Hyku End User Usability Report for External Audiences


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Project Overview

At the request of the Hyku for Consortia team, Aestiva Solutions performed a usability study on several tenants of Hyku for Consortia from December 2022 to February 2023. All schools currently part of the Hyku for Consortia Project were invited to join the study. Participating tenants included School A, School B, School C, School D, School E, and a Miscellaneous Tenant. (Note: two School B faculty members interacted with the Miscellaneous Tenant. Otherwise participants interacted with the tenant for their school.) A total of 13 undergraduate students, 6 graduate students, 4 librarians, and 7 faculty members participated in the study. The study was approved by the IRB at each school.
Research Questions

These questions were developed by Aestiva Solutions in collaboration with the Hyku for Consortium leadership team.

1. Are different personas of users able to complete basic tasks using Hyku interfaces?
2. Does the interface serve users across the wide variety of use cases for Hyku?
3. What common issues do users have when navigating Hyku interfaces?
4. What overall design thoughts do users have about Hyku interfaces?
5. What are some quick wins that could add value to Hyku interfaces?
Research Methods

We used four types of methods in our study, described below.

1. Five Second Test
   A five second test gives participants five seconds to look at the screen and gauges their impressions of the interface.
   
   This measures the site’s ability to communicate purpose and visual appeal.

2. Expectations/Reality
   This method asks participants to mouse over text and images on pages of the interface and share what they would expect to happen if they clicked on those items. Then, they are directed to click on the elements and share if their expectations meet the reality of what happens.
   
   This measures whether the site can be intuitively navigated.

3. Card Sort
   A card sort has participants order items as they apply to them. Participants were given 13 facets and asked to decide whether they always, often, sometimes, or never use them. We choose those facets based on the findings of this research article, which attempted to find the most used facets in library catalogs.

   
   This allows us to suggest prioritization for facets to be created and included.

4. Traditional UX
   This method involves participants completing a simple task using the Hyku interface.
   
   This allows us to track user journeys and struggles through the product.
User Experience Journeys

Faculty Journeys

6 faculty members

Tasks:
- Find materials written by a colleague.
- Find a dissertation from the DNP program.
- Find a textbook in your discipline.

Faculty used the search on the homepage. (5 times)

Faculty clicked on About and on the name of the collection. (1 time)

Faculty found material that fit the prompt. (6 times)
School B

4 undergraduate students

Task:
Find an issue of the student newspaper dated anywhere from 1984-1985.

Students searched for 1984 or 1985 on the homepage. (2 times)

Students looked through the recently uploaded items to see if the item was there. (4 times)

Student clicked on the "view all collections" button. (1 time)

Student experimented with filters, sort by options, and searches. (1 time)

Student found an issue that met the criteria. (1 time)

Student stopped there and failed at completing the task. (1 time)

Students found an issue that met the criteria. (2 times)
School C

6 undergraduate students

Task:
Find an issue of the alumni magazine dated anywhere from 2009-2013.

Students searched for alumni magazine on the homepage. (3 times)

Students tried to use a facet on the left and could not find one that produced desired results. (2 times)

Student clicked on the collection in the search results and searched for a year on the collection page. (1 time)

Students scrolled to the bottom of the homepage and clicked on the collection icon. (3 times)

Students selected a desired year. (6 times)
School D

6 graduate students

Task:
Find materials about salvation for a graduate-level paper.

Students searched for salvation articles or salvation theses on the homepage. (2 times)

Students used facets on the left. (2 times)

Students searched for salvation on the homepage. (3 times)

Student clicked on the view all collections button. (1 time)

Student searched for salvation and received no results as they were searching collections. (1 time)

Student returned to homepage and searched for salvation. (1 time)

Students choose a thesis that fit the prompt. (6 times)
Filter Preferences

We asked 21 participants from each of the represented personas to tell us whether they always, often, sometimes, or never use the following facets when searching for information. We then ranked those on a scale, so if all participants said they always used a facet, it would receive a score of 100.

Based on the results below, the date facet is the highest ranked facet that is currently not available in Hyku. Given the nature of Hyku, since all items are full text, no availability facets need to be added. However, we encourage libraries to add subject terms to items whenever possible, as these are highly valued by participants.
Overall Opinions

All participants were asked to agree or disagree with the following statements. They agreed or strongly agreed with all four statements, however visual appeal had a significant drop compared to the other statements.

- 93% - I would use this to find information.
- 90% - Interface is easy to use.
- 87% - Interface loaded quickly.
- 57% - Interface is visually appealing.

Interface is easy to use

Interface is visually appealing
Positive Feedback

All participants were asked what they liked about the interface. They called it simple, clean, easy to use, intuitive, uncluttered, and user-friendly.

- “I liked that it is very simple and doesn't have that many buttons. Everything is intuitive and aligns with other search engines I've used before.” - Undergraduate student
- “Clean appearance.” - Faculty member
- “It was easy to use.” - Graduate student
- “I liked that it was simple. There wasn't too much going on visually, no flashy colors or a lot of pages to sort through. I felt like I could navigate to anything I needed to find in just a few clicks.” - Librarian
Recommendations for Improvement

Below are our recommendations for improving the Hyku for Consortia interface, based on participant comments and our observations. Each suggestion is ranked with 1 to 3 stars, and was requested by multiple or all personas unless noted otherwise. All images have been chosen from random Hyku for Consortia tenants that may or may not have been included in the study.

Suggestions from Users

<table>
<thead>
<tr>
<th>Image</th>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>Remove the <strong>extraneous white spaces</strong> in the interface, most notably on the collection pages.</td>
<td>Users suggest moving the collection search box into this section to use up some of the white space. But all agree that the collection image is too large.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>Change the <strong>header font for the collections</strong> to not default to floating white.</td>
<td>Instances which added a photo banner to the title received less complaints but the font was still commented on even for those schools.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>Add a <strong>publication date filter</strong>. Attempts by some tenants to make the keyword filter into a makeshift date filter are not a good solution for this gap.</td>
<td></td>
</tr>
</tbody>
</table>

Aestiva Solutions: Helping Academic Libraries Make a Big Impact
Once the publication date filter is in place, remove the date uploaded/date modified sort options from the search screen and replace them with a **Sort by date created**.

Either rename the **Type** or the **Resource Type filter** or remove the Type filter altogether, as the difference between the two was unclear and participants expected only the options gathered under Resource Type.

Make it clearer that doing a new search from the search results page **keeps all current filter selections** and sort by options in place. The sort by is especially problematic, as it has no visual indicator that it has been changed from the default of relevance.

Or, remove this as the default functionality and make it optional. The current “Start Over” link was not used by any participants and could be replaced by a checkbox for users who want to keep their filters when doing a new search.

Make the **x for the filters appear** before you mouse over them to make it clearer how to remove them.
Make **featured collection images** a standard size.

Add an **Advanced Search**.

Clarify which **citation edition** is being used to generate citations.

Also rename the **Citations** button to **Cite** to match industry standards. No colon needed.

**Type**

- **Etd**

Update the **Etd work type** to the full name of Electronic Theses & Dissertations as users are unaware of this acronym.

Then, remove the wording from the top of the collection pages and work pages as it is unneeded there and will be too long once renamed. In its current form it confuses users.

Removing the Type filter as suggested above would also solve half of this issue.

Update the **2019 Samvera copyright date** to say 2019-2023 (with 2023 set to the current year). Participants wondered if that date meant the site hadn’t been updated since 2019.
<table>
<thead>
<tr>
<th>Vertically center tabs, search terms, and search box on all pages. Tab wording does not appear to be centered once they lose their boxes on the other pages of the interface.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add support for chat reference to the Help tab.</td>
</tr>
<tr>
<td>Move the new Analytics button to a less prominent place, such as below the Citation button or in the Item box.</td>
</tr>
<tr>
<td>Add the ability to search multiple schools for similar items, specifically theses and dissertations. Requested by a faculty member.</td>
</tr>
<tr>
<td>Create scholar profile pages so scholars can upload information about themselves to the tenant. Example: <a href="https://connects.catalyst.harvard.edu/profiles/search/people">https://connects.catalyst.harvard.edu/profiles/search/people</a> Requested by a faculty member.</td>
</tr>
</tbody>
</table>
If the **collection search box** is not moved to the top of the collection page to take up white space, users would like to see it moved underneath works as a clearer indicator of what items the box searches for.

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**Bug Fixes**

### Works (31)

Display items on a collection page in a logical order and **fix the sort options** so that they actually change the sort order. (Currently, changing the sort by options has no effect on the items.)

### 2020 DNP Manuscripts

Items should have the **same image** regardless of whether they are shown on the homepage, search results, or a collection page. Items occasionally had a custom image in one of those places but not in all three. Example on the left is shown with this image only on search results. The process for adding images to items should not result in this issue.

### Filtering by: Date created is less than 10/12/1948

Fix the **date created search** that happens if you click that metadata from an item record. It returns items that match any piece of the date created. So if the item was created on 1964-04-02, the search will return all items from 1964, all items from February, and all items from April.
# Suggestions from the UX Team

Create a **generic FAQ/User Guide** to place under the Help tab that would be applicable for all tenants.

Add a **pdf viewer** for pdf items. (Librarians and faculty members expected this to be present, other users did not seem to have an expectation either way.)

Remove access to the **File page** for end users. (This appears if you click the title of the work at the bottom of the page.)

The previous Hyku for Consortia UX report discussed the Items box piece of the item page and what changes could/should be made. In our study, users were generally fine with the box as is, and were only confused when they clicked on the file name and this page appeared.

Consider whether **filters with only 1 use could be hidden** by the tenant.
Recognize searches for **plural material types** and return results for both (i.e. salvation theses and salvation thesis should return the same search results as students don’t recognize the difference.)
## Recommended Local Settings

<table>
<thead>
<tr>
<th>The <strong>Wabash Institutional Repository</strong> provides online access to Wabash College student and faculty scholarship, institutional publications, open educational resources (OER), and materials from the Wabash College Archives. For more information on the Institutional Repository and the Archives’ digital collections, please visit the Robert T. Ramsay, Jr. Archival Center located in the basement of the Lilly Library at Wabash College.</th>
<th>Make clear from the homepage what materials users should expect to find in this repository.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explore Collections</strong></td>
<td>Feature collections on the homepage.</td>
</tr>
<tr>
<td>No collections have been featured.</td>
<td><strong>Add large text on collection pages to fill the white space until another solution can be found. For example, include date ranges for the collection.</strong></td>
</tr>
<tr>
<td><strong>View all collections</strong></td>
<td><strong>Even once the white space issue is resolved, users generally wanted almost all collection descriptions to be longer and include more details about what items were included.</strong></td>
</tr>
<tr>
<td><strong>About Hanover College</strong></td>
<td><strong>Add information to the About page for external audiences.</strong></td>
</tr>
<tr>
<td>Located on 650 acres overlooking the Ohio River, Hanover College is a private institution that has core strengths in the sciences, members take responsibility for lifelong inquiry, and intellectual community within which students are develop their unique abilities to their highest level.</td>
<td></td>
</tr>
</tbody>
</table>
Do occasional metadata checks. If you view all works in a repository and view the filters, you can easily see where some inconsistencies and typos have arisen.

Include the year that the item was created in the title of the item whenever possible until that information is visible in another way. These have been included on serial items but not necessarily on items such as theses and users would like dates for those as well.
Recommended Content for Homepage Tabs

About
In this section, users would like to see, succinctly communicated:
- The purpose and mission of the site.
- Material that can be found on the site.
- Information appropriate for external audiences who found the site via a search engine.

Help
In this section, users are looking for:
- Search tips
- A focused list of FAQs.
- Terms of Use for the materials.
- Information on citing materials.

All of the items for this section could ideally be created by the Hyku for Consortia team and reused by libraries.

Contact
In general, users were not opposed to using a contact form for support. Many would like to see clear differentiation between where they would go for research help versus technical support.

Ideally, this page would have a place where libraries could add contact information in addition to the form. Users would like to see:
- Chat
- People to contact
- Email address(es) for those contacts
- Phone number(s) for those contacts

If this section cannot be added to the Contact tab, it should be included on the Help tab.
Research Questions Answered

1. Are different personas of users able to complete basic tasks using Hyku interfaces?
   a. Yes. All three personas who did tasks could complete them, with some stumbling blocks. Only one undergraduate student did not complete their task.
   b. The largest stumbling block for both undergraduate and graduate students was the search results page, as they expected a new search from that page to remove the existing filters and sort options previously selected.
   c. Users also often looked for date facets or sort options and could not find them.

2. Does the interface serve users across the wide variety of use cases for Hyku?
   a. We intentionally gathered a selection of tenants who are using Hyku in different ways. School A (digital collection for archives), School B (newspaper and DNP collections), School C (digital collection for archives), School D (institutional repository (IR)), School E (IR), and Miscellaneous (open educational resources (OER)).
   b. While users did not always correctly judge the tenants from their first five second look, by the time they had spent 5-10 minutes in the interface, they had a much better idea of the purpose of each site. The large exception to this rule is for School B’s site, where the two collections felt like a disjointed mismatch. We recommend that libraries clearly think through their vision for the site and communicate it to the users. In a case like School B, it may make sense for institutions to have two separate Hyku interfaces, one for archival materials and another one for IR materials. Users are unlikely to need both types of materials at the same time and this will make for ease of use.
   c. Issues listed above exist for both IR and archival uses of Hyku—once corrected, it should serve both purposes well.

3. What common issues do users have when navigating Hyku interfaces?
   a. Users generally took a little while to acclimate to the purpose of each interface, but once they had navigated for a few minutes, they tended to feel fairly comfortable with it from there.
   b. The two major stumbling blocks with the interface have already been mentioned above in answers b and c to question 1.

4. What overall design thoughts do users have about Hyku interfaces?
   a. The final question we asked users on their exit questionnaire was “If you could make one change to this interface, what would it be?” Overwhelmingly, the answers fell into the area of design:
      - “More visual appeal” - Faculty member
      - “I would add more visuals.” - Undergraduate student
      - “I would make it more visually appealing.” - Graduate student
      - “Changes in the white spaces as well as white fonts.” - Undergraduate student
      - “Make design tweaks - possibly make the back end more customizable so that each manager can adjust visuals more clearly?” - Librarian
b. While the interface is largely usable at this point, users would like to see schools add further visual interest to their tenant homepages. As the librarian above said, it would be ideal if the backend could offer easily customizable homepages with additional elements of design. This Samvera-based interface from Lafayette College, https://ldr.lafayette.edu, or others, while not tested on users in this study, could easily be adapted for Hyku for Consortia use. Additionally, Lafayette has solved the white space issue on their collections pages by making collection photos small, although they have left the white font headers and made them aesthetically pleasing with graphics.

5. What are some quick wins that could add value to Hyku interfaces?
   a. We anticipate that some pieces of redesigning collection pages could be quick wins. Additionally, changing the text on the Citations button, adding the copyright date at the bottom of the page, and fixing the CSS for vertical alignment of items on the main page should all be easy to accomplish.