Assessment Reports and Instruments
Evaluation was an important component of the CCC grant. Evaluative efforts were led by the grant's Evaluation Working Group. In year one, the Evaluation Working Group defined the CCC project's quantitative assessment needs.

In year two, the group added new members with expertise in qualitative assessment and drafted a comprehensive plan for qualitative evaluation. Over the course of years two and three, several qualitative evaluation efforts were undertaken, and all data that was gathered and tracked from the beginning of the project was analyzed.

Findings

Qualitative Assessment

- Faculty and History Scholar Evaluation Summary, January 2014
- Undergraduate Survey Report, May 2013
- K-12 Educators Survey Report, October 2012

Quantitative Assessment

- Quantitative Data Analysis Summary, January 2014
- In 2013, an article was published by Joyce Chapman and Samantha Leonard entitled, "Cost and benefit of quality control visual checks in large-scale digitization of archival manuscripts." The article is a case study using CCC production to determine the optimum balance between production and quality control visual checks. The article can be accessed via Library Hi Tech, Vol. 31 Iss: 3, pp. 405-418.

Online Usage Statistics

- Usage summary (V of V), August 2013 - January 2014
- Usage report (IV of V), February 2013 - July 2013
- Usage report (III of V), August 2012 - January 2013
- Usage report (II of V), February 2012 - July 2012
- Usage report (I of V), August 2011 - January 2012

Facebook Analytics

- Facebook Analytics Report: I, July 2012 - September 2012

Processes

Time-tracking

Participating institutions tracked the time they spent on various grant activities for evaluative purposes. These activities included:

Materials preparation

An important and time-consuming part of the large-scale digitization process is preparing the materials for digitization. Student workers timed themselves as they reviewed the materials in the following areas:

- Condition and conservation review
- Fastener removal
- Privacy and IP review

This review included identifying materials in need of conservation work, removing fasteners such as staples or paper clips from pages, and identifying materials with privacy or copyright concerns.
Transportation of materials

Transportation time will be tracked by the Digital Production Manager, who is responsible for all materials transport during the grant. Data to be tracked for each material transport includes:

- Date
- Time driving (in minutes)
- Time other (loading/unloading/moving (in minutes))

Qualitative assessment

In years two and three of the grant, the Evaluation Working Group will plan and conduct qualitative assessments of the project. Qualitative assessment plans were developed broadly in the second half of year one. Instead of testing delivery interfaces, the group will focus on analyzing the user experience as defined by large-scale digitization at TRLN. Delivery interfaces may be tangentially tested through this process, but are not the focus of our assessment work.

Faculty and History Scholars

One on one interviews will be held with some scholars and faculty. The target population will be people who have used highly curated digital content before, such as Documenting the American South. In this way, we will be able to ask interviewees to compare the highly curated versus large-scale aspect.

Undergraduate Students

Three members of the CCC steering committee are teaching undergraduate courses in fall 2012 that can serve as testbeds for project evaluation. These three courses include one taught at NCSU, one taught at UNC, and one jointly taught between NCCU and Duke. The group hopes to conduct at least one project evaluation activity in each of the three courses. These activities may include a task that requires them to find interesting documents within one of the delivery interfaces and write a brief reaction paper evaluating the search and discovery experience, or a website evaluation exercise.

K-12 Educators

Evaluation of K-12 educators perspectives of TRLN's approach to online digital delivery (i.e., no additional metadata other than that which exists in the finding aid is applied to each digital image, and materials are discoverable through the context of the finding aid and not through specialized web portals with advanced searching capabilities) will be two part. In summer 2012, focus groups and one-on-one interviews were held with some local K-12 educators. In addition, an online survey of approximately 2,000 North Carolina teachers of social sciences in middle and high schools will be conducted in August 2012.

Online Usage

Google Analytics will be used to track all usage statistics for the grant. It was decided that Google Analytics would be set up on each institutions' finding aids as well as digital objects where applicable.

Baseline use metrics that we will track at each institution and report in aggregate for the entire grant include:

- Collection guide views
- Clicks on linked folder titles from collection guides
- Clicks on links to "all digital content for this collection" from collection guides
- Traffic referrals
- Unique page views for scans (this data is available by collection for all institutions except NCSU)

Use stats are collected from Google Analytics accounts at the various libraries by the Project Librarian twice a year for aggregation and reporting.
ROAD 2.0: Digitizing Outdoor Advertising

Summary of Project Accomplishments

ROAD 2.0 (2009-2012), an NHPRC-funded project undertaken by Duke University Libraries’ Hartman Center for Sales, Advertising & Marketing History, accomplished its goal: to scan approximately 24,000 images and merge them with descriptive metadata from the ROAD (Resource of Outdoor Advertising Description) database, in order to create an improved online resource for researching advertising history.

This narrative report provides a detailed summary of all project work, including what deliverables were met and how, and challenges encountered during the project. The expected outcomes used to measure the performance of this project are discussed within the following sections:

1. Scanning and Costs
   - Scan approximately 24,000 images from the OAAA Archives and Slide Library and from the John Shaver Papers.
   - Keep project costs below approximately $5 per image.

2. Publication with Metadata
   - Make the scanned images available through the ROAD database.

3. Assessment of Use
   - Test the usability of the digitized materials through a user survey that will examine how researchers use the material.
   - Track and report on the project website about the usage of collections prior to and after digitizing in terms of reference requests and usage of the originals.

4. Promotion of Collection and Project Documentation
   - Publicize the digitized collections through press releases, announcements on appropriate listservs, and presenting on the project during at least one professional conference.
   - Create a project website that publicizes the project and describes the processes and costs associated with preparing, scanning, and making these collections available online.
   - Timely submission of complete reports, which include detailed cost analyses for each part of the project, as well as three copies of grant products such as digitizing guidelines, publicity materials, and the revised finding aid.
1. Scanning and Costs

27,515 total images were produced by this project, exceeding original projections of approximately 24,000 images. The rapid pace of digitization enabled the project team to expand the original scope of materials. Even with this expanded scope, total digitization costs for this project also came in below projections, for a total cost of $97,488.30 to digitize images for the ROAD database (see Table 1 below). Total digitization costs divided by total images produced yields an average cost of $3.54 per image, well below the project goal of approximately $5 per image.

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Planned Expenditures</th>
<th>Actual Expenditures</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitization Assistant wages</td>
<td>$33,333.50</td>
<td>$23,337.50</td>
<td>0.5 FTE; 20 hour/wk</td>
</tr>
<tr>
<td>Digitization equipment</td>
<td>$2,500.00</td>
<td>$2,500.00</td>
<td>Zeutschel planetary scanner</td>
</tr>
<tr>
<td>Contract digitization services</td>
<td>$11,640.00</td>
<td>$19,141.71</td>
<td>Vendor digitization of slides</td>
</tr>
<tr>
<td>Shipping costs</td>
<td>$250.00</td>
<td>$257.09</td>
<td>Shipping slides to vendor to digitize</td>
</tr>
<tr>
<td>Cost share: staff salaries</td>
<td>$49,706.00</td>
<td>$38,973.07</td>
<td></td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>$17,410.35</td>
<td>$13,278.93</td>
<td>Cost share + appropriated funds</td>
</tr>
<tr>
<td><strong>TOTAL DIGITIZATION COSTS</strong></td>
<td><strong>$114,839.65</strong></td>
<td><strong>$97,488.30</strong></td>
<td></td>
</tr>
</tbody>
</table>

Digitization Assistant

Speed and efficiency of digitization work kept costs at a minimum. Rita Johnston, the digitization specialist hired by the grant, proved to be both quick in digitization work (scanning and quality control) and accurate and careful in metadata review. Rita scanned photographs, worked with a vendor to digitized slides and negatives, and conducted quality control on all images, which included cropping, inversion of negatives, and color level adjustment.

As she digitized and performed quality control on the images, Rita reviewed the existing metadata records to ensure that the image in hand matched the existing description. This work also involved checking the file names of the digitized images against the file identifiers that exist in the metadata to be sure that images would match with the database records. Her metadata verification also involved quick corrections of typographical errors and routine normalization.

An additional factor contributing to lower costs for digitization was a decrease in the projected rate for Library Assistant-banded positions at our institution.
Digitization equipment

In addition to great project staff, our strategic purchase of a Zeutschel 14000 A2 overhead scanner (rather than the planned Epson 10000XL flatbed) enabled us to increase our digitization throughput. Where the Epson scanner was estimated to take around six minutes per scan, including time for material handling, quality control, and generating derivatives, the Zeutschel averaged approximately two minutes per scan for the same work.

Contract digitization services and shipping costs

Outsourced slide digitization proceeded at the expected pace. Even though we adjusted our original digitization plan, sending smaller batches more frequently in order to conduct quality control on each batch as it was returned, our timeline for completion of the approximately 12,000 slides was unaffected. The unplanned increase in costs for contract digitization did not affect our total costs, due to the faster digitization pace afforded by the Zeutschel and the efficient work of our Digitization Assistant.

2. Publication with Metadata

Metadata cleaning began during the digitization phase, and continued during preparation of the collection for publication. Unexpected infrastructure development and staff turnover altered original plans to publish the collection in batches. Instead, publication was postponed until work on a new digital collections discover and access application was completed. The ROAD 2.0 collection (http://library.duke.edu/digitalcollections/outdoor_advertising/) was published in its entirety only one month later than originally planned.

The project team established goals for metadata cleanup to enable a more effective discovery interface upon publication. Digitization Assistant Rita Johnston focused on creating new records in cases where multiple items were described in the same record. She has also refined records that had been given a “Miscellaneous” subject designation and corrected company names where values were inconsistently assigned.

Publication of the images with the ROAD database metadata required cleaning of the metadata to correct errors and to enable item-level searching of images, and mapping of the existing descriptive values to a more generic and discoverable schema based in Dublin Core. This modified Dublin Core schema, which we refer to as AdCore, includes additional descriptive values mapped to Dublin Core elements. A list of these new values can be found in APPENDIX 1: AdCore Metadata Schema – Additional Elements.

3. Assessment of Use

To assess the use of the ROAD 2.0 digital collection, we developed and conducted a web-based user survey. A copy of the survey can be found in APPENDIX 2: ROAD 2.0
Survey. To further assess the use of the site, we also gathered web statistics through Google Analytics.

The online survey was posted on the ROAD 2.0 website in September 2011. The most recent analysis of survey results, collected in June 2012 and discussed in greater detail below, supports earlier findings: users are satisfied with the site content and usability and a greater number self-identify as “casual users” than we would have expected. We were also surprised to learn that, of the respondents doing topical research, the majority were apparently not researching the advertising depicted in the photographs, and were instead using such criteria as geographical place names to drive their search.

Analysis of web statistics revealed that ROAD 2.0 was among the more popular of our digital collections, ranking 9th out of 40 based on portal pageviews. The length of time visitors spent on the site, clicking through items and pages of search results, supports the survey finding that users found the content relevant. Search terms used also corroborated another survey finding: that users were frequently interested in the places where the billboards were located, not just the advertisements themselves. While some items in ROAD 2.0 were viewed over 100 times, pageview statistics revealed that 38% of the collection had never been viewed, indicating that more needs to be done to promote the ROAD 2.0 collection and to optimize the portal and pages for search engine discovery.

User Survey

In the fall of 2011, we developed and conducted a user study for assessing use and value of ROAD 2.0. A brief web survey was positioned prominently on the site, for visitors to voluntarily provide feedback. The initial results of that survey were shared in the project’s Jul – Dec 2011 Interim Report. Since then, the survey has received an additional eight responses, which are incorporated in the final analysis below. Between its launch on Sept 19, 2011 and June 20, 2012 (276 days), the survey received 48 complete responses (averaging roughly one response every five days).

Yvonne Belanger (Duke University Libraries’ director of assessment) worked with Liz Milewicz (PI), Lynn Eaton (Hartman Center), and Sean Aery (Digital Projects Developer) to create questions that could accurately gauge the usability of the ROAD 2.0 interface and the value of the content for research, and also probe other ways these materials are being used. Key goals for the online survey were to discover who was using the site, how they were using it, and satisfaction with the site and content. We also hoped to generate a high number of complete responses by keeping the survey short, and not burdening the user with completing a long survey. Questions from this web survey are appended to this report (see APPENDIX 2: ROAD 2.0 Survey).

Survey questions were incorporated into a Qualtrics survey by Sean Aery. Aery also embedded the survey into the online interface using prominent links in the main ROAD 2.0 portal, the member collection portals, search results within either the main portal or a member collection, and on item pages for any item from a ROAD 2.0 member collection.
Analysis of User Survey Responses

There were 66 total responses to the survey. Forty-eight responses (73%) were complete and so were used to develop analysis. The remaining 18 responses (27%) were partial responses (started but abandoned before the end of the survey) and thus were excluded from analysis. Of the total 48 analyzed responses, 26 (54%) included additional feedback. A detailed analysis of responses to survey questions is appended to this report, along with complete listings of the additional feedback users provided (see APPENDICES 3-5).

Overall, responses to the survey were very positive, with most users reporting high degrees of satisfaction (see APPENDIX 4: Detailed Analysis of Responses to ROAD 2.0 Survey). Of the users seeking particular images, 86% were satisfied (either “very” or “somewhat”). Likewise, 83% of users doing topical research reported satisfaction. While the site’s ease of use was generally rated favorably, it is worth noting that slightly more respondents felt it was “somewhat easy to use” (20, or 42%) than “very easy to use” (19, or 40%).

The types of users and uses identified were also insightful, as they indicated to us a higher percentage of casual users than we might have expected (see APPENDIX 4: Detailed Analysis of Responses to ROAD 2.0 Survey). It was also surprising to learn that of the respondents doing topical research, the majority was apparently not researching the signs, billboards, or advertising depicted in the photographs. Though there are too few responses to generalize, it is worth noting that geographical place names figured prominently among the research topics. (See APPENDIX 3: ROAD 2.0 Users’ Research Topics for all user-supplied responses to this question.)

Slow load times, difficulties navigating between several images at once, and insufficient description of outdoor advertisements’ locations were all cited as negative aspects of the site (see APPENDIX 5: ROAD 2.0 Users’ Additional Feedback). It is likely that the site’s unresponsiveness was a primary factor for the users who expressed difficulty or dissatisfaction using the site, given the prevalence of comments that cited slowness as a problem. Slow load times have been problematic for all of Duke’s collections during this assessment period, but development is underway to speed up the application by the end of summer 2012. Some of the navigation features requested by users (grid view and category-specific slideshow) were actually already possible in the application, so these may not be presented clearly enough in the interface.

Web Analytics

We used Google Analytics on all pages of the ROAD 2.0 website in order to measure user interactions with the site and the digitized items within. Statistics were collected for the period April 18, 2011 to June 27, 2012, covering the entire lifetime of the website to date. A project launch timeline (APPENDIX 6: Timeline of Web Statistics) contextualizes the dates during which web statistics were gathered. A more complete breakdown and discussion of these statistics, analyzed in summary form below, are appended to this report (see APPENDICES 7-11).
The ROAD 2.0 portal page (http://library.duke.edu/digitalcollections/outdoor_advertising/) was viewed 7,401 times, with a peak of 724 views on July 20, 2011. These figures include traffic to http://library.duke.edu/digitalcollections/outdoor-advertising/ as the site was available at either location during the first several months of the project. We are encouraged that the ROAD 2.0 portal was visited more frequently than most of our existing digital collection portals: compared with other digital collections at Duke University Libraries during this period, ROAD 2.0 was the ninth most popular digital collection (of 40 in our common discovery & access application), as measured by portal page views.

However, there is still a lot of room for improvement when it comes to helping potential users discover these materials. For instance, pageviews for four of Duke’s advertising digital collections portals surpassed the ROAD 2.0 portal’s 7,401 during this period: Ad*Access = 177,590 pageviews; Emergence of Advertising in America = 70,500 pageviews; AdViews = 33,145 pageviews; and Medicine & Madison Avenue = 10,930 pageviews.

Likewise, while most of the digitized items from ROAD 2.0 were viewed at least once, and there were several items that were viewed over 100 times, nearly 38% were never viewed by a single user during the year (see APPENDIX 7: ROAD 2.0 Item Pageviews). These numbers suggest that we need to do a better job promoting the collection to potential users in the future, as well as enhance our discovery & access application so that our pages (portals as well as items) are better optimized for discovery by search engines.

Our web analytics search data corroborates a conclusion drawn from our user survey responses: there has been slightly more interest in finding materials by geographic region than by particular products or companies, and the landscapes that surround the advertising in the photographs are as compelling to researchers as the ads themselves. (See APPENDIX 10: ROAD 2.0 Frequent Search Terms.)

Finally, our statistics on post-search site interactions support survey feedback that indicated users felt their searches were successful and were satisfied with the relevance of the materials they were discovering on the site. Users who performed searches usually viewed multiple pages of results, opened item pages, and stayed on the site for several minutes before leaving.

4. Promotion of Collection & Project Documentation

Launch of the ROAD 2.0 digital collection was promoted to advertising-industry publications and websites as well as to archival organization, and through the Duke University Libraries’ and Hartman Center’s online and print media outlets. Persistent information about the project and the ROAD 2.0 collection are available through the digital collections website, http://library.duke.edu/digitalcollections/outdooradvertising/about/.
Promotion

The portal was released in April 2011, and heavily promoted through a press release and postings with a variety of trade journals, blogs, and listservs (see APPENDIX 12: ROAD 2.0 Press Release). News of the ROAD 2.0 digital collection appeared as a cover article in the Summer 2011 Hartman Center Front & Center newsletter. It was also posted on the Center’s Facebook page, the Duke University Libraries home page as a news article, and the David M. Rubenstein Library’s blog, The Devil’s Tale.

The ROAD 2.0 digital collection was promoted to academic groups such as the Conference on Historical Analysis and Research in Marketing (CHARM), Business History Conference, American Academy of Advertising and through the H-Announce listserv. The press release was also distributed to the Society of American Archivists’ (SAA) Archival Outlook magazine, the Society of North Carolina Archivists’ (SNCA) newsletter, and the Business Archives Section of SAA.

Documentation

Documentation of project work is described below and in the appendices. Documentation for this project can also be accessed publicly through the project website: http://library.duke.edu/digitalcollections/outdooradvertising/about/.

Cost Assessment

This project sought to produce digital images for less than $5.00 per scan. As shown in Table 1 above, actual digitization costs were lower than expected, and the rapid pace of digitization allowed us to scan more images than originally planned. The result was an average cost of $3.54 per image, well below our goal of $5 per image.

<table>
<thead>
<tr>
<th>Table 2: Planned versus Actual Digitization Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Category</td>
</tr>
<tr>
<td>Digitization Assistant wages</td>
</tr>
<tr>
<td>Digitization equipment</td>
</tr>
<tr>
<td>Contract digitization services</td>
</tr>
<tr>
<td>Shipping costs</td>
</tr>
<tr>
<td>Cost share: staff salaries</td>
</tr>
<tr>
<td>Fringe benefits</td>
</tr>
<tr>
<td><strong>TOTAL DIGITIZATION COSTS</strong></td>
</tr>
</tbody>
</table>
APPENDIX 2: ROAD 2.0 Survey

Thank you for helping us to evaluate our ROAD2.0 (Resource of Outdoor Advertising Descriptions) digital collections, including over 30,000 images from five archival collections. This survey should take only a couple of minutes to complete.

I am a [choose one]:
- Student
- Faculty Member / Teacher
- Librarian / Archivist
- Advertising professional
- Businessperson in an industry other than advertising
- Casual user

How did you use this website today? (check all that apply)
- Casual browsing
- Searching for a specific image or images
- Re-searching a particular topic (please specify)

How successful were your searches for the image(s) you were seeking?
- Very Unsuccessful
- Somewhat Unsuccessful
- Somewhat Successful
- Very Successful

With respect to your research topic, how satisfied are you with the resources and information available in this site?
- Very Dissatisfied
- Somewhat Dissatisfied
- Somewhat Satisfied
- Very Satisfied

How would you rate this website on its ease of use?
- Very Difficult to Use
- Somewhat Difficult to Use
- Somewhat Easy to Use
- Very Easy to Use

How likely would you be to recommend this site to someone else?
- Very Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Very Likely

Please provide any additional feedback:
UF Research Data Needs Assessment Survey, Fall 2013

Overview
UF Research Data Needs Assessment Survey, Fall 2013 by the Data Management / Curation Task Force (DMCTF), distribution started 18 Sept. 2013 with deadline of 18 Oct. to graduate student email list, faculty newsletter, postdoctoral newsletter, library website, and additional standard methods.

Message for Survey Distribution
Subject: UF Research Data Needs Assessment - Response Requested
Message Body:
How do you collect, store, protect, analyze, and share your research data? The George A. Smathers Libraries, UF Research Computing, and UF Office of Research are interested in learning more about needs on campus for services surrounding the management and analysis of research data. Please contribute your ideas by completing this survey: https://ufl.qualtrics.com/SE/?SID=SV_b3mFwx6pd3HiuH

Results will help the UF Data Management Task Force (http://cms.uflib.ufl.edu/datamgmt/index.aspx) identify and develop data services that are most useful to the campus community.

Thank you for your participation,

Hannah F. Norton
Reference & Liaison Librarian
Assistant University Librarian
Health Science Center Libraries
University of Florida
(352) 273-8412
nortonh@ufl.edu

Laurie N. Taylor, Ph.D.
Digital Humanities Librarian
George A. Smathers Libraries
University of Florida
352.273.2902
laurien@ufl.edu

This project has been approved by the University of Florida IRB-02 Protocol #U-750-2013
Qualtrics Survey Questions

Section 1: Audience

Q1  What best describes your current position?
   - Faculty Member at the University of Florida
   - Faculty Member Elsewhere
   - Student at the University of Florida
   - Student Elsewhere
   - Non-Academic/Other

Q2  What is your field of research?

Q3  How often do you visit this collection?
   - Daily
   - Once a Week
   - 2-3 Times a Week
   - Once a Month
   - 2-3 Times a Month
   - Once in 6 months

Q4  Are you interested in creating digital scholarship with the collections? What library resources are you using for this scholarship?
Section 2: Purpose of Use

Q5 What purpose brought you to this collection?
- Research (academic, business, personal, other)
- Teaching (K-12, undergraduate, graduate, other)
- Class Work
- Curiosity
- Other (please specify)

Q6 Which collection do you mainly use?
- Collection 1
- Collection 2
- Collection 3

Q7 What type of information do you search for?

<table>
<thead>
<tr>
<th></th>
<th>Collection 1</th>
<th>Collection 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artifacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Click to write Statement 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Click to write Statement 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Click to write Statement 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q8 What do you find valuable about this collection?
### Section 3: Quality of Service

Q9. Please describe how you search within the collection?
- [ ] Google
- [ ] UFDC homepage
- [ ] Specific Collection Page

Q10. How often do you use the following services?

<table>
<thead>
<tr>
<th>Service</th>
<th>Once a week</th>
<th>2-3 times a week</th>
<th>Once a month</th>
<th>2-3 times a month</th>
<th>Once in six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>MetaData</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>MyUFDC</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Citations</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Zoom</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Thumbnail View</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Page Features</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Search/Retrieval Features</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Click to write Statement #0</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Click to write Statement #9</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

Q11. Rate the effectiveness or usefulness of the following services to your work.

<table>
<thead>
<tr>
<th>Service</th>
<th>Not Useful</th>
<th>Of Some Use</th>
<th>Very Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>MetaData</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>MyUFDC</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Citations</td>
<td>[ ]</td>
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<td>[ ]</td>
</tr>
<tr>
<td>Zoom</td>
<td>[ ]</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Page Features</td>
<td>[ ]</td>
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</tr>
<tr>
<td>Search/Retrieval Features</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Click to write Statement #8</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Click to write Statement #9</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
Section 4: Future Use, Needs, Supports

Q12: What functionality would you like to see added to the site?
- Searching by Date Range
- More integration with archives and finding guides
- Advanced Search

Q13: Is there a particular item, or sources from a region, year, or genre that you would like to see digitized?

Q14: Indicate below what would support your use of and work with the collections.
INDIANA UNIVERSITY BLOOMINGTON
INFinity Query Logs Analysis Study: Final Report
http://webapp1.dlib.indiana.edu/inharmony/projectinfo/userStudies/finalReport_
INHarmonyLogsAnalysis.pdf

IN Harmony Query Logs Analysis Study:
Final Report

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May 10, 2005
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Thanks to Jenn Riley for her analysis and final review of this report. And thanks to Kara Moore for her invaluable help with Excel, especially in processing and visualizing the data.
I. Executive Summary

The IN Harmony Sheet Music Query Logs Analysis study was designed to understand how users search for sheet music in order to inform the:

- selection of a metadata schema and associated vocabularies for sheet music description
- design of a sheet music cataloging tool
- design of end-user browse and search interfaces

This analysis is the first of a two-phase usability study. Remaining and emerging questions will be addressed in a second study, which will be conducted with representative users during the months of June and July 2005.

Six months of data, June-November 2004, was collected from the IU Sheet Music and UCLA Sheet Music Consortium websites. A ten percent random sample of 2,542 log entries (IU, n=1,116 and UCLA, n=1,426) were analyzed to determine the number of:

- Browse, search and advanced searches
- User-specified keyword, subject, names/composer, etc. queries
  - Mappings of keyword searches to specific fields
  - Mappings of subject searches to subject sub-categories (topical, form, genre, style, temporal, geographic, etc.)
  - Known-item versus unknown-item queries
  - Year search filters used

Search inputs were also analyzed in terms of kinds of content (e.g. lyrics), syntax/operators used, and use of advanced search fields.

The data was processed, charted and graphed using Microsoft’s Excel spreadsheet program. Keyword and user-specified subject searches were further analyzed with Jenn Riley’s, IU Metadata Librarian and music domain expert, help.

Name and title keyword searches for sheet music were the most popular; 37% keyword name and 29% keyword title for IU Sheet Music and 27% keyword name and 52% keyword title for UCLA Sheet Music. The most common user-specified search fields are also name and title; 23% name and 19% title for IU and 28% name and 12% title for UCLA. Subject-specified searches are few (IU and UCLA, <3%); however, a significant number of subject keyword searches were conducted (19%, n=1,695). The most common year filter used on both websites was for pre-1923 records. A more detailed discussion of the findings can be found in section VI and VII of this report.

Key findings and recommendations are:

Cataloging Tool
- Tendency towards name searching should require name authority control and integration of the cross-referencing structures in order for users to more reliably find name variants
- Preference toward keyword searching suggests the need for rich, descriptive records including the recording of lyrics, chorus lines, and other metadata that may enrich the record to increase recall when free-text searching
- Common subject searches such as genre/form/style, instrumentation and topic should require the use of controlled vocabularies suitable for describing these specific subject areas
- Infrequent but interesting searches of other metadata elements such as identification numbers and keys should be considered as part of the metadata model

**Website Delivery Functionality**
- High use of browse interfaces in IU Sheet Music and use of broad wildcard searching (e.g. b*) and year range searches suggests the benefit of comprehensive browse menus for additional access points and to provide an overall sense of the contents of the collections
- Number of query syntax errors resulting in no hits though few suggests that flexible keyword searching functionality should be supported (complex Boolean searching, wildcarding, truncation, etc.)
- Prominence of wide-range of searches, from “classical” to contemporary music, may require the need to clarify the contents of the collection with a “Collection Highlights” section

## II. Introduction

Indiana University (IU), the Indiana State Library (ISL), the Indiana State Museum (ISM), and the Indiana Historical Society (IHS) received a grant, effective October 1, 2004, from the Institute of Museum and Library Services (IMLS) to provide electronic access to Indiana-related sheet music from each of the institutions’ collections. Approximately 10,000 pieces of sheet music will be available online as a result of this grant activity.

## III. Purpose of Study

A primary goal for this project is to provide robust, consistent browse and search access across collections. As a result, cataloging guidelines and tools for sheet music description will be developed to aide the project partners in a) cataloging sheet music not yet described in their respective collections; and b) mapping existing cataloging records to a format that will facilitate cross-collection searching.

In order to generate cataloging guidelines and requirements, we needed to understand how sheet music is browsed and searched. We evaluated a subset of the query logs captured by the Indiana University Sheet Music Collection* (housed at Indiana University) and the Sheet Music Consortium** (housed at University of California, Los Angeles) websites to learn the following:

- How often users conduct a browse, search or advanced search for sheet music
- How often users conduct known-item (specific) versus unknown-item (general) searching
- What kinds of searches are being conducted (keyword, title, name, subject, etc.)
- What kinds of subject-related queries are being entered by users (e.g. topical, genre, style, etc.)

Analyzing the log data also helped us determine preliminary browse and search interface and functionality requirements for the IN Harmony website.

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* [http://dlib.indiana.edu/collections/sheetmusic/](http://dlib.indiana.edu/collections/sheetmusic/)
** [http://digital.library.ucla.edu/sheetmusic/](http://digital.library.ucla.edu/sheetmusic/)
Executive Summary

After introduction of Variations2 timelines in one of the classes at the IU school of music, two surveys were conducted to collect data about students’ listening habits and use of the timeline tool as well as identify the level of satisfaction with Variations2. In addition to surveys, log files of Variations and Variations2 were analyzed to back up findings from surveys.

During the week of November 9, 2004 and at the end of the fall 2004 semester students of the MS44 “Piano literature: 1850 to the present” class were asked to fill out a questionnaire asking about frequency of use, tool preferences and general satisfaction with Variations2. Most questions in the first and second surveys were different; a few questions about listening as well as background information questions were the same. Thirteen and seven responses were collected for first and second surveys respectively.

In general, students reported that Variations2 helped them prepare for class and somewhat motivated them to do the listening. All respondents of the first survey reported using Variations2 a lot. Even though Variations2 was available for installation at home and some students installed it, most of them listened to Variations2 recordings in the library (10 out of 13 in the first survey.) The number of hours spent listening depended on the time in the semester: students spent more hours listening with Variations2 closer to exams. This pattern was confirmed by log file analysis.

Surveys and log file analysis also demonstrated that students accepted Variations2 and its timelines as a learning tool. They used Variations2 intensively during Unit 2 (the unit of the semester when Variations2 links were made available in the syllabus by instructor). They also used Variations2 in preparation for the final exam. Six respondents from the second survey said they preferred Variations2 over Variations. All second survey participants reported missing Variations2 in the last unit of the class, when there were no Variations2 links in the syllabus.

Students indicated high satisfaction with the timeline tool. The average helpfulness of Variations2 timelines was rated as high as 6.6 (from 7 being the highest rating). The visual representation of a piece in a timeline was rated 6.5 on average.

Overall, the study provides empirical justification for switching from Variations to Variations2 indicating that students like Variations2 and are willing to use it in preparation for class and will accept using it in class. Due to small samples sizes and relatively low response rate from second survey, further surveying is necessary to substantiate findings from this study with larger, more representative data.
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Purpose of Study

This study was a part of ongoing testing for Variations2: IU Digital Music Library project (V2 hereafter). Primarily the V2 project is a research project aimed to provide a testbed for research in such areas as usability, copyright, metadata, system design, networking and music instruction. The purpose of this study is to collect data about music students’ listening habits and use of the timeline tool in Variations2 as well as identify the level of satisfaction with Variations2.

In many music classes, students are expected to prepare for class by listening to assigned pieces of music. Yet instructors suspect students do not always listen before class—some students prefer to optimize their studying time by first finding out in class what particular features of a work are of interest to the instructor and therefore likely to appear on an exam. With this information in hand, they can pay attention to the right things when they listen, and perhaps spend less time listening by being more selective.

The main purpose of this study was to see whether providing students with guidance up front about what to listen to would make students more willing to listen prior to the class session where a particular work was going to be discussed. In addition, we wanted to explore listening patterns generally and compare students’ attitude towards the existing Variations tool with their attitudes towards the new Variations2.

Procedure

The data for this study were collected using two questionnaires specifically designed to explore students’ motivations and listening patterns (see Appendix, p. 24 and Questionnaire 2, p. 26) as well as from log files. The questionnaires consisted of two sections: background information section and listening and timeline tool information section. The background section was similar in both questionnaires and collected information about students’ gender, major, computer experience, as well as their expectations about grades at the upcoming exam. The listening section asked students to recall how they prepared for each class as well as for the last exam and answer questions about frequency, places and quality of their preparations. The second questionnaire also asked students about their attitudes towards using Variations2 in class.

The surveys were conducted in the “M544: Piano Literature: 1850 to the present” class. In the fall of 2004 there were 18 students in this class. The class met twice a week and covered piano music from 1850 on. The syllabus is divided into 3 sections with exams after each section. First exam is on the week 6 of the semester (October 5), the second exam is on week 11 (November 9), final exam is at the end of the semester (December 13).

The syllabus web page provides links to particular recordings available online via Variations for each class meeting of the semester. For the middle third of the semester (hereafter referred to as Unit 2), starting from October 7, links to Variations2 recordings and timelines were provided along with links to Variations, which allowed students to use Variations2 in addition to or instead of Variations. Timelines of particular pieces were created by instructor (see Figure 1).
Appendix

Questionnaire 1 :: Use of Variations2 for exam preparation

Thank you for participating in this survey. Please fill out the questionnaire and bring it with you to the next class, the researcher will collect them at the beginning of the class.

Background
1. Gender: ____ Female ____ Male
2. What is your native language? __________________
3. What is your current academic involvement at IU (e.g. undergraduate, masters, PhD, non-student)? _____________
4. What is your major (e.g. jazz studies, piano)? __________________
5. Approximately, how many hours per week do you spend using a computer?
   ___ 0-5  ____ 6-10  ____ 11-20  ____ 21 or more
6. Rate your computer experience on the following systems by circling 1-5 below:
   a. PC:   Novice 1 2 3 4 5 Expert
   b. Macintosh: Novice 1 2 3 4 5 Expert
7. What grade do you expect on this exam (November 9)?
   ___ “A”
   ___ “B”
   ___ “C”
   ___ Other (please explain ____________________________)
8. Do you have Variations2 installed at home? ______ Yes ______ No

Listening and timeline tool

Please recall how you prepared for the November 9 exam and answer the questions in this section.

1. What phrase best describes your preparation style for this exam?
   ___ I did the listening according to the syllabus (required works before each class) and
   ___ then reviewed them before the exam
   ___ I didn’t listen much until just before the exam
   ___ I listened to some works earlier but mostly I listened before the exam
   ___ I didn’t listen much because ___________________________________

2. Excluding the 5 days right before the exam, how many hours per week did you spend on
   listening related the material covered by this exam?
   ___ 0-3  ____ 4-6  ____ 7-10  ____ 11 or more

3. During the 5 days right before the exam, how many hours did you spend on listening in
   preparation for this exam?
   ___ 0-3  ____ 4-6  ____ 7-10  ____ 11 or more
4. Where did you do most of your listening?
   ___ At home
   ___ In the library
   ___ Both at home and in the library
   ___ Other (please explain __________________________)

5. When you listen, do you look at the score?
   ___ Yes, all the time
   ___ Yes, sometimes
   ___ No, I just listen
   ___ Other (please explain __________________________)

6. What source(s) did you use for your listening? Mark the most appropriate column for each source.

<table>
<thead>
<tr>
<th>Music Source</th>
<th>Amount of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Lot</td>
</tr>
<tr>
<td>Variations</td>
<td></td>
</tr>
<tr>
<td>Variations2</td>
<td></td>
</tr>
<tr>
<td>Timelines</td>
<td></td>
</tr>
<tr>
<td>CDs</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Please answer the questions below only if you used Variations2. Select the most appropriate phrase or number.

7. Having Variations2 available for this part of the course:
   ___ Changed nothing; I listened as usual
   ___ Helped me in exam preparation but not class preparation
   ___ Sometimes motivated me to do listening in preparation for class
   ___ Helped me listen every week prior to each class

For questions below, circle a number from 1-7 representing your feelings or thoughts about Variations2 experience.

8. I found the timeline tool:
   Not helpful 1 2 3 4 5 6 7 Helpful

9. The visual representation of a piece in a timeline was:
   Hard to understand 1 2 3 4 5 6 7 Easy to understand

If you have additional comments, feel free to write them below
Questionnaire 2 :: Attitudes toward using technology in the class

Background

1. Gender: ____ Female     ____ Male

2. Approximately, how many hours per week do you spend using a computer?
   ____ 0-5   ____ 6-10  ____ 11-20  ____ 21 or more

3. Rate your computer experience on the following systems by circling 1-5 below:
   a. PC:  Novice 1 2 3 4 5 Expert
   b. Macintosh: Novice 1 2 3 4 5 Expert

4. What grade do you expect for this class?
   __ “A”   __ “B”   __ “C”   __ Other (please explain______________________________)

5. Do you have Variations2 installed at home?            ____ Yes   ___ No

Listening

Please recall how you prepared for the third (final) unit of this class and answer the questions in this section.

6. What phrase best describes your preparation style for the final exam?
   ___ I did the listening according to the syllabus (required works before each class) and
       then reviewed them before the exam
   ___ I didn’t listen much until just before the exam
   ___ I listened to some works earlier but mostly I listened before the exam
   ___ I didn’t listen much because ____________________________________________

7. Comparing Variations and Variations2 use during this semester, what phrase best describes your feelings:
   ___ I prefer Variations
   ___ I prefer Variations2
   ___ I prefer Variations but I also found timelines very helpful during the second unit
   ___ I don’t prefer one program over the other

8. After you had the chance to use Variations2 during the second unit of the course, how did you feel about NOT having it available during the last unit?
   __ I strongly missed having Variations2 linked from the syllabus.
   __ I somewhat missed having Variations2 linked from the syllabus.
   __ It made no difference--I didn’t miss Variations2 at all.
   __ I was happy to avoid Variations2.
   __ Other (please describe):

9. Instructors teaching this kind of courses should provide Variations2 timelines to guide students’ listening.
   ___ Strongly disagree
   ___ Disagree
   ___ Don’t know
   ___ Agree
   ___ Strongly agree
Variations2: IU Digital Music Library  
Version 2.0  
Usability Test Report  
October 20, 2003

Facilitator: Maggie B. Swan (mbswan@indiana.edu)

Executive Summary

During July 2003, a round of usability testing was conducted on version 2.0 of the Variations2: IU Digital Music Library software. Variations2 aims to establish a digital music library testbed system for the purpose of examining dissemination of digitized music in a variety of formats. The current Variations system is used primarily by music students to listen to CD-quality recordings online at computer workstations in the IU-Bloomington Cook Music Library.

During five sessions, seven music students used V2 to work through a series of tasks. In two sessions, participants worked in pairs; three participants completed sessions individually. Major goals of the formative evaluation were to investigate users’ approaches to the following: searching for and playing works; accessing, viewing, bookmarking and printing scores; and diagramming work structures with the timeline tool.

Via comments and a satisfaction questionnaire, users indicated above-average satisfaction with the system as a whole. They suggested that the search process was more “streamlined” than IUCAT and the audio player better than the current Variations player. Score viewer default layout was mostly satisfactory, although a few users adjusted to a 2-page view and some requested expanded functionality for score manipulation. It was evident that the process of printing score pages was vastly improved over the process used in version 1.0 and users were impressed by the quality of score printouts. The concept of completing form diagramming tasks on the computer vs. on paper was met with enthusiasm, although an initial learning curve was apparent. Paired users tended to utilize V2 in a much more exploratory and informal fashion and were more talkative [to each other] during sessions. Conversely, individual users tended to be more task-focused and likely to ask the facilitator for help.

Problems were encountered in several areas, although no user experienced any “show-stopper” difficulties. For instance, the act of bookmarking score pages was sometimes difficult due to the large size of the songbook used in the task. In these cases, bookmarks placed close together were difficult to precisely click on for score navigation purposes. Issues associated with the timeline included figuring out the correct window from which to start a new timeline, the misconception that the timeline would be associated with the score viewer, and various problems with deleting and grouping bubbles, and adding labels/annotations. Additionally, one user was color blind, a characteristic which introduced an interesting accessibility variable due to the timeline tool’s heavy reliance on color coding of musical sections.

Recommendations for redesign based on all user sessions are provided. Areas discussed include search window functionality, score viewer bookmarks, and timeline tool activities such as creating new timelines and grouping/coloring bubbles.
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10/20/2003
I. Purpose of the Study

The Variations2: IU Digital Music Library project (V2) aims to establish a digital music library testbed system that contains music in a variety of formats. The current Variations system is used primarily by music students to listen to CD-quality recordings online at computer workstations in the IU Cook Music Library.

This formative usability test examined Variations2, version 2.0, in preparation for its release in September 2003. Goals of this test included:

- Determine what problems users have when searching for selections;
- Determine what problems users have when accessing listening selections with the audio player;
- Observe which methods of score viewing users prefer;
- Determine what problems users have when accessing, bookmarking and printing scores;
- Judge whether score printing process was improved over v1.0;
- Determine what problems users have when accessing and manipulating the timeline tool;
- Gauge user satisfaction with the timeline tool, in particular, use of computer-based tools (vs. paper) to complete form diagramming tasks;
- Monitor problem areas to determine which need to be added to the help pages;
- Observe differences in interaction and usage patterns when users work with a partner versus when users work individually.

Variations2 Components

Version 2.0 of Variations2 includes various components, most of which were present in testing of version 1.0. However, some changes were made to these components from v1.0 to v2.0. In addition, the timeline tool was not tested in the v1.0 round of testing. Therefore, components used in this round of testing are illustrated below. They include the search interface, audio player, score viewer, bookmarks editing window, and timeline tool.
VII. Appendices

I. Demographic Information

1. Are you Male / Female? (Circle one)
2. What is your major? (e.g. composition, voice, piano):

3. What is your age? ______
4. What is your native language? ______________________
5. How many hours per week do you spend using a computer?
   [____ 0-5] [____ 6-10] [____ 11-20] [____ 21 or more]
6. Rate your computer experience on the following systems by circling 1-5 below:
   a. PC: Novice 1 2 3 4 5 Expert
   b. Macintosh: Novice 1 2 3 4 5 Expert
7. Approximately how often do you use Variations?
   ___ once a month or less
   ___ once every two weeks
   ___ once a week
   ___ 1-5 times a week
   ___ more than 5 times a week
8. When did you begin using Variations? Mark the most accurate choice.
   ___ within the last month
   ___ within the last year
   ___ within the last two years
   ___ more than two years ago
9. What activities do you mainly use Variations for? (e.g. listening to a class reserve list, preparing for recital, personal listening, etc.)
   ____________________________________________________________________
   ___
10. Have you participated in any prior Variations2 tests? (circle one) YES NO

10/20/2003 21 Variations2 Usability Test v2.0 Report
II. Tasks

Instructions: Complete all three parts below. Please say aloud any comments you have as you work through the tasks and interact with the system.

Part A

Motivation: You need to find a Schubert piece that you can analyze for a theory assignment.

1. Within Variations2, find a work by Schubert which has an online score available. Write the title in the space below.

2. Open the score in the score viewer and adjust the score appearance according to your preferences.

3. Bookmark three (3) score pages of interest.

4. Print out two (2) of your bookmarked score pages.

Part B

Motivation: Next week's theory quiz requires that you analyze and diagram a Beatles song and turn it in before the end of class. You decide to use the Variations2 Timeline tool to practice for the quiz.

1. Create a new timeline for the Beatles song entitled “Norwegian Wood”.

2. Diagram the structure of the piece by creating bubbles.

3. If appropriate, group a set of bubbles to show larger formal structure.

4. Use labels and/or colors to show relationships between the sections.

5. Add annotations to some bubbles to describe some musical feature of that section.

6. Print out the timeline you just created.

Part C

Motivation: One of the pieces you have been working with is the Beatles song entitled “I Will”. You open the timeline file, a work in progress, to continue diagramming the structure.

1. Adjust the timeline for “I Will” so that it more correctly reflects the structure of the song. You may want to change colors, labels, timepoints, etc.

2. Save the timeline after you are done making adjustments.

3. Print out the timeline you just saved.
III. Satisfaction Survey
For each question below, circle a number from 1-7. The number should best represent your feelings about the Variations2 experience that you described in Section II. Feel free to write additional comments in the space provided below.

1. Overall, I found Variations2:
   Terrible 1 2 3 4 5 6 7 Wonderful
   Difficult 1 2 3 4 5 6 7 Easy
   Frustrating 1 2 3 4 5 6 7 Satisfying
   Dull 1 2 3 4 5 6 7 Stimulating
   Slow 1 2 3 4 5 6 7 Fast

2. Navigating Variations2 and its components was:
   Difficult 1 2 3 4 5 6 7 Easy

3. Tasks could be performed in a straight-forward manner:
   Never 1 2 3 4 5 6 7 Always

4. My location within Variations2 at any given moment was:
   Never apparent 1 2 3 4 5 6 7 Always apparent

5. Characters (letters, type, fonts) in Variations2 are:
   Hard to read 1 2 3 4 5 6 7 Easy to read

6. Organization of information in Variations2 is:
   Confusing 1 2 3 4 5 6 7 Clear

7. The number of screens and/or windows open at any one time in Variations2 is:
   Difficult to deal with 1 2 3 4 5 6 7 Easy to manage

Additional Comments (use back of page if you need more space):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10/20/2003
CAR Usability Study Brief

The Usability Study took place between April 1 and April 12, 2013. Six participants took part and the CAR project librarian, Kristen Merryman, carried out all sessions. The participants were all graduate or PhD level students and all had done research in person at the SCRC in the past year. There were two students in higher education administration, one library science student, two public history students (one in museums and one in archives), and one student who was a PhD candidate in Communication, Rhetoric, and Digital Media who specialized in rhetoric of science.

Tasks Overview

1. “Tell me what your initial impressions of this page are. What strikes you about it?”

Most of the participants noticed first the large first image of the folder and most of their focus went to the image – to the detriment of noticing more explanatory elements on the page around the image. This lead to confusion about what the page represented (a folder, rather than just a single scan). Many did note the high quality image from the scan of the document. Some participants were confused as to what the large title referred to and did not pick up that it did not refer to just the letter, but the folder as a whole.

Those who did notice the other elements liked them – especially the search box at the top and the “What is this” box. One participant noted though that typically one looks to the top left for information first on a website and most of our description about what is on the site is on the right side.

One participant noted “based on what I’ve seen of other special collection sites it’s a much cleaner design.”

2. “Is there anything on this page that is confusing to you?”

The “Pages” label was confusing to people. They did not understand what that meant. One person wondered if they were representing archival subseries.

The “Names” biographical boxes were also confusing to users who did not understand what their purpose was or how they connected to the main image at the top.

3. “Is there anything you dislike about this page?”

No one had anything in particular they did not like, other than a few confusing elements. One participant did say that the page is pretty long, you have a scroll a lot, but “all the info is all right there, so it’s ok.”
4. “What do you think you will find at this site? How can you tell?”

All the participants’ answers related to the collection and materials they were looking at – giving answers such as the “William H. Johnson Collection,” “stuff on agriculture,” or things related to “the Conservation society [the author of the letter].” There did not seem to be an understanding that this was one page of a much larger site with a lot more materials.

C. Tasks

1. *What is this page showing you? How do you know?*

4 out of the 6 participants had some difficulty answering this question. These 4 did not figure out what the page was showing an entire folder of materials until reading through the description, which explained what was being represented.

1 participant realized that it was a folder right away and was the only one to see the “What is this” box and read it.

1 participant could not figure out that they were looking at a folder and only focused on the letter that was the first scan.

2. *Can you find a photograph that is included in this folder?*

4 out of the 6 participants had no problem finding a photograph in the folder by going to the pages section on the page and then selecting a photograph.

2 out of the 6 participants first selected the subject heading “photographs” and then after realizing that took them to all the photographs rather than just in the folder, they went back and found one in the pages view.

3. *Can you find a diagram in this folder?*

All participants successfully completed this task.

4. *Can you find a table titled “Sale of Bulk Cured Tobacco (1958)” in this folder?*
This potentially was a bad question – which influenced the results.

The goal was to get the participants to click through the pages to find the table. Most participants noted that they “could click through, but did not want to.” So all but two participants tried other ways of getting to the table first. Three participants tried to search for the title given but realized that the individual pages were not text searchable. Another participant tried to search the pdf [which may have worked, had the pdf software on the usability computer worked].

5. **What page is this table in the folder?**

All participants successfully completed this task.

6. **Can you bookmark this page to view later?**

All participants successfully completed this task.

7. **You decide you’d like to save this folder of materials to your computer to view later for your research. How would you do this?**

All the participants noted the pdf download ability, which was a very well liked capability on the site. One participant exclaimed, “that is SO cool!”

8. **You want to find other folders from this collection that contain materials discussing tobacco curing. How would you find them?**

The participants had very responses to this question. Two found the “Other Scanned Folders from the Same Box” link at the bottom of the page. Two others went to the finding aid. One clicked on the subject “tobacco curing,” and another selected the heading “William Johnson Papers” and was a bit confused when they did not find the finding aid but a view of more folders.
9. **How would you contact the repository that holds these materials?**

Three respondents clicked on the “contact us about this image” link, two selected the “contact” at the top, and another found links for the Special Collections Research Center on the folder view. No one had problems finding a way to get in contact with the Special Collections Research Center.

10. **Can you find more information about the collection this folder is part of?**

All attempted to get to the finding aid, which four out of the six did. However, there was confusing over the various links to the collection, not all of which went to the finding aid. There needs to be some clarity on where the different collection headings go.

11. **You decide to do a new search. How do you start a new search?**

Not a good question based on the study – skipped during the sessions.

12. **From this main page, and without using the browser’s back button, please show me how you would find the original page you were viewing about bulk curing tobacco.**

Four out of the six participants used the search box and searched “bulk curing tobacco” and found the folder quickly in the search results. One participant attempted to use the facets and was disappointed when that did not work. Another used the topic “agriculture” and then narrowed the results using the subject facets. This participant did note that if the folder showed up later in the search results than the first page it would be a pain to find.
13. Please take a few minutes to explore the site on your own and talk through what you’re looking at as you interact with the site.

Overall likes:
- Facets, especially having the decade facet
- Breadcrumbs showing what you’ve searched
- Big thumbnails on the search view allows for easy browsing
- Added descriptions for names and buildings was appreciated, as was the map view

Overall dislikes or confusing aspects:
- Concerns about copyright
- Doesn’t like how facets default to being organized by how many items there are for each facet
- There was confusion about the difference between topic and collection

Post-test Questions
1. What did you think of this website? What did you like? What did you not like?

One participant noted “this site is much better than what’s out there for the current special collections browse pages” and “this is better than Chapel Hill’s [UNC-Chapel Hill] search for sure”

Likes:
- Site feels familiar – like a lot of other websites on the web (and not just library sites, but like commercial sites, with facets and a clear search bar), another noted it “uses modern design techniques”
- Site is straightforward and well organized, several participants noted the site is “clean”
- PDF download
- Facets can collapse
- Large thumbnail
- Likes having copyright information

Dislikes:
- Wishes it was more colorful
- Confused about topics vs subjects
- Could use a scope and content note information with the collections

2. What changes would you make to the digital materials site?

Add more topics
- Make it easier to save an image from the site
- Add an introduction on the homepage about what can be found on the site
The about page is too wordy
Revise the facets to be more intuitive [not clear what was meant by this]
The name blocks are weird on the folder view

3. We began the study by performing a search in Google that led us to a resource on the Rare and Unique Digital Collections site. Then, during the study, you performed a search for that same resource. Can you discuss each experience, considering the advantages and disadvantages of each?

“Google is easier to use” “Google opens it up to the public”

One participant noted the difference in context that you get from Google vs. the site itself
“Google is text based but the site is photo-oriented”

Searching from the site adds more context but many thought if some more orientation information was added to the folder and image landing pages it would be just as easy to come in from Google and know where one was on the site. There was a note to make the left top corner navigation that you’re on an NCSU Libraries site a bit more obvious.

4. Based on your experience today, would you use this site again if it contained resources pertinent to your field of study or recommend it to someone? Why or why not?

All participants responded yes. The reasons varied but most noted that this made the archives and special collections more accessible.

“I think this makes archives a lot more accessible…people are afraid of the archives. They don’t know where to start. A website like this makes them a lot more accessible.”

“This site is useful to get an idea from home to figure out if coming in person is worth it.”
“Having a site like this could inspire researchers to come in.”

“Having this available saves lots of time” “I haven’t done a lot of historical research…makes archival materials less intimidating.”
**Decisions made on what changes should be made to the site based on the study**

Merryman, Dietz, and Ronallo all watched the usability study videos and then met to discuss what priorities would be made for changes to the d.lib.ncsu.edu/collections site based on the feedback received.

**Common problem areas noted:**
Name blocks are very confusing  
Top title block is confusing  
Large initial image is confusing – people don’t know there are more images on the page  
Collection/classification links having the same name but going different places are confusing  
“Pages” doesn’t make sense as a label

**Other observations:**
Pretty even split between facet use and search box use from the homepage. Facets were popular but unsure if that’s because they were spending time staring at the site compared to a normal user or if that’s usually how they would interact with the site.

**Changes made:**
Change label “Pages” to “Pages in the folder”  
Change the bookmark label to “URL”  
Add external link icons to any links that go out of the site  
Change the title block to have more archival location content (Box, Folder, Series, Collection)  
Add intro text on the homepage  
Have a fixed search box on the search results view so it moves as you scroll down  
Add an automatic citation link  
Rearrange the folder view so the initial image is not as big and more pages are emphasized at the top