

Usability Test Report for *UFDC (University of Florida Digital Collections)*

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Executive Summary

The University of Florida Digital Collections (UFDC) is a research tool that enables a user to find resources held at the University of Florida (UF), learn about the physical collection it is held in, and use the online full content of the resource. The University of Florida Digital Library Center (DLC) developed this digital library to house the digital resources (e.g. monographs and serials, maps and other images) and provide open access to remote and local users.

The UFDC offers at least forty collections grouped into several major headings as a top-level (i.e. on the homepage) or lower-level collection. The headings used include: Arts, Humanities and Social Sciences; Science and Technology; Maps; Florida; World; and University of Florida and Endowed Collections. In addition, the UFDC links to external collections that the DLC has assisted in digitizing.

Since the UFDC's full launch in April 2007, the UFDC has undergone significant development in functionality and design. At the start of development, the UFDC programmer in collaboration with the public services liaison to the Digital Library Center/Systems Group identified desired functionality as seen in similar resources and considered participant preferences based on experience with user behavior in class instruction and reference desk transactions.

Collections that represent much of the functionality desired to test were selected for three separate usability assessments. The evaluations on individual collections, such as the Baldwin Library of Historical Children's Literature, Florida Digital Newspaper Library and Digital Library of the Caribbean, resulted in recommendations that would impact the overall functionality of UFDC within limits of the technical capability of the open source Greenstone Digital Library System currently used for its metadata storage, retrieval, and search engine. The continuing development of UFDC has occurred as part of the iterative assessment of the resource.

At present, additional functionality including downloading of files from UFDC and map searching were to be evaluated. Along with this functional testing, the Interim Head asked that the public interface of UFDC be considered; this interface has not significantly changed since 2007.

To accomplish these tasks, an Assessment Team developed and administered usability testing to a group of university participants. The testing examined how well the UFDC allows for ease of use, navigability and learnability. In addition, the testing captured the participant reactions to general intuitiveness. Key areas of concern were identified prior to testing:

- Is the main UFDC homepage intuitive
- Is the current subject default view for the homepage preferred
- Are the additional functionalities (e.g. map searching) and default views intuitive

The testing resulted in feedback with in the following overall findings:

- In searching, participants often rely on the basic search box without consideration of collections

The following report will provide a summary of findings, including:

- User difficulties and frustrations with the resource
- Significant usability findings (may include positive as well as negative findings) and recommendations

Methodology

Prior to testing, the Assessment Team members reviewed and considered the need to submit a University of Florida Institutional Review Board Protocol (IRB). After submitting the documentation and the survey instruments, the IRB Office indicated that the protocol was exempted.

What happened during the usability test

The evaluation of the UFDC was conducted at the University of Florida in Gainesville, Florida. The research methodology involved resource testing to evaluate online participant search behavior and card sorting to organize collections on the homepage. Of the fifteen participants in total, six were given scenario-based test questions while nine were asked to organize collections. Scenario-based testing participants completed a test session consisting of structured exercises using the UFDC search interfaces; result pages and item viewer. During the individual test sessions, participants spoke out loud about their process to complete each question and what they expected would happen; responses were written down by the librarian.

Card sorting participants completed a test session consisting of organization of index cards with UFDC collection names and descriptions. Once they sorted all cards, they were asked to provide categories, headings or other ways to identify the piles of cards (e.g. cards could be hierarchically arranged or sorted by subject/geography/etc.).

All participants of the usability testing completed the same pre-assessment questionnaires to determine experience using online library resources. Post-test questionnaires that were used assessed participant satisfaction with using the resource.

Each participant was asked to compare homepage views and indicate which structure was preferred.

Who we tested

The individual usability testing took place between July 8 and July 20, 2009.

The fifteen participants of the usability testing were recruited prior to testing. Participants were selected from four categories of users who represented the campus community.

Faculty participants were recruited by email to personal contacts of subject specialists in the Liberal Arts and Sciences and Education. University staff members, graduate and undergraduate participants were frequent library users who responded to an open invitation by assessment team members. The participants reported the following profile characteristics:

Academic Status

Faculty	5
Graduate Student	5
Undergraduate Student	2
Staff	3
TOTAL	15

Area of Academic Interest

Science and Engineering	5
Social Sciences	5
Arts and Humanities	5
TOTAL	15

Self-reported Web Skills

Searching skill levels are all self-reported values gathered from pre-test questionnaires.

No online search experience	0
Novice user	2
Proficient user	4
Highly experienced user	6
Expert	3

Most participants indicated that reasons for using particular resources include the ease of navigation, familiarity, speed of retrieved results and appropriateness of content covered in the resource.

Resources Used to Locate Newspaper Information

Google	11
Another WWW search engine	1
Library Database like Factiva or LexisNexis	7
Special online newspaper collections (specified as Proquest National Newspapers)	2
Microfilm at the library	1

Important features of online resources

Ability to search specific fields	13
Use of Boolean operators	7
Use of truncation and wildcards	5
Help screens	0
Simple navigation of resource	9
Consistent navigation	8
Ability to retrieve a variety of formats (e.g. images, PDF, text)	11
Saving items to a basket	7

Where we tested

In most cases, individual testing and observation was conducted at the University of Florida, Library West or in the faculty member's office. The following is a general summary of the participants' computing environment:

URL of tested website:	[http://www.uflb.ufl.edu/ufdc
Computer platforms:	[Dell Pentium IV with an 17" display]
Browser tested:	[Mozilla Firefox]
Screen resolution:	[1024 X 768]
Operating system:	[Windows XP]
Connection speed:	[Shared T1]

What data we collected

The assessment team members collected data that would address the major elements of the UFDC including homepage design; navigation and ease of use; searching features; result pages; and the item viewer.

Scenario-Based Testing

Initial Resource Impressions

At the beginning of each individual scenario-based test session, we allowed the participants to preview the resource. We asked participants the following four questions:

- What are your initial impressions of this resource?
- What did you like about this resource?
- What did you dislike about this resource?
- What type of information would you expect to find on this site?

The respondents indicated that their general impression had is that it is a graphically attractive, well organized resource. After a short perusal, most participants indicated that they thought that the interface and search features were easy to use. However, the majority of participants only spent a short time scanning and exploring to find out what it contains.

The overall assumption regarding content is that the database would cover older, historical resources, including university-owned and developed publications.

What are your initial impressions of this resource?

- Easy to use
- Has a simple interface

- Impressive—holds digitized books
- Confusing—uncertain about content

What did you like about this resource?

- Attractive layout
- Collections appear to be broken down into specific fields
- Design on homepage is not cluttered
- Ability to search more than just the bibliographic information (as with the catalog)

What did you dislike about this resource?

- Collections are not self-explanatory; lots of collection names without information about why it's important or what is available
- The search results retrieved too slowly
- No mouse hover option to show any collection information
- No search history feature
- Inability to save results or searches conducted
- Home navigation is not obvious

What type of information would you expect to find on this site?

Common answers included:

- Older papers held by the University
- e-Books
- Archived materials
- Pictures and maps
- Videos
- Conference papers in science collections
- Resources in .pdf or .doc formats

Tasks and Test Review

During the usability evaluation, six participants were asked to complete a number of tasks using the resource. The questions were presented in order on index cards. The following questions were asked of all participants to ensure they explored most features of the resource. The issues are addressed in this section and again in the Findings and Recommendations section of this document.

	Question	Function/Feature Tested
1	How can publishers provide additional content to the Florida Digital Newspaper Library?	Collection Homepage Navigation
2	Find the 2007-2008 Budget Information report published by the UF Office of the Provost. Can you download the report?	Collection Search and Download
3	How many maps are available that cover the African countries south of the equator?	Map Search Tab in Map and Imagery Collections

4	In the UFIR find all materials that deal with citrus. What is the oldest item?	UFIR Result Page
5	On what page does Section C (Sports) of the January 24, 2007 Santa Rosa Press Gazette start?	Newspaper Section Search

Overall Navigation and Ease of Use/Intuitiveness

Participants were generally successful in navigating through the database's search interfaces, result pages and item viewer. Most commented that the interface was generally easy to use. However, one participant did indicate that returning to the UFDC homepage was not intuitive; the University of Florida Digital Collections link in the upper right corner went unnoticed.

Collection Homepage Tools

By asking the question, how can publishers provide additional content to a collection, the Assessment Team hoped to gauge the intuitiveness of a collection homepage. Each collection has a Home tab, various search tabs, All and New items tabs, as well as an About tab. Although the text on the homepage for FDNL is descriptive and text intensive, most participants thought that the information desired should be found on the page. Of the six participants of this testing, four thought that the Florida Electronic Library link would give them the answer. Only one participant was able to successfully use the About tab to locate the answer; the other patron tried an Advanced search and contact us link to seek publishing/contributing information.

Item Searching

Participants were asked to search for a specific item which is published annually: Find the 2007-2008 Budget Information report published by the UF Office of the Provost. Because the collection was not identified in the question, five of six participants searched by a combination of the key terms "provost" "budget" "information" and report" to seek the requested information. Only one patron thought to seek a particular collection that would be of relevance to the question—Institutional Repository at University of Florida. The words "University of Florida" in the collection title lead the participant to searching within the collection.

Some participants were able to use the listed volumes to locate specific 2007-2008 item requested.

Download This PDF

Once a participant located a publication, the newly implemented download feature was tested. Being able to download PDF files is only available for some items in some collections; the hyperlink for the feature is nested in the PDF viewer tab. Although not all collections and not all items within collections provide this capability, this question sought to see how intuitive it would be for a user to locate it. Since the Page Image view is the default, the PDF download is hidden. All users could find the PDF download but only one participant could find it on first try; other participants clicked through one or more of the other five available tabs to locate the correct one.

Map Searching

When participants were asked to locate the number of maps available covering the African countries south of the equator, the Assessment Team members navigated participants to the correct collection. Two participants could not answer the question because the collection search was down.

On the collection homepage, the default Home tab shows a basic search box. One participant used it in an attempt to locate the number of maps below the equator. Conducting a Basic Search of “Africa” he did not locate the correct number and then tried to use the metadata for an item located, clicking on the Citation tab. Once the participant realized that it would not give any additional clues he moved on to the next question.

The Africana Map—Map Search was used by three participants who answered this question. Three participants took several tries but were able to find and select the desired area. Clicking on the “Select Area” button at the top of the map is the initial step required to successfully use the Map Search. Once that step was taken, selecting the appropriate area and locating the number of maps was mastered by three participants.

Result List/Sorting

Once participants located list of results, Assessment Team members tried to determine if the sorting feature worked intuitively. With the question “What is the oldest item dealing with citrus in the UFIR?” all participants went to the appropriate digital collection and did a basic search of term “citrus.” At least one participant clicked on the Include Full Text box. Upon seeing the results, all participants could use the Sort By dropdown→Date Ascending to answer the question.

Newspaper Section Search

To determine how intuitive newspaper searching is within UFDC, Assessment Team members asked participants to find the page number for the first page of Section C (Sports) for a particular newspaper date. Although at least one participant could not tell what type of resource the Gazette was, most participants immediately went to the Florida Digital Newspaper Library.

With Full Citation as the current default search criteria, when participants did a search of the newspaper they were able to locate the newspaper title right away. Using the collapsible date feature, three participants were able to locate the 2007 issues of the newspaper. Three participants did not find 2007 issues—an errant issue with the search interface at that time—so they did not complete the question. Once viewing the newspaper one participant expressed excitement that the full image was available. He also perused the other views noting that the zoomable and thumbnail views were helpful, but that the page image was unclear.

Post Test Reactions

At the end of each session, we asked participants to complete a post-test questionnaire. The questions were useful in gauging how easy the resource was to learn and to use. Not all questions were answered by participants.

When asked if the resource easy or difficult to navigate the following responses were given:

1. Without an officially designated Home button (participant did not notice the UFDC Home button in the upper left) returning to the UFDC homepage was difficult; he used the back button between most questions. In addition a participant indicated that the search box for each collection made sense. However, because the collection name was not located in the gray search area but instead was above the search area as a logo, he thought it was a bit confusing. Further, if several collections should be searched at one time, he thought the Advanced search on the UFDC homepage should give all collection names.
2. Relatively easy.
3. Not easy or particularly difficult; site is good for those with patience, or those willing to spend a lot of time "playing around with it."
4. Easy to navigate
5. Not very good
6. Did not immediately know what tabs mean--tabs are too small and would be helpful for navigation

What was the most difficult or confusing thing you encountered while using the resource?

1. Newspaper result pages easy to move around. [Date field needed?]
Brief view should be the default, rather than Icon view. Should I search from the 1st page or within a collection to find what I need?
2. All collections should be under brief view; Tree view is dull.
3. A lot to take in for an inexperienced user, not the epitome of intuitive should define differences in search criteria
4. Understanding terms used. Foreigners may find it difficult to search
5. Hyperlink text is too small in some places
6. The tabs for easier searching

What could be changed to make the search interface more user friendly?

1. Having a link for dates (date range) on main page.
2. Something to explain the uses of each tab (perhaps a mouse-activated info box would help). Did not immediately understand purpose of FDNL subcollection "Historic News Accounts of Florida", thought it should read "News ARTICLES"; hardly noticed "subcollections tab". Newspapers should show dates in a more readable fashion
3. Add search history
4. Basic search seems unlikely to retrieve needed results; advanced search preferable

What could be changed to make the result pages more user friendly?

1. Immediately put in date order. Old to New or New to Old.
2. JP2 image navigation arrows, because of their gray color, look nonfunctional; Viewable area boxes not intuitive
3. Not much—results retrieved as expected
4. Explain what "Include full text?" mean

Were the materials contained in the database what you expected based on your prior knowledge of the resource?

1. Newspaper impressed - not expecting it. Liked zoomable.
2. Tree View = self-explanatory; Icon view = most attractive and most useful; Brief view = ambivalent; BROWSING very important, as opposed to querying; "Africana Collections": "Africana" vague, even to an Africanist
3. No prior experience with it but assumed papers and articles from science conferences or newspapers

What do you like or dislike about the current default view of the map results in FDNL? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive? (*Appendix A, FDNL Result Views, Scenario-Based Questions (6)*)

1. Love brief view. - Content. Like icons. - Children's lib. got character!
2. "I liked the Google Maps one..." Disliked Table View, but liked Brief and Map view
3. Liked the title with detailed information with pictures—though would like to see more detail about the item.
4. Table view most intuitive because it gives a clear list of items retrieved.
5. Brief view more intuitive.

What do you like or dislike about the current default view of the map results in the Map and Imagery Collections? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?

1. In Maps, the ability to expand the selection area when a segment is already selected would be useful; sometimes a user may want to move or increase area but in this current iteration of the feature, a user must start over.
2. Liked Full View – likes 'the pretty'. "Map view would work intuitively...I liked the Google-esque nature."
3. Liked that the title was shown with detailed information. Brief view is most intuitive.
4. Brief view more intuitive.

Participants were also asked to provide any additional information or comments not addressed in the post-test sessions. Some comments include:

1. Averse to too much clicking, prefers scrolling.
2. Liked brief view for map results
3. Thought a tree view in each collection (listing all associated subcollections) would be helpful.
4. Reiterated desirability of easy, intuitive browsing.

The major findings of the test sessions and focus group are indicated in the Findings and Recommendation section of this report.

Findings & Recommendations

These findings and recommendations provide information from the testing and pre-/ post-test questionnaires. While participants thought it was overall easy to understand and user-friendly, the site requires some modification to increase ease of use. The following are specific issues and recommendations.

Finding [#1]: Navigation tools need improvement.

Comments/Supporting Evidence	Recommendations
<ul style="list-style-type: none"> • Participants sometimes did not have the means to easily recall what collection they are in once in item viewer • Navigation back to the main UFDC homepage was not always accomplished by clicking on the UFDC Home link in the upper right hand corner • Use of some colors make navigation tools appear nonfunctional • The thumbnail in Zoomable tab can be difficult to use • All collections should be under brief view; Tree view is dull. 	<ul style="list-style-type: none"> • Create a breadcrumb system to the collection pages, including result pages. • Advanced search on the UFDC homepage should give all collection names. • Change the color of the JP2 image navigation arrows • Provide short description or instruction for how to use the thumbnail or increase the font size of the line “Click on Thumbnail to Recenter Image”

Finding [#2]: Map View should include more visible instructions.

Comments/Supporting Evidence	Recommendations
<ul style="list-style-type: none"> • Participants using the Map Search may not notice the instructional text above the map to select the Select Area first or submit coordinates • Users may want to increase or move the Selection Area 	<ul style="list-style-type: none"> • Increase the size of the instructions to call attention to the directions • Make the Select Area button more visible—use different border or font color • Allow a select/drag to expand the Select Area box when a segment is already selected

Finding [#3]: The terminology used in some areas of the UFDC can be confusing to the typical user.

Comments/Supporting Evidence	Recommendations
<ul style="list-style-type: none"> • Having to actively select the Search button from the search page is inconvenient and 	<ul style="list-style-type: none"> • Update Help pages • Explain what “Include full text?” means • Provide definitions of search criteria in Help pages

Finding [#4]: Patron empowerment tools are lacking.

Comments/Supporting Evidence	Recommendations
<ul style="list-style-type: none"> • Some users may want to save searches or see past searches • PDF download is hard to locate when available 	<ul style="list-style-type: none"> • Add a search history feature • Move PDF download to a more visible location

Finding [#5]: Patrons should be able to select multiple subcollections for searching.

Comments/Supporting Evidence	Recommendations
<ul style="list-style-type: none"> • Some users want to select multiple collections to simultaneously search but only the Advanced Search interface allows for this • The broad categories of collections are not consistent with the collections on the homepage and subcollections of each are not able to be viewed or selected 	<ul style="list-style-type: none"> • On the Advanced Search interface, allow subcollections to be viewed and selected • Ensure consistency in collection lists • Allow multiple collection selection in Table View list

Card Sorting Exercise

Tasks and Test Review

Card sorting is an exercise to determine a hierarchy of elements. On a web page with a given number of links, the hierarchies would correlate with groupings of links, thus providing a possible navigational vector to the contents of the web page or web site.

To determine how a typical user of the UFDC collections might expect to see the collections organized within a web site, we decided to use an open-card sort. In an open-card sort, participants are asked to sort a stack of cards and give each stack a label. No predetermined group names are provided to the participants. Participants are required to create their own group headings. Participants may create as few or as many groupings as they feel necessary.

Nine participants completed the card sorting exercise for the UFDC collections. They placed collections into groups of their own devise. Each participant (UF staff, undergraduate students, graduate students, and faculty) was given a stack of cards, each with a name and a short description of a single collection. The participants were then asked to sort the cards into groups and give each group a relevant label.

Findings & Recommendations

Groupings. The sheer number of collections (45) and the wide diversity of subject matter covered by the digital collections provided a difficult task at limiting the number of groups. Some participants resorted to creating hierarchies that included sub-groupings under larger headings. Others had trouble placing a particular collection into any group.

The number of groups, including subgroups, ranged from six to 17. When the subgroups were flattened, the number of main groups ranged from three to ten. The groupings by each participant are included at the end of this report (*Appendix D, Individual Sorts and Groupings*).

While this disparity in grouping may seem problematic, the headings provided by the participants provide an insight into terminology familiar to the UFDC's users. There was also a general consensus on a few headings such as Florida, The Arts, Literature, History, Maps, and Science (including similar derivations).

Hierarchical Clustering. The actual groupings of collection names were submitted to single-link, complete-link, and average-link cluster analysis. The resultant dendrograms, or cluster tree diagrams, with a sample closeness of 0.550 are attached to this report.

The sample closeness of 0.550 produces the following number of groups:

Single-link: 6 groups
 Complete-link: 12 groups
 Average-link: 8 groups

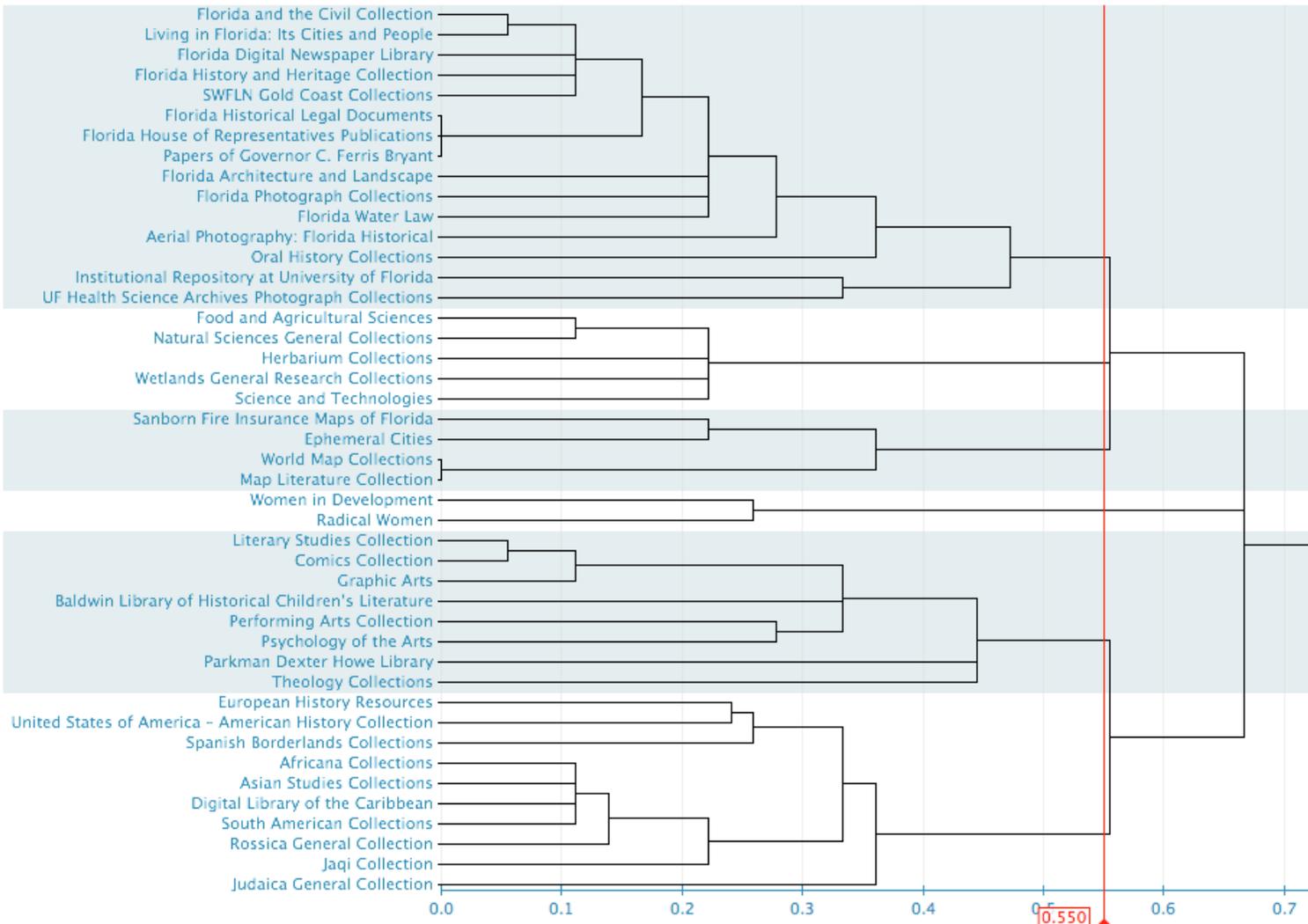
Changing closeness can produce a different number of groups. For instance, changing the closeness to 0.400 produces:

Single-link: 9 groups
 Complete-link: 19 groups
 Average-link: 15 groups

To try different distances, place a straightedge vertically along the bottom rule of the diagram. The number of lines (or branches) the straightedge cuts is the number of groups for that closeness. Follow a branch, and any child branches, to the left to determine which collections belong to the group. The three charts below provide the possibilities for homepage groupings. The Assessment Team does not recommend one particular grouping.

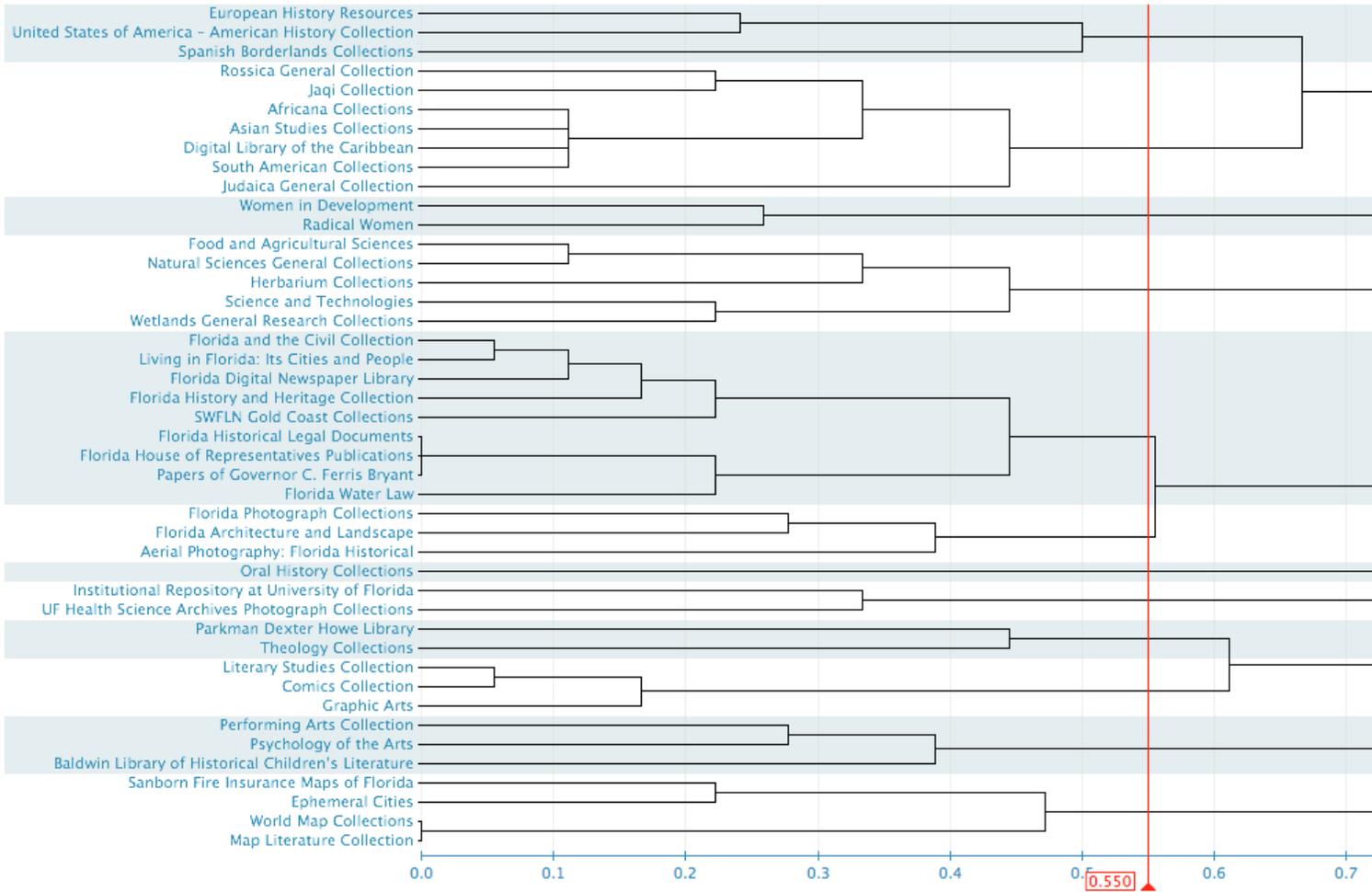
UFDC Card Sort Cluster-tree (Single linkage – Subgroups included) Closeness= 0.550

Single linkage merges clusters with the smallest minimum distance from any member of a cluster to any single member of another cluster. Single linkage may produce fewer larger clusters.

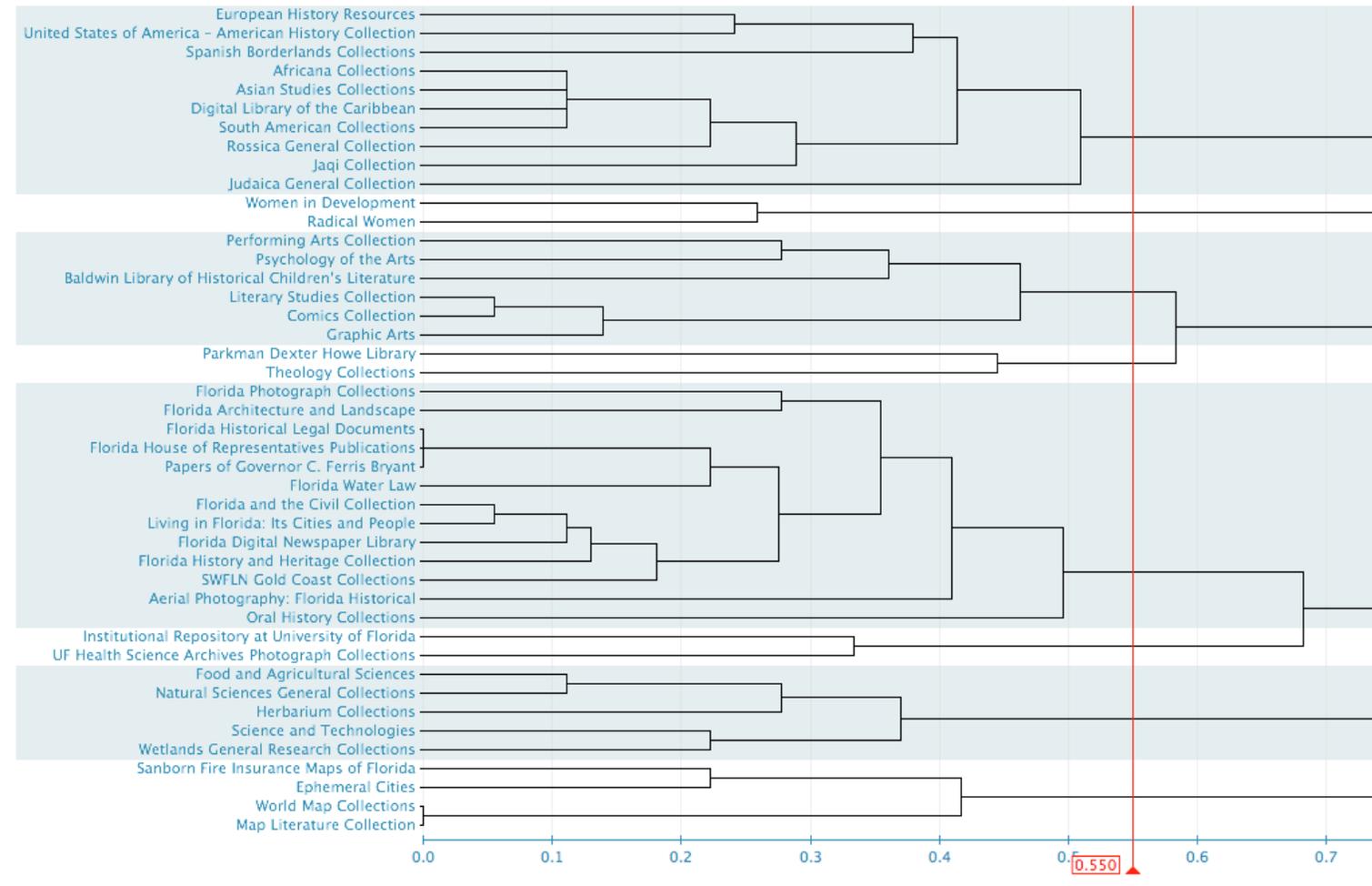


UFDC Card Sort Cluster-tree (Complete linkage – Subgroups included) Closeness= 0.550

Complete linkage merges clusters with the smallest maximum distance from any member of a cluster to any single member of another cluster.



UFDC Card Sort Cluster-tree (Average linkage – Subgroups included) Closeness= 0.550
 Average link hierarchies produce a compromise between large clusters and tighter clusters.



Post Sort Questions

After the card sorting exercise, participants were asked a series of questions about their experience with card sorting. Not every participant chose to answer the questions.

1. In general, what was the most difficult or confusing thing about arranging these items?
2. Which collection would you expect to find the University of Florida Science Archives Photograph Collection?
3. Which of the Result Views (brief, table, thumbnail, full or map) shown is the most intuitive?

Overall, a common issue that participants faced was sorting the number of Florida collections and finding collections that could fall into multiple categories.

Each participant was also asked the following additional question comparing current UFDC views with two possible views based on the Duke University Digital Collections (*Appendix C, Homepage Views—Card Sorting Questions*).

- What do you like or dislike about the current default view of the UFDC homepage?
- What are the problems of the homepage view and arrangement of collections?
- Please indicate which of the four views (Icon, Brief, Collection 1 or Collection 2) you like best.

Below are the participant responses:

In general, what was the most difficult or confusing thing about arranging these items?

1. It was hard. Some titles were obvious about where to categorize them and others were difficult to categorize.
2. It was hard. Some titles were obvious about where to categorize them and others were difficult to categorize.
3. Most frustrated by deciding which category in which to include certain cards when she thought they could go under multiple categories. Also, she had trouble placing the Theology Collection card because she didn't feel like it belonged in any of the categories.
4. Confused about what some of the collections contain and felt that some of collections could have fallen under multiple categories.
5. Most confusing part of the exercise was deciding upon a way to categorize the cards. He thought that he could either make many categories with only a few collections or just a few categories with lots of collections, but would have liked to figure out something in between, a mid-number of categories with a mid-number of collections.
6. Most difficult was finding a common theme, the # of Florida collections make dividing harder.
7. Didn't know where to place the HSCL card.

Which collection would you expect to find the University of Florida Science Archives Photograph Collection?

1. University of Florida Collections
2. University of Florida Collection
3. Should be found in a UF sub collection within a larger photograph collection.
4. A UF sub collection
5. The Florida Photographs Collection, which he had categorized as part of a broader Florida Studies category.
6. Under the Florida collections.
7. Florida.

Which of the Result Views (brief, table, thumbnail, full or map) shown is the most intuitive?

1. Brief, it provided more information and was easier to understand. The data provided was

just enough to explain the items shown.

2. Brief
3. Liked the brief view the best because of all the information available as well as the thumbnail, but would add a link to a map that demonstrates the location of the publication.
4. She liked the brief view, noting that it had more information and offered several results on one screen.
5. Liked the list and thumbnail views and did not like the full view. His thoughts on the brief view and map view were neutral. Upon a second look, he added the brief view to those he liked. When asked to pick just one, he chose the thumbnail view, citing the visual appeal of the pages and the number of results visible in the display area.
6. Brief view should be first.
7. Likes maps
 - Geographically oriented
 - Mentioned this might not be typical of all users
 - Load time may be issue
 - Thinks that “Brief View” is a nice alternative
 - Doesn’t like table view- like looking at a phone book
 - Thumbnail is too hard to read

Homepage Assessment

Because one of the goals for testing was to evaluate the homepage, a series of questions were asked regarding the current default view and other possible views. When asked to discuss the current homepage view, the following comments were provided:

1. Did not like that the categories were broad and would like to see a short explanation of the collections.
2. Images for each collection and categories are made clear.
3. Liked the separation of the world collections under their own heading.
4. Really liked the category groupings but would have liked more information, like lists of sub collections under each heading.
5. Didn’t have any negative things to say about the current default view of the homepage or the arrangement of collections;. he liked the way that the page looked and felt that it was navigable.
6. Hates that there are no descriptions. He needs descriptions to understand what some of the collections are and why they might be useful. (i.e. “ephemeral cities” is not self-explanatory)
7. Too many icons
 - All map collections could be one icon
 - “ephemeral cities” is a confusing name
 - Florida should be on top since it is the strong pt of collections
 - Use the terminology “Area Studies” instead of “world studies”.

In addition, participants reflected that some of the problems of the homepage view and arrangement of collections included:

1. Collections could go under multiple categories on homepage.
2. Found the tabs (Icon, Brief and Tree) under the search section to be confusing. Collections could go under multiple categories on homepage.
3. She thought that some of the collection names were confusing or misleading, citing the History and Heritage Collection specifically. She thought that it should either be moved to the world collections heading (citing that all countries have history and heritage) or the heading itself should be reworded to clarify whose history and heritage is included in the collection. She also noted that the oral history collections should not be listed under Florida Collections because the information isn't exclusive to Florida.
4. She liked that the brief view had more information, but thought that the default view was more aesthetically pleasing, mentioning that the brief view seemed to have too much text for a homepage.
5. The participant noticed that the arrangement of collections on the homepage was generally similar to his categorization of the collections.
6. A lot of the collections could be in multiple categories and may need to be cross linked (i.e. "Aerial Photographs" could be maps or florida).
Maybe collections should be in alphabetical order so they would be easier to browse.
Loves the icons
Suggested a dropdown menu
Thinks top of homepage should be clear that you are searching all collections
Wants an icon that represents all of UFDC that looks like the collection icons.

Participants were asked to indicate which of the four views (Icon, Brief, Collection 1 or Collection 2) you like best (*Appendix C, Homepage Views—Card Sorting Questions*).

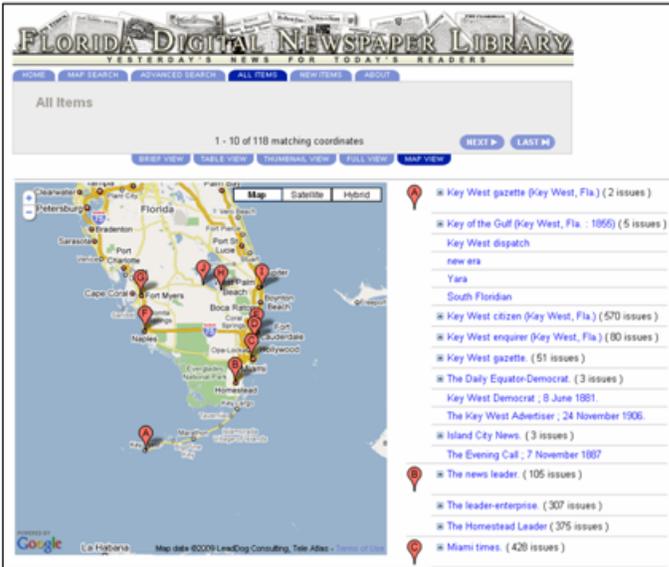
1. Appreciated the "What am I searching" section of the Collections 2 view. Found the A-Z List of Digital Collections option helpful from Collections 1 view. Confused by Tree view. Liked the Brief view best but thought it would be better to narrow down text provided. Also liked seeing the sub-collection headings but is wary that multiple collections could go under different headings.
2. Brief, likes being able to see sub-collections under headings for categories. Also finds the descriptions helpful.
3. Liked the Icon View and Collections 2 View best for their simplicity.
4. She thought that the collections 2 view was nicely minimal, but would have liked the option to expand each heading.
5. Likes the language used in "Collection View 2" search box.
6. Likes Collection 2 view
simple, doesn't want to read too much text
prefers fewer categories
KEEP IT SIMPLE!
7. Prefer the icon view, not collection view (too broad). However, the Collections 2 view is too broad - could cross.
8. Icon view is visually appealing. While the tree view is familiar, the hierarchy of the collections is not intuitive.
9. Prefers Collections View II

Appendix A, FDNL Result Views, Scenario-Based Questions (6)
 Brief, Table, Thumbnail, Full, Map

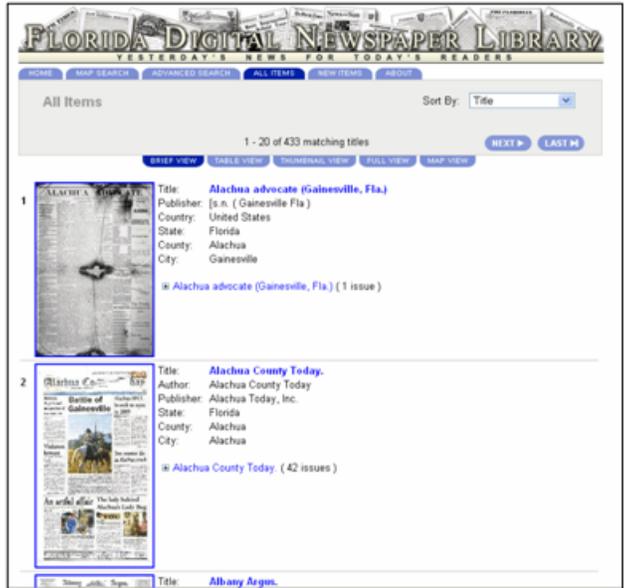


Full View

6. What do you like or dislike about the current default view of the map results in FDNL? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?



Map View



Brief View

6. What do you like or dislike about the current default view of the map results in FDML? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?



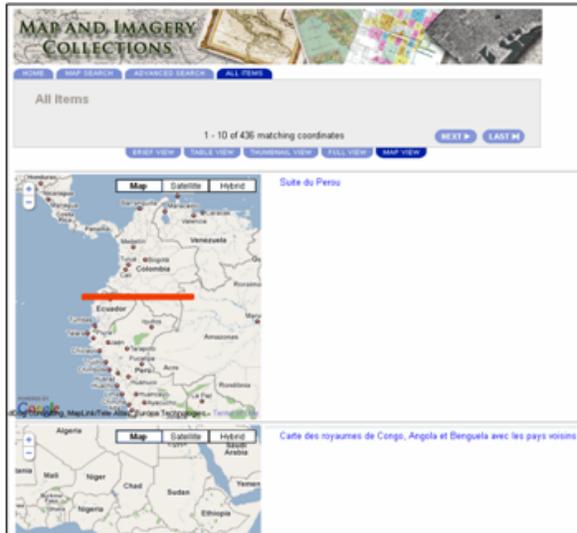
Table View



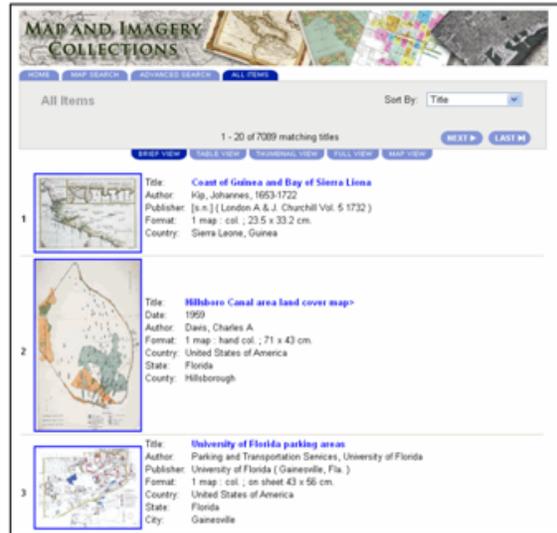
Thumbnail View

Appendix B, Maps Result Views—Scenario-Based Questions (8) Brief, Table, Thumbnail, Full, Map

7. What do you like or dislike about the current default view of the map results in the Map and Imagery Collections? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?

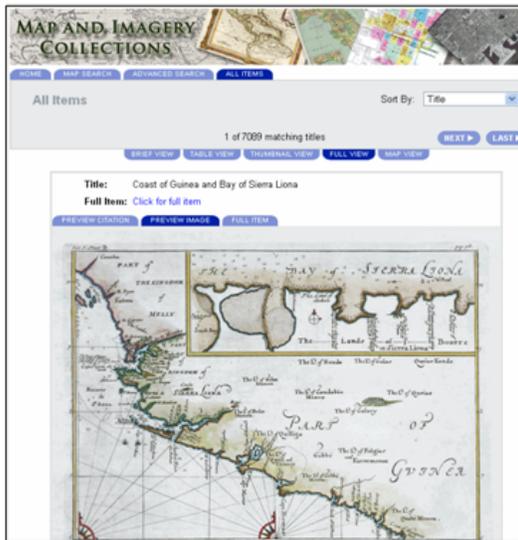


Map View



Brief View

7. What do you like or dislike about the current default view of the map results in the Map and Imagery Collections? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?

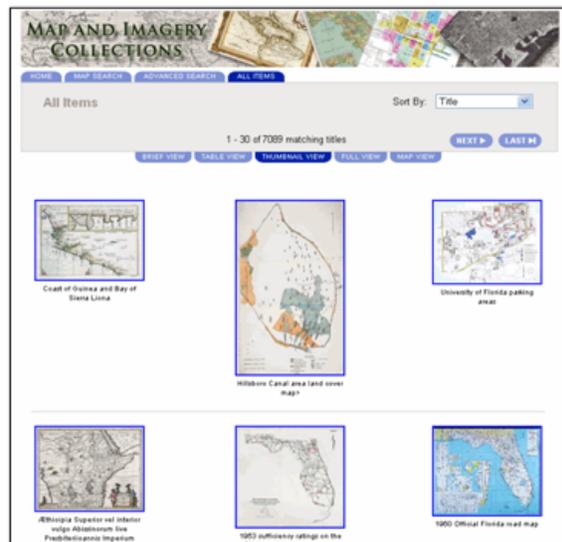


Full View

7. What do you like or dislike about the current default view of the map results in the Map and Imagery Collections? Please indicate which of the Result views (brief, table, thumbnail, full or map) provided is most intuitive?



Table View



Thumbnail View

Appendix C, Homepage Views—Card Sorting Questions
 Default, Icon, Tree, Brief, Collections 1, Collections 2

3. What do you like or dislike about the current default view of the UFDC homepage?

4. What are the problems of the homepage view and arrangement of collections?

UFDC University of Florida Digital Collections

UFDC HOME ADVANCED SEARCH

Search Collection: Go

Include full text?

ICON VIEW BRIEF VIEW TREE VIEW

The University of Florida Digital Collections (UFDC) enables users to find unique and rare digitized materials held at the University of Florida (UF) and partner institutions. With UFDC, remote and local researchers can have free, open access to the full content of the resource. This is a constantly growing collection of resources.

The search box above searches across all the digital resources in all the collections for a term in each digital resource record, as well as any full text. By clicking on the icons below, you can view and search that individual collection.

ARTS, HUMANITIES AND SOCIAL SCIENCES COLLECTIONS

- Arts Collections
- Baldwin Library of Historical Children's Literature
- History and Heritage Collections
- Humanities Collections and the Public Sphere
- Literature Collections

SCIENCE AND TECHNOLOGY COLLECTIONS

- Herbarium Collections
- Sciences Collections

MAP COLLECTIONS

- Aerial Photography Florida
- Ephemeral Cities
- Map and Imagery Collections

FLORIDA COLLECTIONS

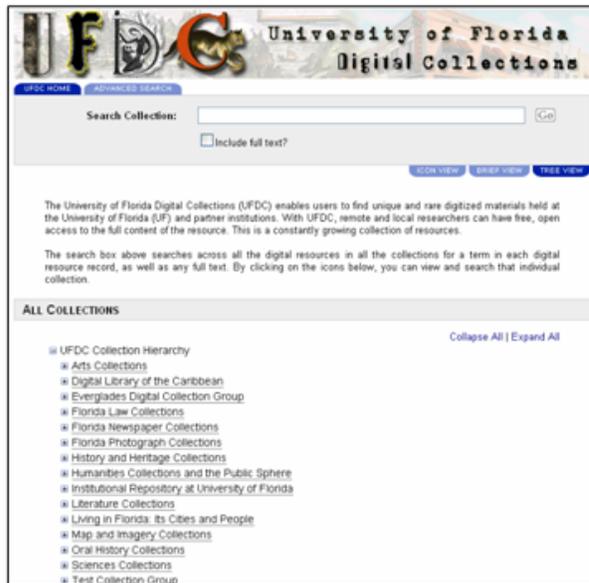
- Everglades Digital Library
- Florida Digital Newspaper Library
- Florida Law Collections
- Florida Photograph Collections
- Living in Florida: Its Cities and People
- Oral History Collections

WORLD COLLECTIONS

- Digital Library of the Caribbean
- World Studies Collections

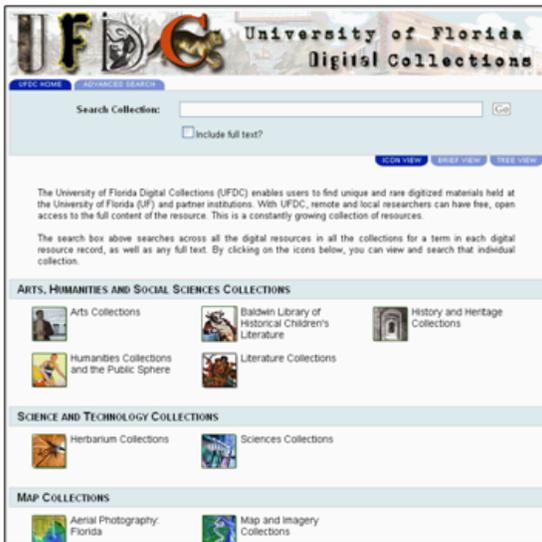
Homepage View

What do you like or dislike about the current default view of the UFDC homepage? Please indicate which of the Result views (icon, brief or tree) provided is most intuitive?



Tree View

What do you like or dislike about the current default view of the UFDC homepage? Please indicate which of the Result views (icon, brief or tree) provided is most intuitive?

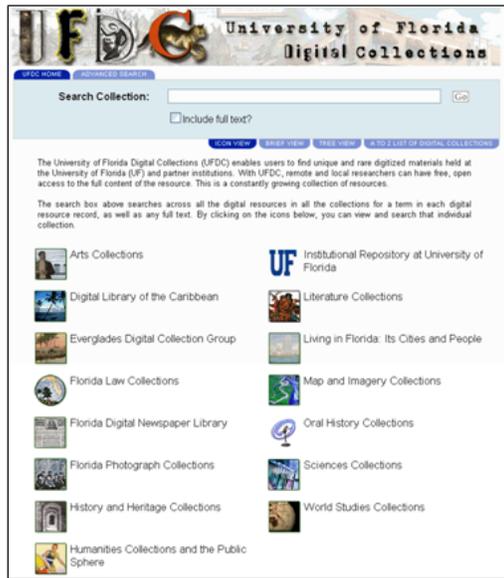


Icon View (default)

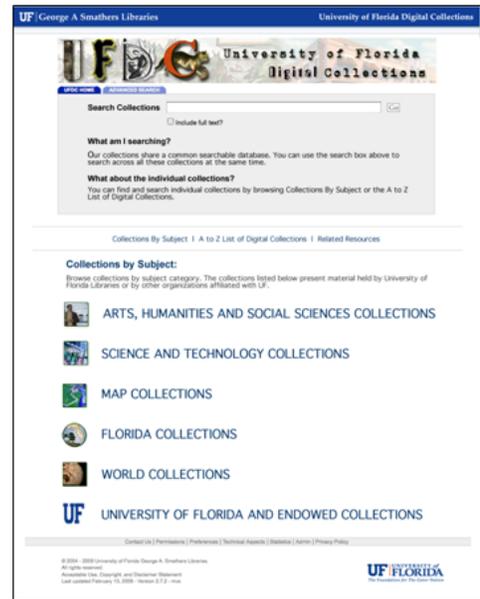


Brief View

Please indicate which of the views you like best.



Collections View 1



Collections View 2

Appendix D, Individual Sorts and Groupings

Participant #1

Art

- Psychology of the Arts
- Graphic Arts
- Performing Arts Collection

Florida Studies

- Living in Florida: Its Cities and People
- Florida House of Representatives Publications
- Florida and the Civil Collection
- Florida Historical Legal Documents
- Oral History Collections
- Florida History and Heritage Collection
- Florida Water Law
- Florida Architecture and Landscape
- Aerial Photography: Florida Historical
- Florida Photograph Collections
- SWFLN Gold Coast Collections
- Florida Digital Newspaper Library
- Papers of Governor C. Ferris Bryant

Florida Science

- UF Health Science Archives Photograph Collections
- Herbarium Collections
- Natural Sciences General Collections
- Wetlands General Research Collections
- Institutional Repository at University of Florida
- Science and Technologies
- Food and Agricultural Sciences

Theology

- Judaica General Collection
- Theology Collections

Cartography

- Map Literature Collection
- World Map Collections
- Ephemeral cities
- Sanborn Fire Insurance Maps of Florida

Women's Studies

- Radical Women
- Women in Development

International Studies

- United States of America – American History Collection
- European History Resources
- Jaqi Collection
- Digital Library of the Caribbean
- Rossica General Collection
- Asian Studies Collections
- Spanish Borderlands Collections
- Africana Collections
- South American Collections

Literature

- Comics Collection
- Baldwin Library of Historical Children's Literature
- Literary Studies Collection
- Parkman Dexter Howe Library

Participant #2

Humanities and Arts

- Baldwin Library of Historical Children's Literature

- Comics Collection
- Graphic Arts
- Literary Studies Collection
- Parkman Dexter Howe Library
- Performing Arts Collection
- Psychology of the Arts
- Theology Collections
- Women in Development

Sciences

- Food and Agricultural Sciences
- Map Literature Collection
- Natural Sciences General Collections
- World Map Collections

N.A. – U.S. – Florida

- Ariel Photography: Florida Historical
- Florida and the Civil War Collection
- Florida Architecture and Landscape
- Florida Digital Newspaper Library
- Florida Historical Legal Documents
- Florida History and Heritage Collection
- Florida House of Representatives Publications
- Florida Water Law
- Living in Florida: Its Cities and People
- Papers of Governor C. Farris Bryant
- Sanborn Fire Insurance Maps of Florida

- Sciences and Technologies
- SWFLN Gold Coast Collections
- Wetlands General Research Collections

Florida – Gainesville/Alachua C. – UF

- Florida Photograph Collections
- Herbarium Collections
- Institutional Repository at University of Florida
- Judaica General Collection
- Oral History Collections
- Radical Women
- UF Health Science Archives Photograph Collections

Geo – Africa

- Africana Collections

Geo – Asia

- Asian Studies Collections
- Rossica General Collections

Geo – Euro.

- European History Resources
- Spanish Borderlands Collections

Geo – N.A.

- United States of America – American History Collection
- Ephemeral Cities
- Digital Library of the Caribbean

Geo – S.A.

- Jaqi Collection: Aymara, Jaqaru, and Kawki Language Resources
- South American Collections

Browse?

By Geo? (in alphabetical order)

- North American and Caribbean
 - Florida – Gainesville – UF
- South America
- Africa
- Asia
- Europe

By subject?

- Arts and Humanities
- Law?/Legal (Farris Bryan etc)
- Sciences
- Social Sciences

By title (of collection)?

- Titles need to be very specific and intuitive. Subtitles or parenthetical

Participant #3

History/Regional Collections A-Z

- Spanish Borderlands Collection
- Digital Library of the Caribbean
- Asian Studies Collection
- South American Collections
- Judaica General Collection
- Jacqi Collection
- Africana Collection
- American History Collection
- Rossica General Collection
- European History Resources

- Women in Development
- Radical Women

Literature/Arts

- Arts
 - Graphic Arts
 - Comics Collection
 - Performing Arts Collection
- Literature
 - Map Literature Collection
 - World Map Collections
 - Baldwin Library of Historical Children's Literature
 - Parkman Dexter Howe Library
 - Theology Collection
 - Literary Studies Collection
 - Psychology of the Arts

Sciences

- Natural Sciences General Collections
- Sciences and Technologies
- Food and Agricultural Sciences

Florida

- Land /Environment Related
 - Florida Architecture and Landscape
 - Wetlands General Research Collections
 - Florida Water Law
 - Herbarium Collection
- Florida Documents
 - Papers of Governor Farris C. Bryant
 - Florida House of Representatives Publications
 - Florida Historical Legal Documents
 - Florida Digital Newspaper Library
 - Institutional Repository at University of Florida
- Florida Photos
 - Aerial Photography: Florida Historical
 - UF Health Science Archives Photograph Collections
 - Florida Photograph Collections
- Florida History/Social
 - Living in Florida: Its Cities and People
 - Florida History and Heritage Collection
 - Sanborn Fire Insurance Maps of Florida
 - Ephemeral Cities
 - Florida and the Civil War
 - Oral History Collections
 - SWFLN Gold Coast Collection

Participant #4

Maps

- Map Literature Collection
- World Map Collections
- Sanborn fire Insurance Maps and Resources
 - Ephemeral Cities
 - Sanborn fire Insurance Maps of Florida

Comedy and Use of Graphics

- Literary Studies Collection
- Comics Collection
- Graphic Arts

Women

- Radical Women
- Women in Development

Environment

- Herbarium Collections
- Wetlands General Research Collections
- Natural Sciences General Collections
- Food and Agricultural Sciences

Florida

- Florida Land Use & Water Management
 - Science and Technologies
 - Florida Water Law
 - Aerial Photography: Florida Historical
- Historical Resources
 - Florida and the Civil War
 - SWFLN Gold Coast Collections
 - UF Health Science Archives Photograph Collections
- Newspaper Archive & Research Resources
 - Florida Digital newspaper library
 - Institutional Repository at University of Florida
- Life in Florida
 - Florida Architecture and Landscape
 - Living in Florida: Its Cities and People
 - Florida Photograph Collections
- Politics of Florida
 - Papers of Governor C. Ferris Bryant
 - Florida House of Representatives Publications
 - Florida Historical Legal Documents

History

- Spanish Borderlands Collection
- European History Resources
- American History Collection
- Florida History and Heritage Collection
- Performing Arts Collection

Family History

- Oral History Collection
- Jaqi Collection

Literature

- Psychology of the Arts
- Parkman Dexter Howe Library
- Baldwin Library of historical Children's Literature

Theology

- Theology Collections

Other Nation Studies

- Digital Library of the Caribbean
- Asian Studies Collections
- Africana Collections
- South American Collections
- Judaica General collection
- Russian Stamps
 - Rossica General Collection

Participant #5

Florida Materials (with Florida focus)

- Papers of Governor C. Farris Bryant
- Living in florida: It's Cities and people
- Aerial Photography: Florida Historical
- Florida Architecture and Landscape
- Sanborn Fire Insurance Maps of Florida
- Florida History and Heritage Collection
- Wetlands General Research Collections
- Florida House of Representatives Publications
- Sciences and Technologies
- Florida Water Law
- Florida and the Civil War
- SWFLIN Gold Coast Collections
- Florida Photograph Collections
- Institutional repository at University of Florida

- Florida Historical legal Documents
- Florida Digital Newspaper Library

Geography –Maps -Area Studies

- Map Literature Collectuion
- World Maps Collections
- Spanish Borderlands Collections
- Ephemeral Cities
- Africana Collections
- South American Collections
- Jaqi Collection
- Digital Library of the Caribbean
- Asian Studies Collections
- European History Resources
- Rossica General Collection

Literary Collections -Graphic Arts (Comics)

- Literary Studies Collection
- Parkman Dexter Howe Library
- Graphic Arts
- Comics Collection

Women's sites (Women Studies focus)

- Radical Women
- Women in Development

History -Historical Materials Collection

- American History Collection
- Oral History Collections
- Baldwin Library of Historical Children's Literature

The Arts – Performing Arts

- Performing Arts Collection
- Psychology of the Arts

Religious Studies –Theology -Judaica

- Theology Collections
- Judaica General Collection

Plant Life (Biology) -Natural Sciences -Agriculture

- Natural Sciences General Collections
- Herbarium Collections
- Food and Agricultural Sciences

Health Science Photo Collection

- UF Health Science Archives Photograph Collections

Participant #6

Cultures of the World

- Jaqi Collection
- American History Collection
- Asian Studies Collections
- Digital Library of the Caribbean
- Africana Collections
- South American Collections
- Judaica General Collections
- European Studies (maybe a subsection of Cultures of the World)
- Rossica General Collection
- European History Resources
- Theology Collections
- Parkman Dexter Howe Library

Florida Culture and History

- Spanish Borderlands Collections
- Papers of Governor C. Farris Bryant
- SWFLIN Gold Coast Collections
- Florida House of Representatives Publications
- Florida Historical Legal Documents
- Florida Digital Newspaper Library
- Florida Photograph Collections
- Florida Architecture and Landscape
- Florida History and Heritage Collection
- Living in Florida: Its cities and People
- Florida and the Civil War
- University of Florida and Gainesville
 - Oral History Collections
 - Institutional Repository at University of Florida
 - UF Health Science Archives Photograph Collection

Women's Studies

- Women in Development
- Radical Women

Maps

- Sanborn Fire Insurance Maps of Florida
- Ephemeral Cities
- World Map Collections
- Map Literature Collection

Literature and Arts (Humanities and Science)

- Food and Agricultural Sciences
- Performing Arts Collections
- Psychology of the Arts
- Baldwin Library of Historical Children's Literature

Graphic Arts

- Graphic Arts
- Comics Collection
- Literary Studies Collection

Florida Ecology, Environment, and Land Use

- Aerial Photography: Florida Historical
- Florida Water Law
- Sciences and Technologies
- Wetlands General Research Collections
- Natural sciences General Collections
- Herbarium Collections

Participant #7

Florida Legal Documents

- Florida Water Law
- Florida House of Representatives Publications
- Papers of Governor C. Farris Bryant
- Florida Historical Legal Documents (also under **Florida**)

Florida

- Florida History and Heritage Collection
- Florida Photograph Collections
- Living in Florida: Its Cities and People
- Florida and the Civil War Collection
- Oral History Collections
- Aerial Photography: Florida Historical (also under **Maps**)
- Florida Digital Newspaper Library
- SWFLN Gold Coast Collections
- Wetlands General Research Collections (also under **Science/Technology**)
- Florida Architecture and Landscape (also under **Science/Technology**)
- Sanborn Fire Insurance Maps of Florida (also under **Maps**)
- Florida Historical Legal Documents (also under **Florida Legal Documents**)

Literature Studies and Theology

- Baldwin Library of Historical Children's Literature
- Parkman Dexter Howe Library
- Performing Arts Collection

- Comics Collection
- Graphic Arts
- Literary Studies Collection
- Theology Collections

Women's Studies

- Radical Women
- Women in Development

Science/Technology

- Natural Sciences General Collections
- Food and Agricultural Sciences
- Herbarium Collections
- Sciences and Technologies
- Wetlands General Research Collections (also under **Florida**)
- Florida Architecture and Landscape (also under **Florida**)

UF Collections

- UF Health Science Archives Photograph Collections
- Institutional Repository at University of Florida
- Psychology of the Arts

Maps

- Ephemeral Cities
- World Map Collections (also under **World Studies**)
- Sanborn Fire Insurance Maps of Florida (also under **Florida**)
- Map Literature Collection
- Aerial Photography: Florida Historical (also under **Florida**)

World Studies

- World Map Collections (also under **Maps**)
- Spanish Borderlands Collections
- Jaqi Collection: Aymara, Jaqaru, and Kawki Language Resources
- United States of America - American History Collection
- South American Collection
- Asian Studies Collections
- Africana Collections
- Judaica General Collections
- Rossica General Collection
- Digital Library of the Caribbean
- European History Resources

Participant #8

University of Florida

- UF Health Science Archives Photograph Collections
- Institutional Repository at University of Florida

Sciences

- Wetlands General Research Collections
- Sciences and Technologies
- Natural Sciences General Collections
- Herbarium Collections
- Food and Agricultural Sciences

Maps

- World Map Collections
- Sanborn Fire Insurance Maps of Florida
- Map Literature Collection
- Ephemeral Cities

International/Cultural

- Women in Development
- Rossica General Collection
- Spanish Borderlands Collections
- South American Collections
- Judaica General Collection
- Jaqi Collection: Aymara, Jaqaru, and Kawki Language Resources
- Digital Library of the Caribbean
- Asian Studies Collections
- Africana Collections

Historical

- United States of America - American History Collection
- European History Resources
- Theology Collections

The Arts

- Psychology of the Arts
- Performing Arts Collection
- Parkman Dexter Howe Library
- Baldwin Library of Historical Children's Literature
- Comics Collection
- Literary Studies Collection
- Graphic Arts

Florida/Florida History

- Radical Women
- SWFLN Gold Coast Collections
- Papers of Governor C. Farris Bryant
- Oral History Collections
- Living in Florida: Its Cities and People
- Aerial Photography: Florida Historical
- Florida Architecture and Landscape
- Florida Water Law
- Florida Photograph Collections
- Florida House of Representatives Publications
- Florida History and Heritage Collection
- Florida Historical Legal Documents
- Florida and the Civil War Collection
- Florida Digital Newspaper Library

Participant #9

Science- Florida + US

- Natural Sciences
- Herbarium Collections
- Wetlands
- Food & Agricultural Sciences
- Sciences & Technology

History

- World
 - Women in Development
 - S. American
 - European History
 - Africana

- dLoC
- Asian Studies
- US History Non-FL
 - US American History
 - Parkman Dexter
- Florida
 - Radical women
 - Spanish Borderlands
 - FL History and Heritage
 - FL and the Civil War
 - The following cards were bound together without a sub heading
 - Oral History
 - Ephemeral cities
 - Sanborn
 - Living in FL
 - IR @ UF
 - FL Digital News
 - FL Historical Legal Docs
 - FL House of Rep
 - Papers of Gov C. Farris Bryan
 - FL Water Law

Liberal Arts

- Theology
- Judaica
- Jaqi Collection
- Performing Arts
- Comics
- Rossica
- Graphic Arts
- Baldwin
- Literary Studies
- Aerial Photos
- FL Photos
- World Maps
- Map Literature
- SWFLN
- FL Architecture
- UF Health Science
- Psychology of Art