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Usability Test: DUL's Bento Search

Executive Summary

As Duke University Libraries (DUL) evaluates a transition to Primo as a unified discovery system, this study compared Duke's bento-style search interface with Dartmouth's Primo-based search system. The study evaluated participants' preference, satisfaction, and usability—effectiveness & efficiency—across both systems. Five participants completed three search tasks using each of the primary search portals for Duke and Dartmouth. The results were analyzed based on task success rates, time on task, navigational patterns, and subjective participant feedback.

Recommendations

1. Introduce a dedicated 'Journals' bento category
2. Separate 'Books & Media' into distinct categories
3. Retain the bento interface but refine its UI
4. Redesign the layout and UI of the homepage all-search bar page links
5. Reposition the format filtering tabs on the homepage all-search

Background

Library patrons have historically struggled to understand and navigate library search results, particularly in identifying material types. This difficulty arises from various reasons, including a lack of familiarity with library search interfaces, unclear terminology or material types, and inconsistent visual cues. One early proposed solution to address some of these challenges has been the implementation of "bento" style search, which categorizes search results into material type silos. This approach aims to simplify the search process by organizing content into distinct categories, such as books, articles, or videos, allowing patrons to navigate directly to the material type of interest (see figure 1). Additionally, it streamlines the search process by gathering from multiple discovery systems, reducing the number of platforms a patron needs to search in order to find relevant content.

DUL currently maintains two separate catalogs: one designed for discovering and requesting print materials, and another that provides article-level access to electronic resources. To bridge this divide, the library developed a bento-style search interface that integrates results from both catalogs, along with content from the library's public website and other related systems. In 2025, DUL is evaluating a potential transition to Primo, a unified discovery system that would replace the separate print and

electronic resource catalogs. As part of this evaluation, it was essential to determine whether the bento-style search interface should be retained if Primo is adopted, and if it meets the modern needs of DUL patrons. This decision requires both a review of existing literature—which was performed prior to this study and is beyond the scope of this research report—and user research tailored to Duke's patrons to assess how different search interfaces impact the user experience.

To contribute to this ongoing evaluation, the following study examined the user experience of Duke's current bento-style search system (see figure 1) in comparison to Dartmouth's Primo interface (see figure 2) which does not incorporate bento-style search. The study specifically assessed how effective and efficient each system is in supporting patrons completing various types of information search tasks, while also exploring participant preferences and overall satisfaction with both search interfaces.

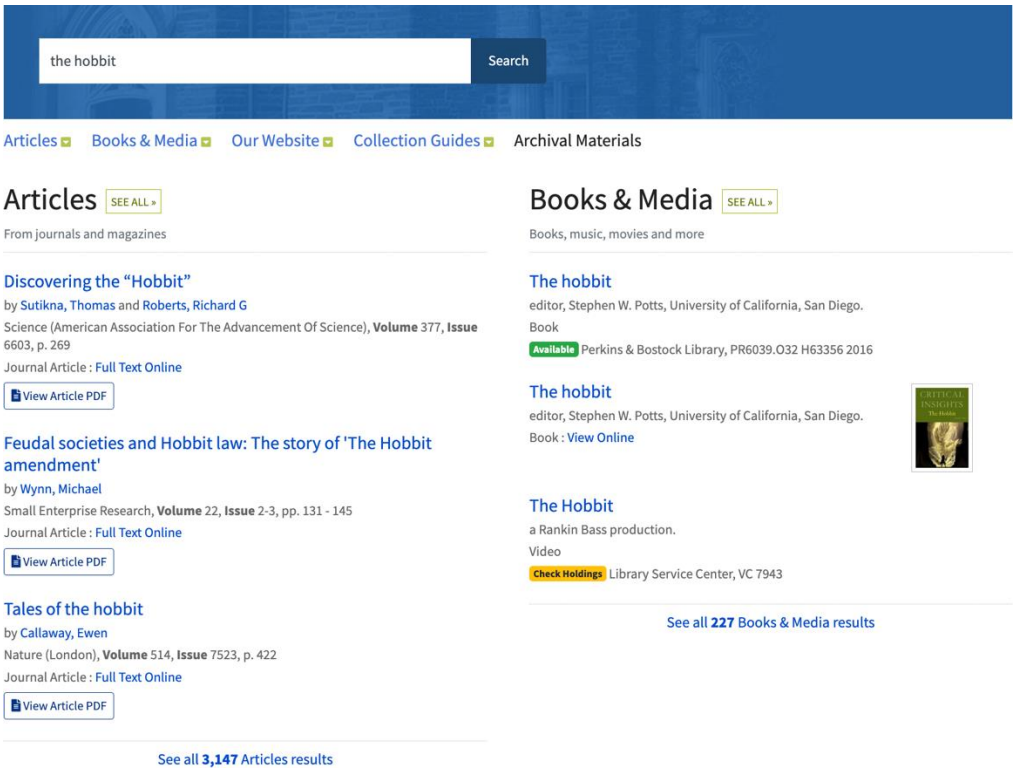

Figure 1. *Duke's bento, showing search results segmented by material type.*

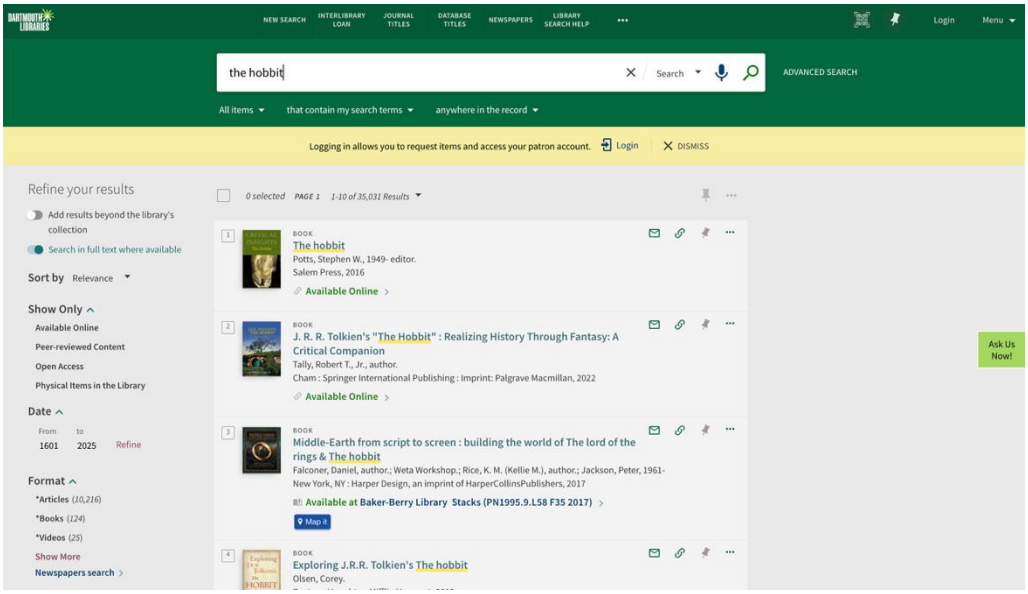

Figure 2. *Dartmouth's Primo-based search interface, showing unified results as a sing list.*

Research Question

- Should Duke University Libraries (DUL) retain the bento-style search in addition to an aggregated discovery layer like Primo?

Methodology, Metrics, & Tasks

Methodology

Comparative Usability Testing

- Bento: Duke
- Primo Non-bento: Dartmouth

Methods

- ***Task Analysis***: Task analysis served as the foundational method for assessing the effectiveness and efficiency of each search interface. Participants were asked to complete three distinct search tasks on both Duke's bento-style interface and Dartmouth's Primo-based interface. These tasks were carefully designed to represent a range of search behaviors—from open-ended exploration to known-item retrieval and journal discovery. By analyzing how participants navigated each task, the study identified usability patterns, bottlenecks, and interface affordances specific to each system. The analysis revealed differences in navigation paths, time on task, and task completion rates, offering insights into which interface structures best support participant needs.

- ***Observations***: While participants engaged with the search systems, their screens, click patterns, and behaviors were directly observed to contextualize their performance and decision-making. Observational data captured instances of confusion, hesitations, or task completion. These observations provided nuanced understanding beyond quantitative metrics, revealing how participants interpreted the systems' information architectures and visual hierarchies.

- ***Interviews***: Post-task interviews elicited qualitative feedback to understand participants' preferences, perceived usability, and satisfaction with each system. Interview questions probed what participants found intuitive or frustrating, as well as which interface elements enhanced or hindered their ability to locate information. Participants also reflected on their overall experience with both Duke and Dartmouth systems, allowing the study to triangulate observed behavior with self-reported attitudes.

Metrics

Effectiveness - *Task completion*

- Was the participant able to complete the task?

Efficiency - *Task Time & Effort*

- How quickly did the participant complete the task?
- How much effort was required to complete the task?

Satisfaction & Preference

- To what extent was the participant satisfied with the experience?
- Which Library interface does the participant prefer?

Tasks

The following three tasks were designed to evaluate each system's effectiveness and efficiency in supporting both open-ended and goal-directed (closed) searches, while also observing how participants engaged with Duke's bento-style search interface.

1. You've been assigned to write a paper focused on the use of AI in criminal justice for your class. Find a resource published in the last 5 years that would help you get started.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

2. You're looking for resources to help improve your coaching skills. Find the Book *Brilliant Coaching* by Julie Starr, published in 2017.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

3. Find a peer-reviewed journal on human-computer interaction.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

All participants began the tasks on the main library homepage, where the default all-search functionality is located. **At Duke, entering a query into the main search box using the default settings directs patrons to the bento search results page. However, if a participant refined their search by selecting a specific material type or system** (e.g., Online Journals, Research Databases, etc.), **they bypassed the bento interface and were routed directly to Summon or another subsystem**. As a result, not all participants engaged with the bento interface for every task, as this depended on the search path they chose.

Participants

Five participants participated in comparative usability tests, performing the same tasks on both Duke's and Dartmouth's library search systems. The following participant information was collected to provide context to collected data.

Participant	Gender	Year	DUL Search Usage
P1	M	Masters	Occasionally
P2	F	Masters	Rarely
P3	M	Masters	Occasionally
P4	F	Masters	Rarely
P5	F	Masters	Rarely

Detailed Findings

Satisfaction

Duke satisfaction	4.6/5
Dartmouth satisfaction	4.2/5

Preference

DUL preference (60%)	Dartmouth Library preference (40%)
P1, P2, P5	P3, P4

Overall, participants were similarly satisfied with both libraries' discovery interfaces, though there was a slight preference for Duke. Three out of five participants favored Duke's approach to discovery, while two preferred Dartmouth's interfaces. **These preferences were influenced more by elements such as filtering functionality, information organization, and overall UI design than by the bento functionality**

itself. Accordingly, this report identifies opportunities for improvement that extend beyond modifications to the bento search interface alone. While some participants appreciated the structured categorization offered by Duke's bento interface, others favored Dartmouth's cleaner layout and consistent user experience. The following sections presents participant perspectives, highlighting the specific aspects of each interface that contributed to their preferences.

Duke Preference: P1, P2, P5

Among those who favored Duke, participants highlighted the ability to refine searches early in the process as a key advantage—particularly through the ability to select material type upfront in the bento interface and by using preset date filters in Summon. These features made it easier to narrow results and locate relevant materials quickly.

However, some participants reported confusion during the transition from Duke's bento interface to Summon, noting that the visual change between interfaces made it unclear whether they were still within DUL's website. This design inconsistency disrupted the user experience and led to uncertainty about navigation paths and system boundaries.

Participant 1

P1 preferred Duke's system over Dartmouth's primarily because of Summon's date filtering options (see figure 3). He found Duke's preset date facets well-organized and easy to use, whereas Dartmouth's Primo manual date entry (see figure 4) and the "Apply Filters" process (see figure 5), having to click the apply filters button after selecting facets, felt tedious and inefficient.

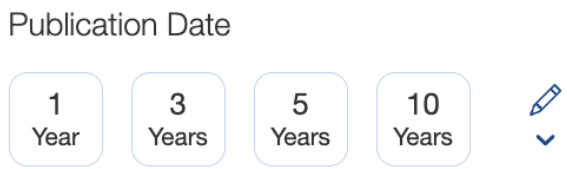

Figure 3. *Duke's Summon date facet.*

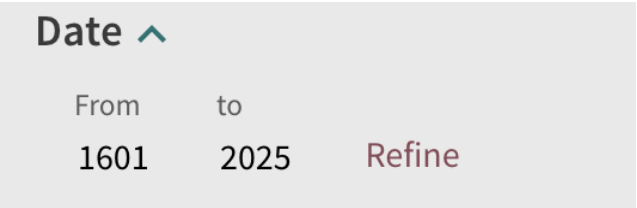

Figure 4. *Dartmouth's Primo date facet.*

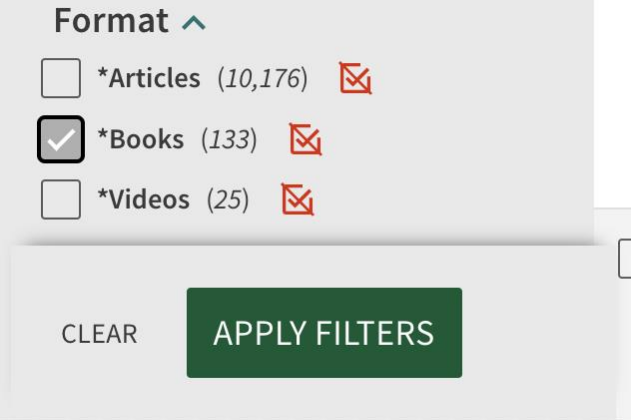

Figure 5. *Dartmouth's Primo facet apply filters button.*

However, while P1 preferred DUL's search, he noted frustration with Duke's interface, specifically regarding the transition between DUL's discovery pages (see figures 6-8). The shift in visual design—across the bento search, Summon, the Books & Media Catalog, and the homepage search box—created confusion regarding his navigation choices and whether he was within DUL's website (see figures 6-8). In contrast, he appreciated Dartmouth's consistent interface design throughout the search experience, stating:

"One thing I didn't like about Duke's website is that it looks different when I search for a book versus when I search for a journal. In Dartmouth, the interface stays the same regardless of what I'm looking for, and I like that."

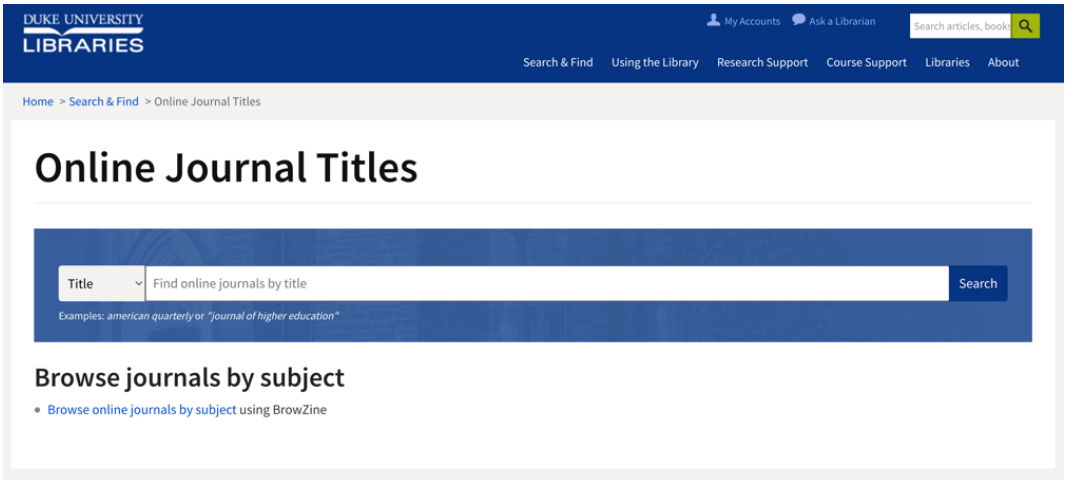

Figure 6. *Duke's Online Journal Titles search page.*

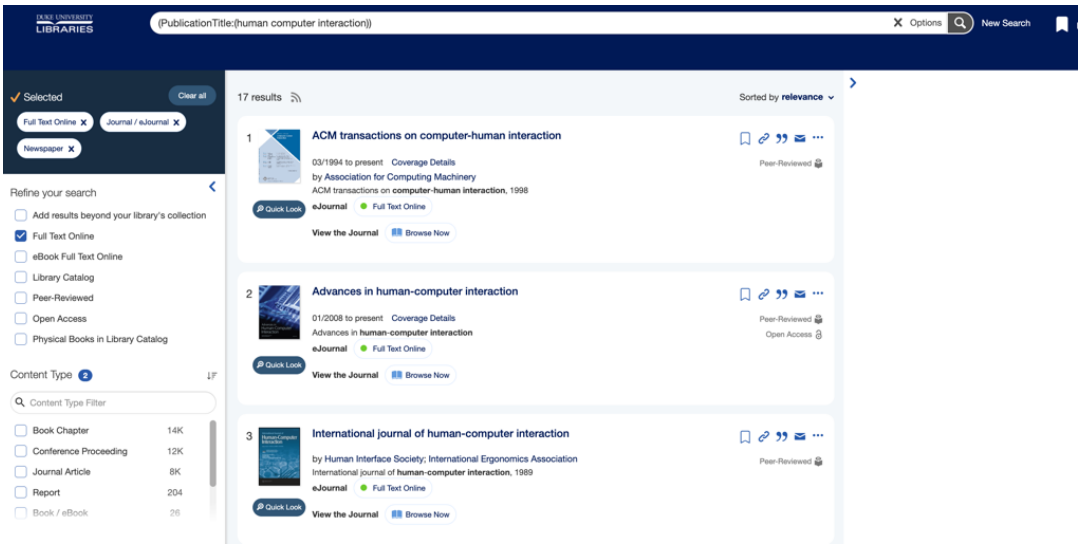

Figure 7. *Duke's Summon search result page.*

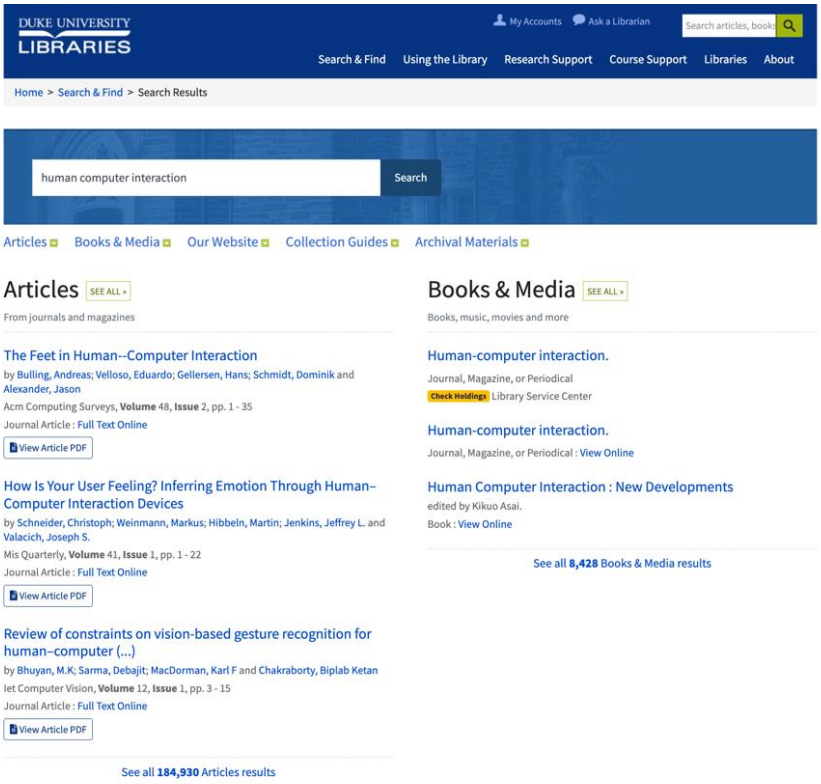

Figure 8. *Duke's bento, showing search results segmented by material type*.

Participant 2

P2 preferred Duke's system primarily due to the bento interface, which allows participants to select the material type before browsing titles—ultimately saving time and reducing cognitive load (see figure 8). She appreciated the ability to filter out irrelevant materials early in the search process, stating:

"I prefer Duke because I want to organize or sort by media type before looking at titles. I want to filter out the materials that I wouldn't use."

Participant 5

P5 noted that she preferred Duke's interface for its bento-style categorization, which she found helpful whether or not she knew in advance what material type she was looking for. The ability to see results grouped by format made the process of scanning, evaluating, and selecting sources more manageable. However, despite this, she felt that Dartmouth's interface was overall easier to navigate. This perceived ease did not stem from a specific feature she could identify, but rather from a general sense of flow and visual simplicity.

"Dartmouth's seemed a little bit easier to navigate, but I can't really tell you why… but everything (the materials) is, like, jumbled together. I like how Duke gives you the two columns, I think that made it more digestible. Dartmouth is like article, book, book, article, article, article, dissertation, book, making it harder to scan."

This response suggests that while Duke's bento interface reduces cognitive load and supports easier evaluation of materials through clear categorization, Dartmouth's interface may offer a smoother visual experience and more intuitive navigation. P5's preference for Duke also indicates that, for her, the ability to efficiently find and filter relevant materials outweighs the benefits of a cleaner or simpler UI design.

Dartmouth Preference: P3 & P4

Participants who valued visual simplicity found Dartmouth's general interface and homepage all-search box easier to navigate, as the format tabs, located atop, dynamically filtered the search context and relevant links (see figure 11).

Participant 3

While P3 expressed a general appreciation for both interfaces, he ultimately preferred Dartmouth's interface due to its visual design and layout. He noted the usefulness of Dartmouth's homepage all-search format tabs which he found to be more visible and clearly labeled than Duke's (see figures 9 & 10). P3 acknowledged Duke's categorization and expressed a preference for the bento-style search

results over Dartmouth's material aggregation, but valued Dartmouth's cleaner visual design and overall interface over Duke's bento organization.

"I don't like how I have to go through a first page, second page, etc., in the hopes of finding an article rather than Duke saying, hey, through our search, here is article categorization."

"I actually like both, but I'm a visual person so I like Dartmouth's homepage search more than Dukes. One other thing I like on Dartmouth is the tabs at the top showing the different options... Audio, video and the descriptions (see figure 8.) I'm big on descriptions because it helps with processes. So, (he points to Duke's All-Search formats and portal links, see figure 9) like ebooks, online journal titles, research database, you know, digitized collections, I found to be a bit difficult to differentiate, you know, ebooks and online journal types in the sense that, you know, they are all electronic. So, I wasn't inclined to use Duke's tabs as opposed to Dartmouth's because I felt they had more clarity."

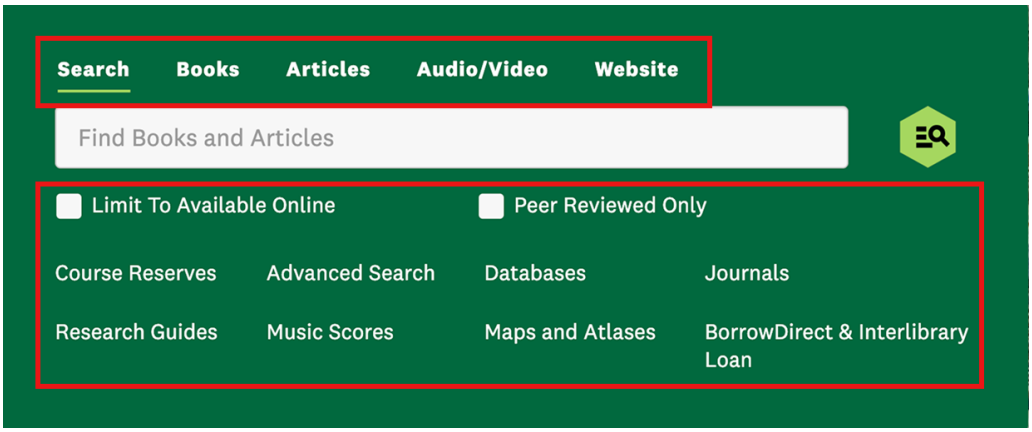

Figure 9. *Dartmouth's homepage all-search bar with format tabs at the top & page links at bottom.*

Figure 10. *Duke's homepage all-search bar with format tabs on the left & page links at the bottom.*

P3 also appreciated that Dartmouth's page links are dynamic, automatically displaying relevant options based on the selected format tab (see figure 11), making the experience feel more intuitive and responsive.

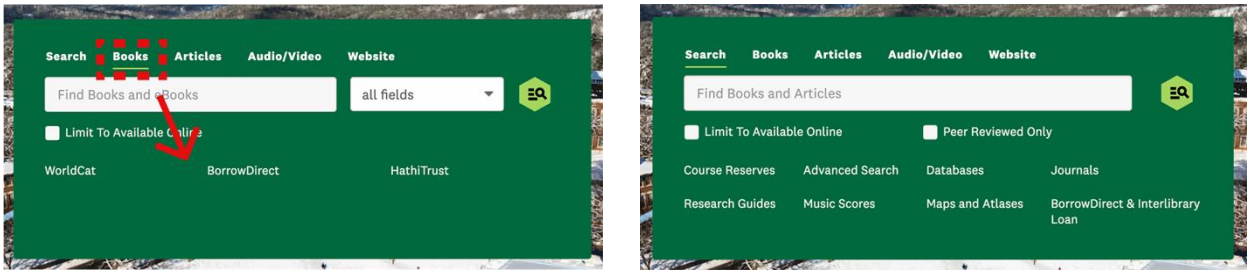

Figure 11. *Dartmouth's homepage all-search bar format tabs, with page links dynamically updated per format.*

Participant 4

Similar to P3, P4 found both libraries' interfaces intuitive and easy to navigate but preferred Dartmouth's Primo interface for its cleaner UI and design.

"I think just because of the interface, I probably prefer Dartmouth's more. I like the Duke one because It's what I'm used to, but I think once you figure it out (how to use Dartmouth's Library search) it's not hard to understand and it's a lot more condensed, which I like."

Specifically, she noted that Dartmouth's Primo facet layout (see figure 13) was more visually appealing compared to Duke's Summon facets (see figure 12), which she described as looking separate from the rest of the page.

"This feels a little bit cluttered (pointing to Duke's Summon facet layout (see figure 12)), and this (pointing to Dartmouth's Primo facet layout (see figure 13)) feels easier to look at, but that's really it. I think both of them are similar in terms of usage. Duke's (Summon left sidebar) feels a little bit cluttered, and Dartmouth's feels easier to look at… Duke's (Summon left sidebar) looks like a whole different section on the page, versus Dartmouth's (Primo left sidebar) whose has the same background grey color as the page. It's a better flow visually."

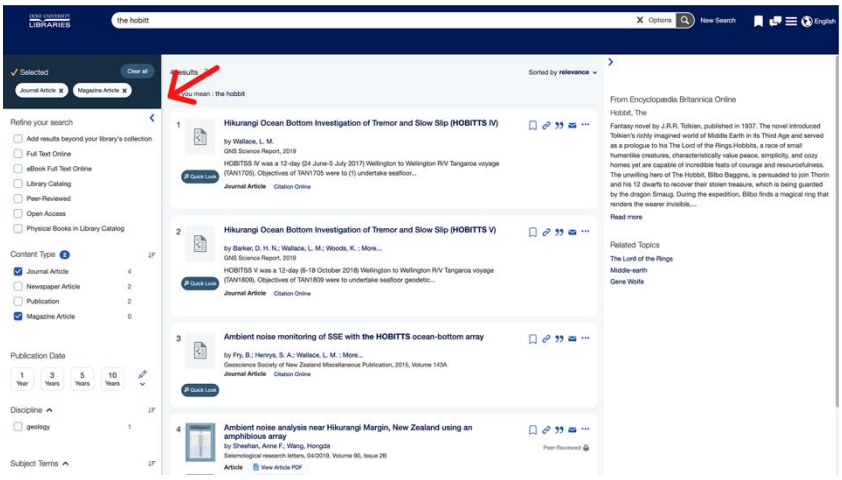

Figure 12. *Duke's Summon facet sidebar.*

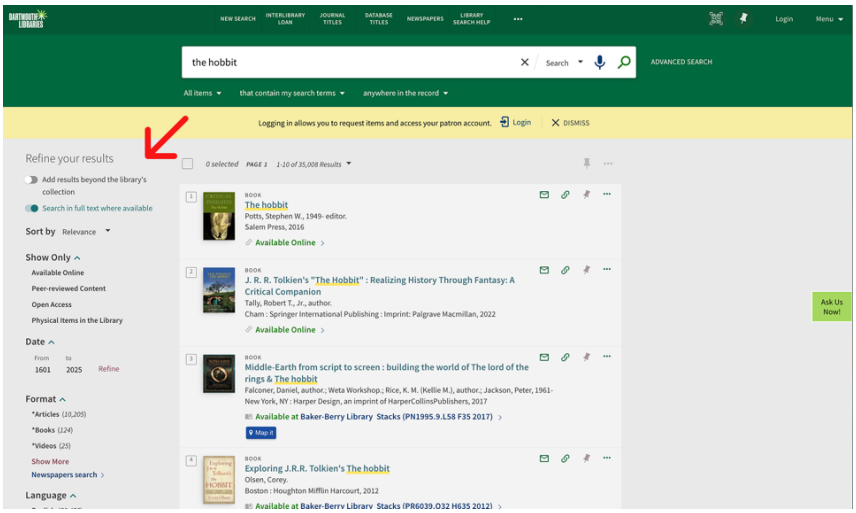

Figure 13. *Dartmouth's Primo facet sidebar.*

Task Analysis & Bento Utilization

This section presents a comparative analysis of how participants ngaged with both Duke's bento-style search interface and Dartmouth's Primo interface across three core search tasks. The tasks were designed to reflect diverse information-seeking behaviors: open-ended exploration, known-item retrieval, and journal discovery. Each task was evaluated in terms of effectiveness (task success), efficiency (time, search queries, and page views), and perceived difficulty.

Task 1: Open-Ended Search

Objective: Evaluate how effectively each search system supports open-ended, exploratory searches when the participant is unfamiliar with specific sources.

Prompt: You've been assigned to write a paper focused on the use of AI in criminal justice for your class. Find a resource published in the last 5 years that would help you get started.

T1 Usability: Effectiveness & Efficiency

Task	Success	Time (min)	Searches	Pages	Difficulty
Duke T1	100%	2.7	1.6	6.2	1.4 - Easy
Dartmouth T1	100%	1.57	1.8	3.4	1.6 - Easy
Difference	0%	Duke 1.13	Dartmouth 0.2	Duke 2.8	Dartmouth 0.35

Participants completing Task 1 on DUL navigated through more pages and took longer to complete the task, suggesting that because DUL's system requires more navigation across pages, the time spent

finding materials increases. While Dartmouth's system is more time efficient, specific to task 1, participants may have perceived the task as slightly more difficult for two reasons:

First, P1 found Dartmouth's Primo facets confusing as they required selecting a filter followed by an additional step clicking “Apply Filters” for the results to update (see figure 5). He expected the filters to apply automatically upon selection and found the extra step tedious and unnecessary, giving a higher difficulty rating. Second, all participants expressed frustration with Dartmouth’s Primo date filtering system (see figure 4) which required manually entering exact dates. This process was seen as tedious and cognitively demanding, whereas Summon’s preset 2-, 5-, and 10-year filtering option was preferred for its simplicity and ease of use (see figure 3).

P1: *“I was really confused because I'd put in a date, but then I'd also have to select that I want to filter* (see figure 5)*. Then I don't know what the refine button does because I clicked the refine button and it didn't do anything. So that just kind of ruined that experience. I don't like having to (click) apply filters.”*

Task 2: Known-Item Search

Objective: Assess how efficiently participants can locate a specific known item.

Prompt: You’re looking for resources to help improve your coaching skills. Find the Book Brilliant Coaching by Julie Starr, published in 2017.

T2 Usability: Effectiveness & Efficiency

Task	Success	Time (min)	Searches	Pages	Difficulty
Duke T2	100%	0.55	1.2	3.4	1.2 - Easy
Dartmouth T2	100%	0.49	1.2	3	1.2 - Easy
Difference	0%	Duke .06	0	Duke .04	0

Participants performed equally well on Task 2 across both systems, with all participants successfully locating the item. Average completion times, search behavior, and perceived difficulty were nearly identical. While Duke participants viewed slightly more pages, this difference was minimal and did not significantly impact the overall task experience. These results suggest that both DUL’s bento interface and Dartmouth’s unified Primo system effectively support direct, known-item searches with minimal effort or confusion.

Task 3: Journal Discovery

Objective: Determine how easily participants can locate peer-reviewed journals.

Prompt: Find a peer-reviewed journal on human-computer interaction.

T3 Usability: Effectiveness & Efficiency

Task	Success	Time	Searches	Pages	Difficulty
Duke T3	60%	1.23	1.2	4.4	1.8 - Easy
Dartmouth T3	60%	0.55	1	3.2	1 - Easy
Difference	0%	Duke .67	Duke .02	Duke 1.2	Duke .80

Participants had equal success rates for Task 3 across both systems (60%), but their experiences varied widely in terms of time spent, page views, and perceived difficulty. Dartmouth's interface—with clearly labeled homepage format tabs and dynamic filtering (see figures 9 & 11)—enabled faster and more efficient journal searches. In contrast, Duke's homepage and bento interface lacked a distinct journal category (see figure 8), leading to confusion and longer search paths for several participants.

These findings suggest that while both systems can support journal discovery, Duke's interface might be improved by either introducing a dedicated "Journals" bento or adjusting the existing "Online Journal Titles" page link, on the homepage, to be more visible. Participants who found and used the "Online Journal Titles" homepage link completed the task efficiently, while those relying on the bento interface struggled to identify appropriate journal content.

Duke T3 Task Successes:

Two participants (P1 and P5) successfully located journals by using the "Online Journal Titles" page link on DUL's homepage (see figure 14), successfully completing the task with ease.

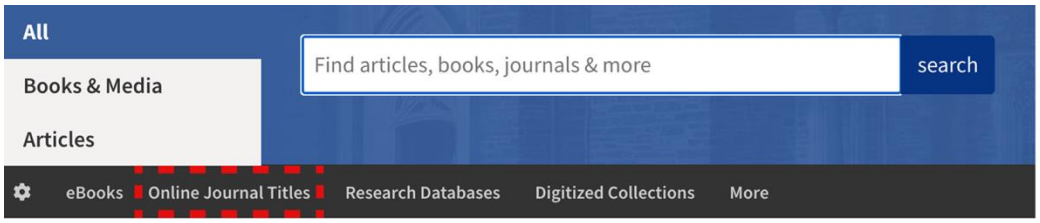

Figure 14. *Duke's Online Journal Titles page link located at the bottom of Duke's homepage all-search bar.*

P2 ultimately completed the task but encountered significant difficulty. Overlooking the "Online Journal Titles" page link (see figure 14), she entered a general search which sent her to the bento where she expected to find a dedicated journal category—similar to the existing "Articles" and "Books & Media" sections. After considerable time scrolling through unrelated results, she eventually discovered a small "Online Journal Titles" page link at the bottom of the bento page (see figure 15). Expressing frustration with its placement, she remarked:

"I expected there to be a bento box specific to just journals at the top, similar to the Articles and Books & Media bento. It was tedious having to scroll all the way down to the bottom, and it was small."

Her experience suggests that the absence of a clearly defined journal-specific bento led to inefficiencies and diminished the user experience.

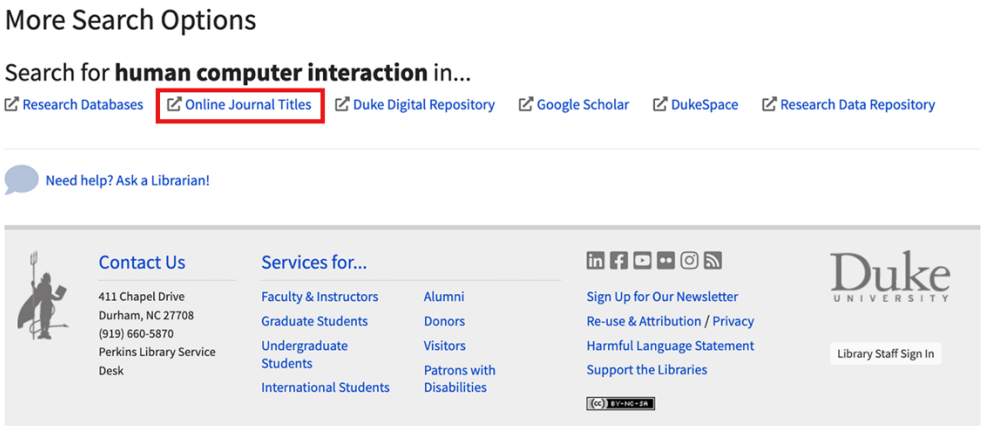

Figure 15. *Duke's Online Journal Titles page link, located at the bottom of bento page.*

Duke T3 Task Failures:

Two participants, P3 and P4, failed the task. In both cases, they attempted to locate a journal by selecting content from the "Articles" bento box, mistakenly assuming that individual articles were journal titles.

While some of this confusion may stem from limited familiarity with library resources, it also highlights the lack of a dedicated "Journals" bento category, a prominent "Online Journal Titles" link on the all-search homepage, and the system's insufficient visual cues distinguishing articles from journals.

Summary of DUL's Bento Utilization

Bento usage varied by task type, reflecting differences in search goals and strategies. At DUL, entering a query into the main search bar using default settings directed participants to the bento results page. However, selecting a specific format type or page link (e.g., Online Journals or Research Databases) bypassed the bento interface and routed users directly to a subsystem like Summon. As a result,

participants were more likely to encounter the bento layout during open-ended tasks, while more focused searches often led them to specialized tools.

- **High Bento Engagement** occurred in **Task 1** (used by 80% of participants), an exploratory research task. The open-ended nature prompted participants to browse broadly and evaluate content across material types—an interaction well supported by the bento layout. In this context, the bento interface was perceived as helpful for scanning and comparing results across silos.

- **Moderate Bento Engagement** was observed in **Task 2** (used by 60% of participants), which involved locating a known item. Although a direct path to the "Books & Media" catalog was available, some participants defaulted to the all-search without refinement and were routed to the bento results. This suggests that even when a more efficient route was possible, some participants still encountered the bento view—though it was not necessarily their intention. For these participants, the interface did not hinder task completion but was not seen as particularly advantageous either.

- **Moderate Bento Engagement** occurred in **Task 3** (used by 60% of participants), where participants were asked to find a peer-reviewed journal. Some participants bypassed the bento interface altogether, using Duke's "Online Journal Titles" portal link instead. Among those who did access the bento interface, confusion arose due to the absence of a dedicated journal bento. Additionally, two of those participants failed the task, expressing difficulty distinguishing journals from individual articles, indicating that in tasks requiring precision and content type clarity, the current bento configuration was less effective.

Overall, the bento interface was most effective when participants were engaged in exploratory, broad-topic searches. However, when participants expected precise content categorization—particularly in distinguishing journals from articles—limitations in bento structure became apparent. These findings suggest that while bento can support general browsing and reduce cognitive load, its utility is task dependent. Enhancing bento visibility for certain content types (e.g., journals) and improving label clarity could help extend its usefulness across a wider range of search behaviors.

Recommendations

1. **Introduce a dedicated 'Journals' bento category:** The absence of a clearly labeled "Journals" bento category in Duke's bento search interface caused confusion and negatively affected task performance. Several participants expected to see a journal-specific category alongside existing bento sections such as "Articles" and "Books & Media". When this expectation was not met, participants either mistakenly selected individual articles, believing them to be journals, or spent unnecessary time scanning unrelated results. This concern was especially evident in Task 3, where participants were explicitly asked to locate a peer-reviewed journal.

- *P2: "Because there's Articles, Books & Media, I expected there to be another section for just Journals. But then as I scrolled down, I didn't see that."*

2. **Separate 'Books & Media' into distinct categories:** Participants found the combined "Books & Media" confusing both on the homepage all-search format tab and within the bento search results. Several participants expressed that they were exclusively searching for books and were unsure what "media" encompassed. This ambiguity discouraged them from using the dedicated "Books & Media" format tab on the homepage, leading them instead to initiate a general all-search. Consequently, they were routed into the bento interface—even though the more efficient Books and Media Catalog could have fulfilled their query directly. The same label appeared again in the bento results, where some participants questioned whether results labeled "Books & Media" included only print materials or a mix of formats.
    - *P1: "I don't want to select Books & Media, because I know it's not media that I'm looking for. I know I'm just looking for a book. If I select Books and Media, it's not that narrow anyway. So, I will probably just do a general search all."*
    - *P3: "When someone does Books and Media, now the person's like, oh, I'll have media, but I just want books, now I have to sift through media as well."*

2. **Retain the bento interface but refine its UI:** The bento format effectively categorizes search results by material type, a structure that participants found beneficial and which supported successful task completion. However, design inconsistencies between the bento interface and Summon caused confusion. A more seamless integration and visual design between these systems would enhance the overall search experience and limit navigational confusion. Additionally, some participants suggested design improvements to the existing bento categories, including clearer distinctions between material types, enhanced visual cues, and the inclusion of publication dates within each bento result preview.
    - *P1: "One thing I didn't like about Duke's website is that it looks different when I search for a book versus when I search for a journal... all the pages look different. In Dartmouth, the interface stays the same regardless of what I'm looking for, and I like that."*
    - *P2: "Because I would want to see first the title and how relevant it is to my search and the date... so having the date info just right there on the front screen (referring to the bento) would be helpful."*

3. **Redesign the layout and UI of the homepage all-search bar page links:** Several participants noted that the all-search bar page links, located below the all-search box on Duke's homepage, were easy to miss. The placement and visual styling of these links lacked prominence, reducing their discoverability. For instance, the "Online Journal Titles" page link—an effective and efficient pathway for locating peer-reviewed journals—was overlooked by multiple participants, leading them to default to broader bento searches that lacked journal-specific filtering options. This usability breakdown suggests the need for a more visible and intuitive UI. Adjusting the

color of the dark navigation bar, repositioning page links, or applying more prominent visual cues might improve visibility and clarify function.

- *P5: "I didn't notice the [Online Journal Titles] link on Duke's homepage... I expected there to be something more obvious at the top."*

4. **Reposition the format filtering tabs on the homepage all-search**: Some participants overlooked the format-specific filters (e.g., "Articles") located on the left-hand side of Duke's homepage all-search box. These format filters weren't prominent enough to attract participants' attention or guide behavior during task initiation. Several participants expressed hesitation or confusion about using these tabs, opting instead to enter broad queries that routed them into the bento interface—even when a more efficient path was available. This suggests a potential need to reposition or redesign the format filter layout to better align with participants' expectations and search patterns. Enhancing the visibility and labeling of these tabs may reduce reliance on general searches and improve the precision and efficiency of navigation.
    - *P3: "One other thing I like on Dartmouth is the tabs at the top showing the different options… Audio, video and the descriptions… I wasn't inclined to use Duke's format tabs as opposed to Dartmouth's because I felt they had more clarity and prominence."*

APPENDIX A: Usability Test Script

Thank you for meeting with us today. We appreciate your time; your participation will be incredibly valuable to our study. We are exploring how library patrons search for academic resources across different library search tools. In this session, we will ask you to complete three search tasks using the library websites of **[Duke University]** and **[Dartmouth College]**. Afterward, we'll ask a few follow-up questions to understand your thoughts on the experience.

To ensure we accurately capture your interactions with the websites, we would like to **record this session**. Please know that your participation is completely confidential, and the recordings will only be used for research purposes. Do we have your permission to proceed with recording?

** Wait for approval*

Great, thank you! Before we begin, I want to emphasize that **this is not a test**—there are no right or wrong answers. Our goal is to observe how you naturally search for information, just as you would if you were doing this on your own. Try to approach the tasks as you normally would, and if you have any questions, we may ask you to share your thoughts rather than provide direct assistance unless absolutely necessary.

One last thing—we'd like you to **think aloud** as you navigate the sites. That means describing what you're doing, why you're making certain choices, and what you're expecting to happen as you click through the search results. This helps us better understand your decision-making process.

Do you have any questions before we begin?

Background Questions

1. What do you do at Duke University?
    a. Undergraduate student
    b. Master's student
    c. Doctoral student
    d. Staff
    e. Faculty
    f. Other

2. How often do you use Duke's library website?
    a. Frequently (every week)
    b. Occasionally (every month)
    c. Rarely (less than once a month)
    d. Never

3. How often do you use the search function on the library website?
    a. Frequently (every week)
    b. Occasionally (every month)
    c. Rarely (less than once a month)
    d. Never

Usability Tasks

https://library.duke.edu/

https://www.library.dartmouth.edu/

** Complete all tasks on Duke then on Dartmouth.*

** Alternate between Dartmouth & Duke University for each patron.*

Duke & Dartmouth

1. You've been assigned to write a paper focused on the use of AI in criminal justice for your class. Find a resource published in the last 5 years that would help you get started.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

2. You're looking for resources to help improve your coaching skills. Find the book Brilliant Coaching by Julie Starr, published in 2017.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

3. Find a peer-reviewed journal on human-computer interaction.
    a. On a scale of 1-5, where 1 is very easy and 5 is very difficult, how difficult was this task?

** Questions for after task completion on both Duke & Dartmouth:*

4. For Duke/Dartmouth's library search:
    a. On a scale of 1-5, where 1 means 'very dissatisfied' and 5 means 'very satisfied', how satisfied are you with Duke/Dartmouth's library search?
        i. What went well?
        ii. What could be improved?

Usability Questionnaire

Please answer the following questions about your experience and preferences when searching for information on the library websites.

* *Show Duke's library home page all-search next to Dartmouth's library home page all-search.*

5. Which library's website do you prefer and why?
    a. Duke
    b. Dartmouth

6. What are your thoughts about categorizing materials by format (e.g., articles, books, databases) rather than displayed in a single list?

* *Only ask if they prefer the bento*

7. Please rank, in order of preference, what search results you would want to see displayed when searching on the library's website:
    a. Articles
    b. Books/eBooks
    c. Databases
    d. Journals
    e. Research Guides
    f. Other (please list)

Thank you.

APPENDIX B: Consent Form

Recording consent form

Thank you for participating in our usability research.

We will be recording your session to allow Duke University Libraries staff members who are unable to be here to observe your session and benefit from your comments.

Please read the statement below and sign where indicated.

- -

I understand that my usability test session will be recorded.

I grant Duke University Libraries permission to use this recording for internal use only for the purpose of improving the designs being tested.

Signature: _____

Print your name: _____

Duke Unique ID: _____

Date: _____