories of Museum Professionals and Other Occupations. The survey failed to capture a significant number of answers from Teachers or Academic Scholars. One reason for

this disparity could be the makeup of our network, which is lacking in teachers and academic scholars.

OCCUPATION		
Occupation	Number of Respondents	% Total
Museum Professional	131	51.57%
Other	86	33.86%
Academic Scholar	30	11.81%
Teacher	7	2.76%
TOTAL	254	100.00%

Of the museum professionals surveyed (N=101) there was a wide range of areas of expertise:

MUSEUM PROFESSIONALS		
Area of Expertise	Number of Respondents	% Total
Other*	34	33.66%
Interpretation	21	20.79%
Archaeology	17	16.83%
Decorative Arts	15	14.85%
Historic Preservation/Architecture	6	5.94%
Archives	5	4.95%
Digital Humanities	3	2.97%
TOTAL	101	100.0%

*Other category included: collections management, art, history, registration, and collections

As previously stated, the number of teachers that responded was extremely low (N=7). While this is surely regrettable, it does illustrate a need on our part to increase our engagement with teachers.

TEACHERS		
Grade	Number of Respondents	% Total
College/University	3	42.86%
Pre-Elementary	1	14.29%
Elementary	1	14.29%
Middle	1	14.29%
High	1	14.29%
TOTAL	7	100.00%

Again, the makeup of the data for the academic scholars could be related to our network, with a spike in the number of archaeologists that took the survey. However, interestingly enough there were no respondents for Archives, Historic Preservation/Architecture, or Genealogy.

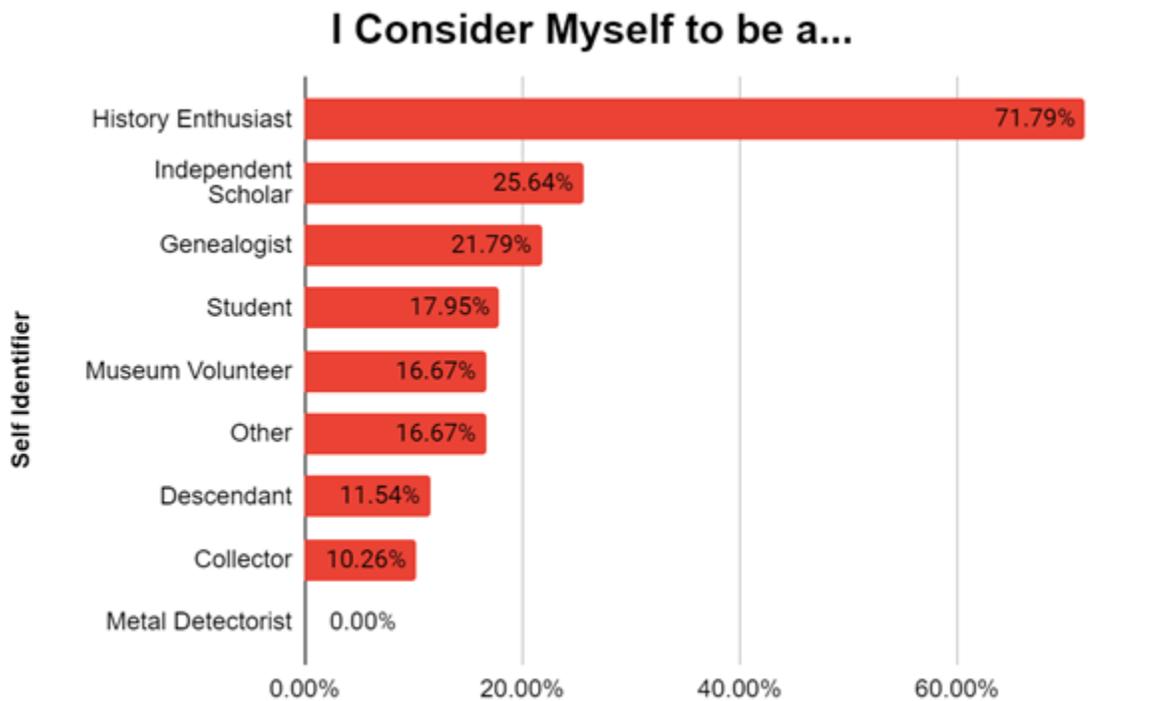
ACADEMIC SCHOLARS		
Area of Expertise	Number of Respondents	% Total
Archaeology	10	52.63%
Other*	5	26.32%
Decorative Arts	2	10.53%
Interpretation	1	5.26%
Digital Humanities	1	5.26%
Archives	0	0.00%
Historic Preservation/Architecture	0	0.00%
Genealogy	0	0.00%
TOTAL	19	100.00%

*Other category included: US History/American Studies, Art History, and Environmental Sciences

The Other Occupation category should represent the general public, and the answers given to occupations illustrate that well. The results have been scanned for common words and lumped into groups, which is why the “Other” category is so large, but represents a wide variety of occupations. This strengthens the survey because it could be argued that a third of all respondents were members of the general public. When asked to self-identify as a specific type of stakeholder, an overwhelming majority considered themselves to be “history enthusiasts”, however all other categories, with the exception of metal detectorists, were also represented.

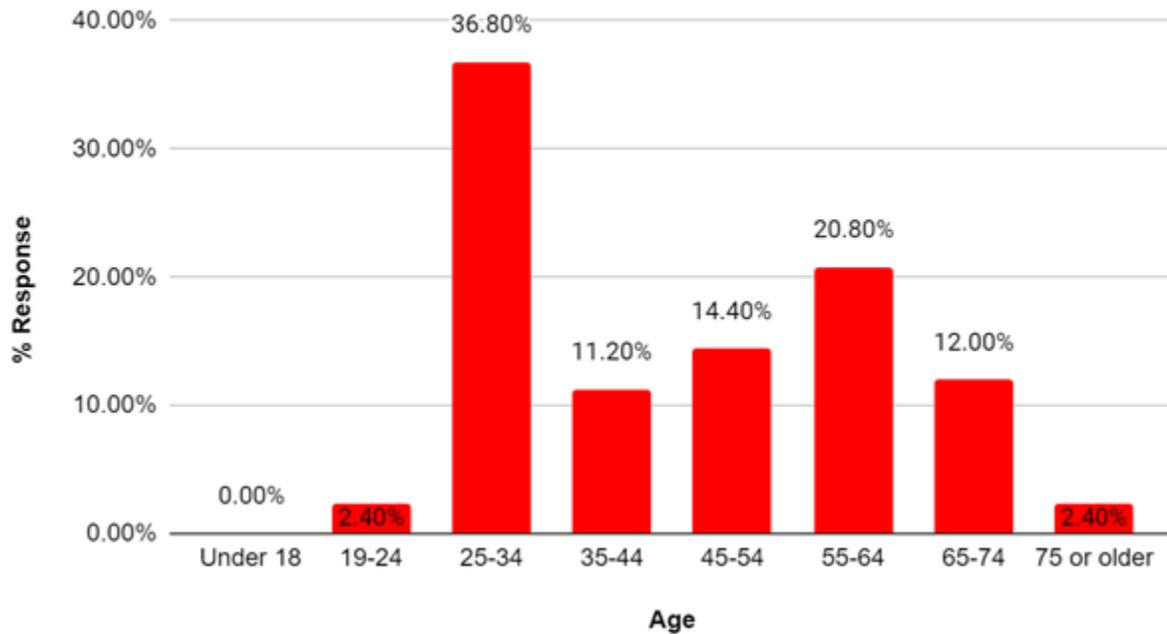
OTHER		
Occupation	Number of Respondents	% Total
Other	29	37.16%
Retired	13	16.67%
Archaeologist	8	10.26%
Student	6	7.69%
Consultant	6	7.69%
Professional	4	5.13%
Genealogist	3	3.85%
Manager	3	3.85%
Archivist	3	3.85%
Engineer	3	3.85%
TOTAL	78	100.00%

*Other category included: dentist, retired forensic chemist, interior designer retired ophthalmic photographer, and antique dealer.

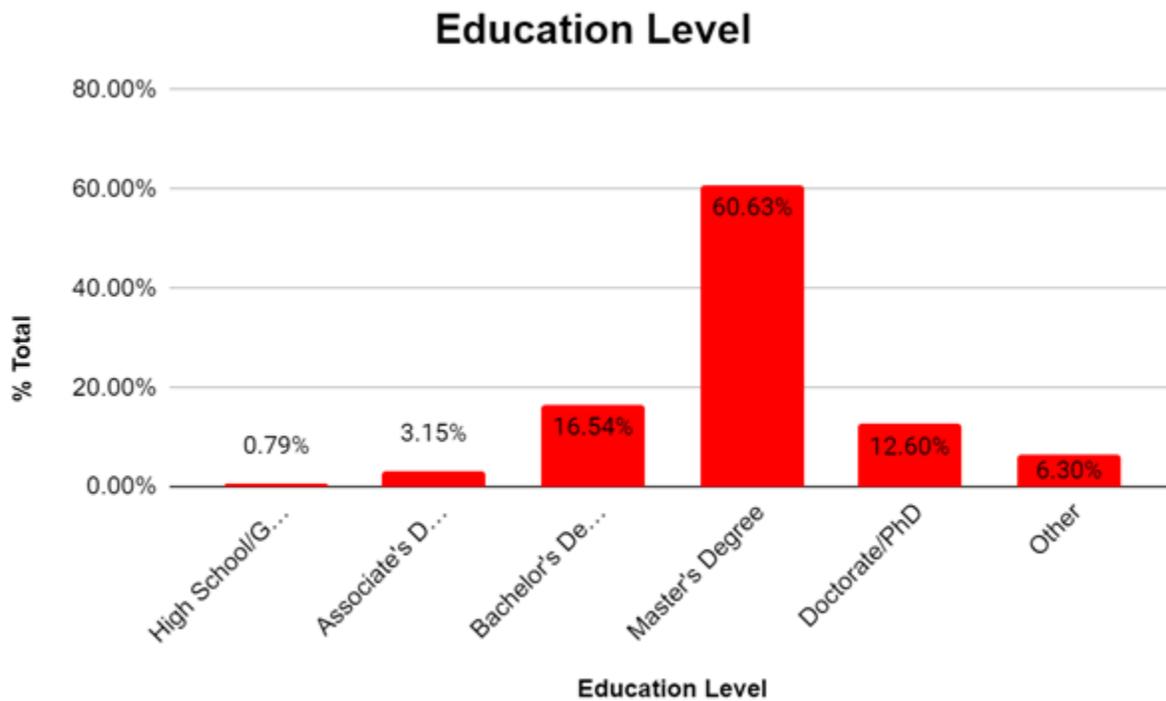


The demographics of the survey were about what we expected; with a good mix of respondents across all age groups, but a large spike in 25-34 year olds. This would largely make sense as these would be individuals in graduate school who would be interested in researching for their own studies. It is also encouraging that respondents from other age brackets were surveyed as well, which suggests that the results are a good mix of various ages of stakeholders. The final digital product should take into account the variety of ages within our constituent base.

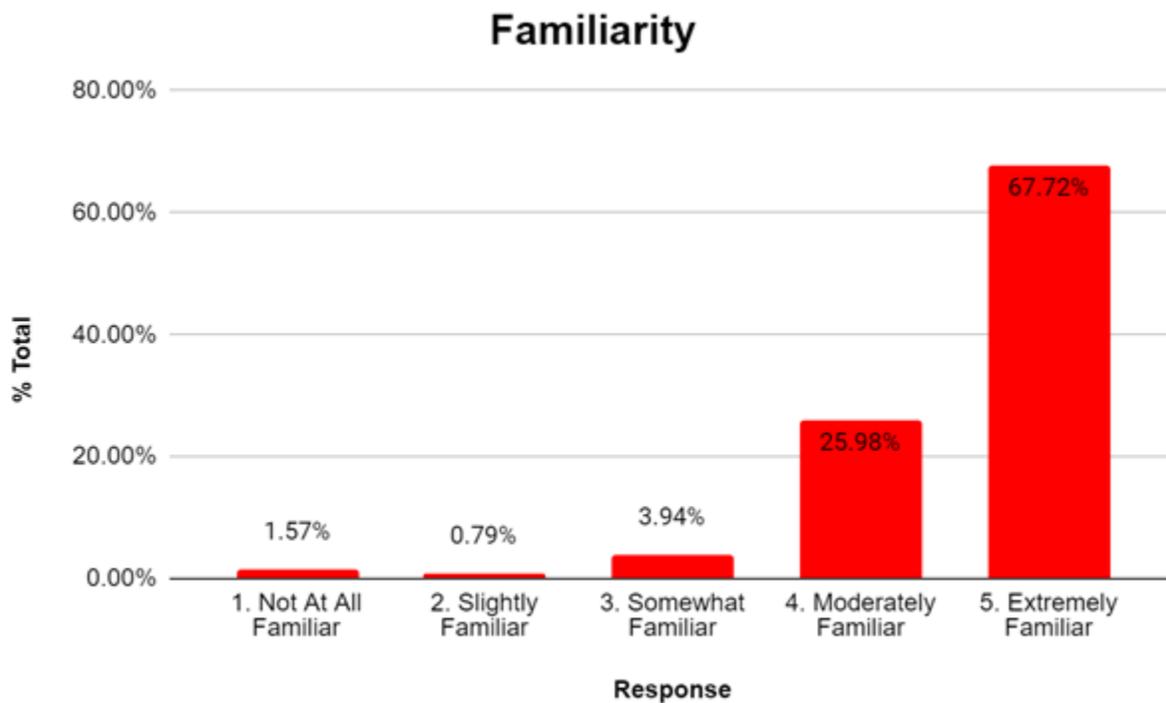
Age Demographics



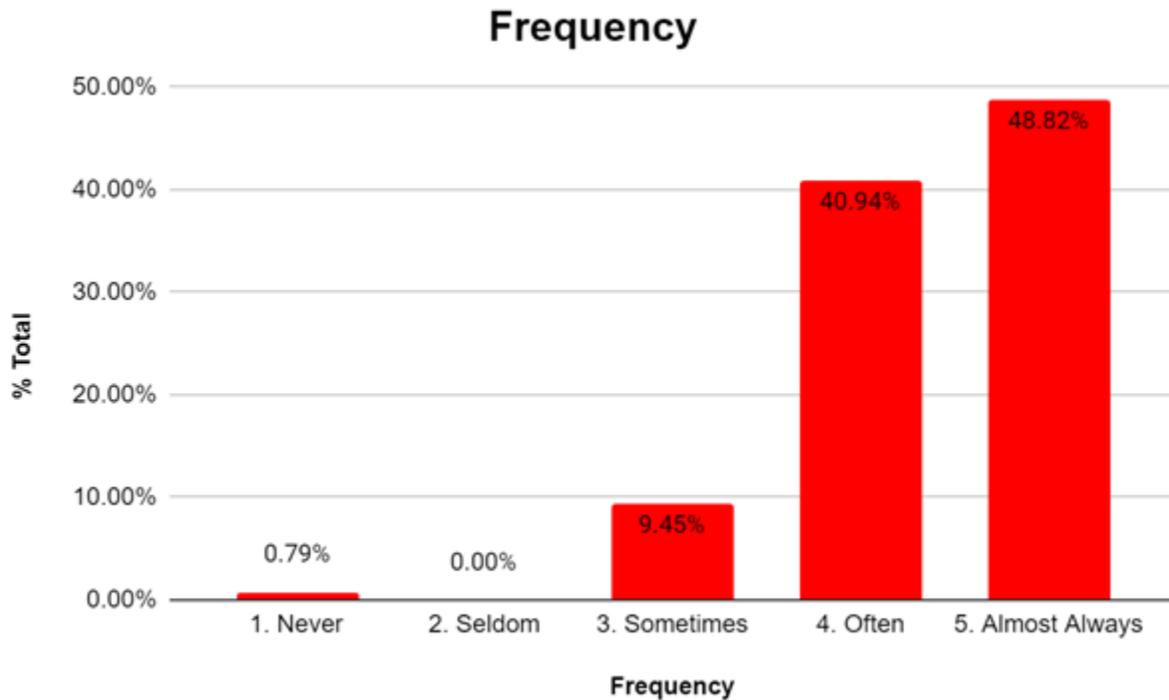
Educational background was also unsurprising, with most respondents having at least some college education, but with a large spike in the number of respondents with a Master's degree. It is clear that the respondents have a lot of educational experience, which is encouraging with respect to using the digital collection as a research tool. The spike in Master's degrees also corresponds with the spike in the age demographics, assuming that graduate students are mostly captured in the 25-34 age bracket.



The survey respondents as a whole are very familiar with digital resources, with the average result being 4.58 (between moderately and extremely familiar).

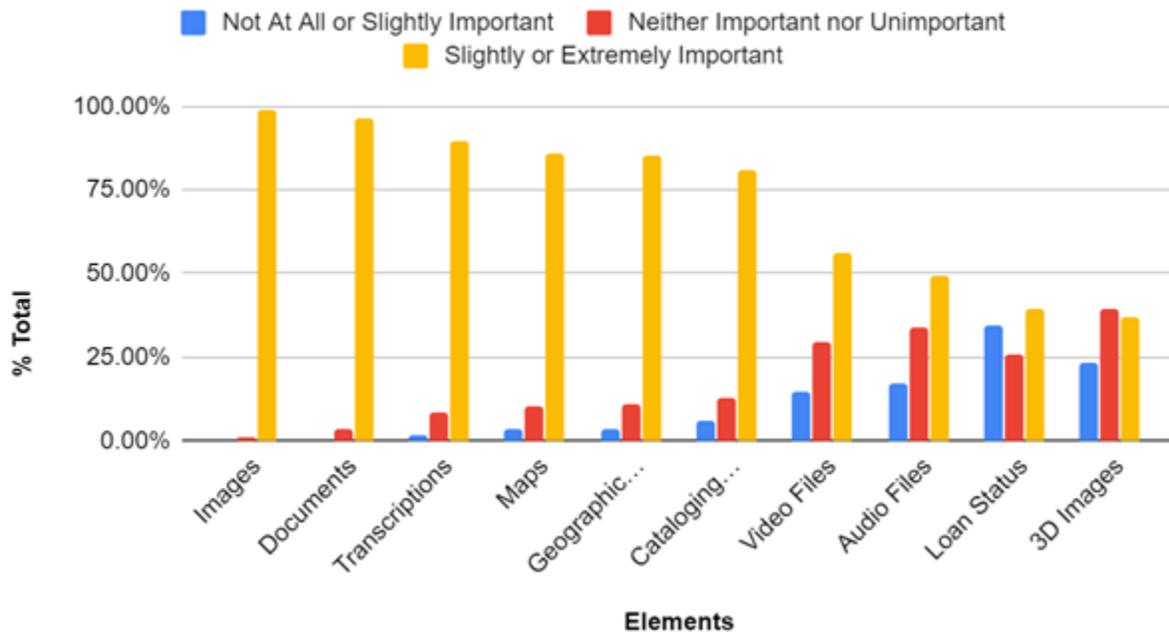


Although the respondents frequently use digital resources, they don't use them as often, with the average being 4.37 (between sometimes and often).



When regular users of digital collections were asked about how important elements of a digital collection were, they rated images, documents, transcripts, maps, geographical information, and cataloging information as the most important. They rated as least important: video files, audio files, loan status, and 3D images. This is consistent with the education level and demographics of respondents, and suggests that many of them might potentially use this as a research database for their own studies.

Importance of Elements



Non-regular users of digital collections tended to be focused on objects in a collection, historical documents, documents or objects related to slavery, and architectural fragments, with far less interest in archaeological artifacts and learning about other specialized topics. This could suggest that they would also use it as a research database, or as a way to get more interested in what is currently happening at Montpelier. This is strengthened by the other specialized topics non-regular users are interested in, including: conservation, preservation efforts, and historic preservation. For these non-regular users, a digital collection could act as a way to get them more invested and interested in the work at Montpelier.



What Would Cause You to...	
Use These Websites More	Use These Websites Less
Easy-to-use	Too much technical information
Good keyword search capability	Little/limited information on objects
Good search algorithms	Difficult search operations
Lots of available material	Clunky user interface
More photos	Visible errors in data transcription
Free access	Incomplete data
Knowing their existence	Not up to date information
Indexing/tagging of items	Fees/paywalls
Hi-res, open access photos	Pop-up ads
	Difficulty downloading data

we did not ask a question further elaborating on it. It would behoove us to examine these websites when building our own digital collection and build our elements around them. Some of these websites are not what would traditionally be called “digital resources” (such as Google and Pinterest), but still are powerful tools when researching information on artifacts, objects, and documents.

Digital Resources	
Favorite	Least Favorite
Library of Congress (Chronicling America)	Ebay
Google	Artstor
JSTOR	Beazley Archive Pottery Database
Subscription services (Ancestry.com)	PastPerfect
Digital Archaeological Archive of Comparative Slavery (DAACS)	National Archives Main Catalog Interface
SOVA.si.edu (Smithsonian)	Google Scholar
Diagnostic Artifacts of Maryland (JeffPat)	Blogs
Library of Virginia	
University of Virginia Library	
Pinterest	
Winterthur	

Digital Engagement

Because we wanted to reach as many people as possible and meet potential users of the MDCP where they are (in the digital world), we made several efforts to engage digitally. The primary way we did this was through livestreaming the lectures and presentations on Montpelier’s Facebook page. We promoted this livestream

through the MDCP website, on various social media accounts run by Montpelier departments, and through targeted emails to digital humanities professionals. The video of the workshop lectures had over 400 views, including those who watched it live and those who watched later. Comments and questions left by viewers during the live viewing were incorporated into the Q&A sessions for the lectures. In addition, the MDCP Director received several emails from colleagues who watched the videos offering comments and suggestions for the projects.

In addition, throughout the workshop Montpelier staff and workshop participants posted the workshop discussion questions to their departmental and personal social media accounts. Unfortunately, the feedback and comments posted in response to these posts did not provide a lot of specific feedback about particular topics. However, they were overwhelmingly positive about the project itself and expressed support for the endeavor.

Post-Workshop Meetings

Following the workshop we held several meetings. The first meeting was held the morning after the workshop. At this meeting the Montpelier staff met with Ethan Watrall of Michigan State University's MATRIX: The Center for Digital Humanities & Social Sciences. The purpose of this meeting was to learn about KORA, the "open-source, database-driven, online digital repository application for complex multimedia objects (text, images, audio, video) created by MATRIX" (<https://kora.matrix.msu.edu>) in order to see if it would accommodate the MDCP. This technical discussion was driven by the information we had heard during the workshop. We also discussed next steps for the project.

From this initial meeting we realized we needed more opportunities to gather, make decisions about the project, determine next steps, and digest everything we had heard during the previous few days. We then scheduled a meeting for the following week for Montpelier staff to review what we had heard in the workshops and to begin to outline the whitepaper. From these meetings we developed our overall takeaways of the workshop. From this we developed a list of needs, as follows:

- We need a **Strategic Plan** in order to properly execute and funding this project.
- We need a **Sustainability Plan** to manage the massive amount of data and assure its continued existence and accessibility.
- We need a **Digital Manager/Project Director on staff** at Montpelier in order to make sure the project continues and is completed.
- We need to **market** this project in order to have people use it, particularly the public components.
- We need to also create and make accessible **tools for learning** the collections and operating the system, while we develop and populate the database system.

Coming out of the workshop and follow-up meetings, the Montpelier staff now has a better idea of what questions we have for moving this project forward and how they need to be answered. We also reaffirmed two major decisions made during the grant proposal process. These are:

- We are committed to using Open Source Software
- We are committed to working with Partners rather than client/provider relationships

However, we still had some major decisions left to make, such as:

- Who will we partner with to design, create, and populate this system?
- What is the best approach for undertaking the work of such a large project? In what order should we do things?
- How do we pay for it all, including project development, prototyping, and maintenance?
- When we talk about “the database” do we mean one system, a modular-system, or a combination of systems?

To continue our efforts to answer these questions, we held a strategic planning meeting on November 21-22, 2020, with Montpelier staff and several of the workshop attendees. (See Appendices for the list of Workshop Attendees and Schedule for Strategic Planning Meeting.) At this meeting we dug deep into the details of the MDCP and made some important decisions. This included:

- Montpelier staff writing and presenting detailed use cases about how they use their current collections databases

- Establishing a core group of shared metadata across collections
- Determining that the best system architecture would be to put the archaeological, architectural, and archival collections into a new modular system with a shared core and to connect the decorative arts collection to the shared core through an API. This was decided because a significant portion of the decorative arts collection consists of objects owned by the National Trust for Historic Preservation, which requires the objects they own be managed in their ReDiscovery database
- Creating a list of values that we will uphold for this project. (See Appendices for the Strategic Plan for the Digital Collections Project, which includes a list of these values.)
- Discussing funding and project phasing strategies, particularly in regards to connecting with other digital initiatives at Montpelier
- Exploring the idea of a “Presidential Library” as a model for this project
- Selecting some members for an Advisory Committee to guide the MDCP

Conclusions/Next Steps

Following the workshop, survey, and post-workshop meetings, we set to work developing a plan for the next steps to carry the MDCP into its next phase. Full details about this can be seen in the [Strategic Plan for the Digital Collections Project](#).

Additionally, some important efforts have been made to continue the work on this project, including:

- Development of the Strategic Plan, which includes a list of values for the project and suggested steps and activities for meeting these values
- Monthly Metadata Meetings of Montpelier staff to discuss current collections management systems and begin developing a shared vocabulary
- Receipt of a grant from the Institute of Museum and Library Services to begin digitizing the archival records associated with the excavation and restoration of Montpelier’s main house.
- Application to host an ACLS/Mellon Public Fellow to lead the MDCP.
- Attended Digital Archives in the Commonwealth Summit, December 6, 2019.

- Met with Digital Library faculty and staff at James Madison University about collaboration on the MDCP.
- Continued conversations with workshop participants.
- Created a Montpelier Digital Collections Project Advisory Committee and held first virtual meeting.
- Presented three papers about the MDCP at professional conferences.

While the scope of the project is undeniably huge, the activities undertaken as part of the NEH-supported planning grant (workshop, survey, digital engagement, and follow-up meetings) have given us a clearer picture of what the final products of the Montpelier Digital Collections Project will be and what steps we need to take to create them successfully and collaboratively. Most importantly, the enthusiasm for the MDCP has not waned and more people and partners have joined in the effort during the course of the project.

Appendix I: Workshop Participants

Montpelier Staff

- **Elizabeth Chew**, *Vice President for Museum Programs*
- **Mary Furlong Minkoff**, *Curator for Archaeological Collections, Montpelier Digital Collections Project Director*
- **Matthew B. Reeves**, *Director of Archaeology and Landscape Restoration*
- **Terry P. Brock**, *Assistant Director of Archaeology*
- **Benjamin Kirby**, *Assistant Curator of Archaeological Collections, Montpelier Digital Collections Project Manager*
- **Jennifer Glass**, *Director of Architecture and Historic Preservation*
- **Hilarie M. Hicks**, *Senior Research Historian*
- **Jenniffer Powers**, *Collections Manager*
- **Leanna Shafer**, *Curatorial and Collections Assistant*
- **Christian Cotz**, *Director of Education and Visitor Experience*
- **Kyle Stetz**, *Manager of Student and Family Programs*
- **Emily Voss**, *Education Director, Center for the Constitution*
- **Anna Roberts**, *Corporate and Foundation Relations Officer*

Partners

- **Ethan Watrall**, *Associate Director, MATRIX Assistant Professor, Anthropology Adjunct Curator, MSU Museum; Director, Cultural Heritage Informatics Initiative*
- **Sheila Brennan**, *Senior Program Officer, Office of Digital Humanities*

Participants

- **Barbara Aikens**, *Archaeology Lab Volunteer, Retired Archivist, Smithsonian Archives of American Art*
- **Edward L. Ayers**, *Tucker-Boatwright Professor of the Humanities & President Emeritus, University of Richmond*
- **Megan Brett**, *Digital History Associate, Roy Rosenzweig Center for History & New Media, George Mason University*

- **Jo-Ann Brock**, *Descendant, Treasurer, Orange County African American Historical Society*
- **Priya Chhaya**, *Associate Director, Publications and Programs, National Trust for Historic Preservation*
- **Sara Devine**, *Director of Digital Engagement, Brooklyn Museum*
- **Ron Downes**, *Archaeology Lab Volunteer, Retired Astronomer, Space Telescope Science Institute*
- **Annie Evans**, *Director of Education & Outreach New American History, University of Richmond Digital Scholarship Lab*
- **Mark Freeman**, *Lecturer, University of Tennessee Knoxville and Co-Founder of Stories Past*
- **Jillian E. Galle**, *Project Director, Digital Archaeological Archive of Comparative Slavery (DAACS), Monticello*
- **Leslie Grigsby**, *Senior Curator of Ceramics and Glass, Winterthur Museum, Garden & Library*
- **Patrice Grimes**, *Descendant, Associate Dean, African American Affairs & Director, GradSTAR Program and Associate Professor, Curry School of Education*
- **Skyla Hearn**, *Chief Archivist & Special Collections Librarian, DuSable Museum of African American History*
- **Bari Helms**, *Director of Archives & Library, Reynolda House Museum of American Art*
- **Bernard Means**, *Director of Virtual Curation Laboratory, Virginia Commonwealth University*
- **Andy Mink**, *Vice President for Education Programs, National Humanities Center*
- **Loren Moulds**, *Digital Collections Librarian and Head, Digital Scholarship & Preservation, Law Library University of Virginia*
- **Marsha Mullin**, *Vice President Collections & Research/Chief Curator, Andrew Jackson Foundation, Andrew Jackson's Hermitage*

- **Shelley Murphy**, *Professional Genealogist*, Midwest African American Genealogy Institute, *Descendant Project Researcher*, PCSU, *Adjunct*, Averett University
- **Angelia Michelle Payne**, *Research Assistant*, Center for Advanced Spatial Technologies, University of Arkansas
- **Sue Perdue**, *Manager*, Digital Repository, Discovery Virginia, Virginia Foundation for the Humanities
- **Tamar Rabinowitz**, *ACLS/Mellon Public Fellow*, *Manager of Curatorial Innovation*, National Trust for Historic Preservation
- **Tyson Reeder**, *Associate Editor*, Papers of James Madison
- **Michelle Taylor**, *Descendant*, *Course Scheduling Specialist*, Virginia Commonwealth University
- **Noelle Trent**, *Director of Interpretation, Collections & Education*, National Civil Rights Museum
- **Carrie Villar**, *John & Neville Bryan Associate Director of Museum Collections*, National Trust for Historic Preservation
- **Matt Webster**, *Director*, Grainger Department of Architectural Preservation, Colonial Williamsburg Foundation
- **Daryle Williams**, *Associate Professor*, Department of History, University of Maryland
- **Jordy Yager**, *Digital Humanities Archivist*, Isabella Gibbons Local History Center, Jefferson School African American Heritage Center

Appendix II: Workshop Schedule

Day 1: July 29, 2019

- 3:00 pm- 5:00 pm Registration & Room Check-In
- 6:00 pm Keynote Lecture: Edward L. Ayers
- 7:00 pm Welcome Dinner & Participant Introductions

Day 2: July 30, 2019

- 8:30 am Meet & Greet Breakfast
- 9:00 am Workshop Introduction & Goal Setting
 - Discussion of Workshop Goals & Desired Outcomes
- 9:45 am Formal Presentations Montpelier Collections
 - Architecture & Historic Preservation: Jenn Glass
 - Archaeology: Mary Furlong Minkoff
 - Curatorial & Collections: Jenniffer Powers
 - Research: Hilarie Hicks
- 10:45 am Coffee & Snack Break
- 11:00 am Formal Presentations: Best Examples, Challenges, Successes, and Lessons Learned from Digital Collections Projects
 - Architecture & Historic Preservation: Matt Webster, Colonial Williamsburg
 - Archaeology: Jillian Galle, DAACS
 - Curatorial & Collections: Bari Helms, Reynolda
 - Research: Loren Moulds, Law Library UVA
 - Presentation of Pre-Workshop Survey Results: Montpelier Staff
- 12:15 pm Lunch
- 1:00 pm Tour of Collections and Collaborative Projects
 - Tour Collaborative Project: Main House
 - Tour Collaborative Project: Mere Distinction of Colour Exhibition
 - Tour Collaborative Project: Landscape
- 2:45 pm Coffee & Snack Break
- 3:00 pm Group Discussion & Breakout Sessions: Collection Needs
 - Archaeology
 - Architecture & Historic Preservation

- Archives & Digital Media
 - Museum Objects & Decorative Arts
- 4:45 pm Today's Wrap-up & Tomorrow's Goals
- 5:00 pm Free Time
- 6:30 pm Evening Lecture: MATRIX's Enslaved Project Ethan Watrall
- 7:30 pm Dinner & Open Viewing of Mere Distinction of Colour Exhibit
- 9:00 pm Fireside Talk

Day 3: July 31, 2019

- 8:30 am Breakfast
- 9:00 am Breakout Sessions (First Rotation): Identifying & How to Best Serve Different Audiences & Users
- Public (Students)
 - Public (Adults)
 - Museum & Research Professionals
- 10:30 am Coffee & Snack Break
- 10:45 am Breakout Sessions (Second Rotation): Identifying & How to Best Serve Different Audiences & Users
- Public (Students)
 - Public (Adults)
 - Museum & Research Professionals
- 12:00 pm Lunch
- 1:00 pm Group Discussion & Breakout Sessions: Envisioning the Database for Your Audience
- Public (Students)
 - Public (Adults)
 - Museum & Research Professionals
- 3:00 pm Coffee & Snack Break
- 3:15 pm Report Out from Groups
- 4:00 pm Group Discussion: Next Steps
- Distribution of Workshop Results & Recommendations
- 5:00 pm End of Workshop