

Enterprise and Aspen Comparative Usability Test Report

May - June 2020

Introduction/Summary

SWAN is in the beginning stages of evaluating potential replacements for their discovery platform. A part of this evaluation process is to perform usability testing comparing the current catalog, Enterprise, to one of the proposed layouts, Aspen. This usability testing was initially conducted by testing Oak Lawn Public Library staff members. We found five key findings as a result of this testing which are outlined below.

Methods

Usability Testing

Members of the Oak Lawn Public Library User Experience Working Group, along with Tara Wood from SWAN, created and facilitated usability testing to compare how participants completed the same tasks in two different library catalog layouts – our current SWAN Enterprise Oak Lawn Public Library catalog, and a different version of the catalog through Aspen Discovery platform. Testing was completed using Zoom with the facilitator directing the testing, the tester sharing their screen while they completed the tasks, plus at least one note taker viewing the test.

Test takers were evaluated on their ability to pass or fail a specific task. Test takers were also asked for their initial reactions to the front page of the Aspen Discovery catalog as well as their reactions to initial search results. These reactions were documented to help understand what features participants liked or disliked compared to the Enterprise catalog, which each of them used with some regularity.

Participants

An email was sent to all staff members at the Oak Lawn Public Library to find participants. The email included a link to a form with a few questions. These questions helped us decide who we would select to participate. We wanted to include testers with a variety of familiarity with the Enterprise catalog, as well as ensure that testers had access to a computer with internet in their homes. We selected 6 participants total.

Key Findings

Finding 1: Misspellings in search terms are difficult to overcome in both catalogs

Enterprise does not offer search term corrections. When presented with searching a commonly misspelled word that is also the title of a few items, participants struggled to understand why they were not finding results. As a result of the misspelling, participants had to scroll through results for much longer to successfully find intended titles. Overall, while participants eventually were successful in finding titles they were looking for, many were inhibited by a misspelled term they weren't aware of.

Aspen has two additional features to correct misspelled search terms that Enterprise does not have. First, Aspen attempts to autocorrect misspelled search terms to corrected spellings. This changes the term in the search box from the misspelled term to a correctly spelled term. Second, Aspen has a feature that indicates it has changed the misspelled search term and that the search results shown are for the correctly spelled search term it has changed to. It also gives the option to search instead for the misspelled search term. In Aspen, four out of six participants noticed that the misspelled word was autocorrected to a correctly spelled search term. Only one of the six participants noticed there was a feature that indicated the new search term and offered a way to search the misspelled search term.

Recommendation 1a: In Aspen, move the “Showing Results for” and “Search instead for” features to an area closer to the search bar. We believe this would enhance the visibility of these search suggests and prove as better indicators that the catalog has changed a misspelled term to a correctly spelled one.

Aspen's current layout

The screenshot shows the Aspen Discovery website interface. At the top, there is a search bar with the text "souls" entered. Below the search bar, there are navigation options: "by Keyword", "In Library Catalog", and "GO". The search results are displayed in a grid format. The first result is "1) Lost souls" by Lisa Jackson, published by Kensington Books in 2008. The result includes a book cover, author information, and a "Choose a Format" section with options for "Book", "On Shelf", and "Place Hold". A red circle highlights the text "Showing Results for souls" and "Search instead for soulless" in the search results area. The "Sort by Best Match" dropdown menu is also visible. The page includes a sidebar with "Narrow Your Results" filters and a "LOGIN" button in the top right corner.

Layout Suggestion from Google

The screenshot shows a Google search interface. At the top left is the Google logo. The search bar contains the text "souless". To the right of the search bar are icons for voice search and image search. Below the search bar are navigation links: "All", "Images", "News", "Videos", "Shopping", "More", "Settings", and "Tools". Below these links, it says "About 564,000 results (0.61 seconds)". A red text suggestion says "Did you mean: **soulless**". Below that are two search results: "www.twitch.tv > Directory > Schedule" and "souless - Twitch" with a sub-link "twitter.com/TSM_Souless.". A "People also ask" section is visible, containing three questions: "What does soulless mean?", "How do you spell soulless?", and "What is a soulless person?". A "Feedback" link is at the bottom right of this section.

Layout Suggestion from Ebsco

The screenshot shows an EBSCOhost search interface. At the top left is the EBSCOhost logo. The search bar contains "souless" and a "Search" button. Above the search bar, it says "Searching: eBook Collection (EBSCOhost), Show all | Choose Databases". To the right, it says "OAK LAWN PUBLIC LIBRARY". Below the search bar are links for "Basic Search", "Advanced Search", and "Search History". A red text suggestion says "Did you mean: **sucess**". On the left side, there is a "Refine Results" panel with "Current Search" and "Find all my search terms: souless". Below that are "Expanders" and "Apply equivalent subjects". The main search results area shows "Search Results: 1 - 10 of 36". The first result is "1. Billionaire Amazon Founder Defends Company Against Report That It Is a 'Souless,' 'Dystopian' Workplace." with a thumbnail of a document. Below the title, it says "By: Coder, Maria. People.com. 8/19/2015, pN.PAG. 1p. , Database: MasterFILE Complete" and "Jeff Bezos responds to The New York Times story calling Amazon 'Soulless' in internal memo to employees". There are icons for "Periodical" and "HTML Full Text". At the top right of the results area are "Relevance", "Page Options", and "Share" dropdown menus.

Recommendation 1b: In Enterprise, provide a suggested search term feature for misspelled words. Offering suggestions to misspelled search terms would help alert patrons to misspellings and give patrons a better way to effectively search for their intended terms.

Finding 2: Finding the newest books by an author exposed difficulty working with publication dates in general.

The tool (the sort by dropdown menu) that accomplishes this task went unnoticed by many participants in both Enterprise and Aspen. There is also a persistent perception that the catalog automatically sorts in chronological order, with the newest books first. This is incorrect, and led participants to instead try to use a publication date filter to remove older books from the search. This did not produce the desired results. Regardless of the spoken perception of each individual

participant, most participants did attempt to use publication date filters to access the newest title by a particular author, and again, this did not produce the desired results. Interestingly, this was true in both Enterprise and Aspen, with very little differentiation between the interfaces.

Recommendation 2: Visually emphasize the sort by dropdown in some way.

Recommendation 2b: Remove publication date from facet sorting, and only provide access to it in advanced search.

Finding 3: Hold wait times are a mystery to catalog users, and the catalog doesn't help.

Participants correctly concluded that there is no way to figure out your wait time in the Enterprise catalog, though they were able to guess that a visit to the holds section of their account would be the place to do it. Aspen does indicate a person's position in line for an item, but some participants didn't notice that.

(It's worth noting here that the instance of Aspen used in this test wasn't a consortial instance, so the hold line position may not be a feasible data point to offer our patrons.)

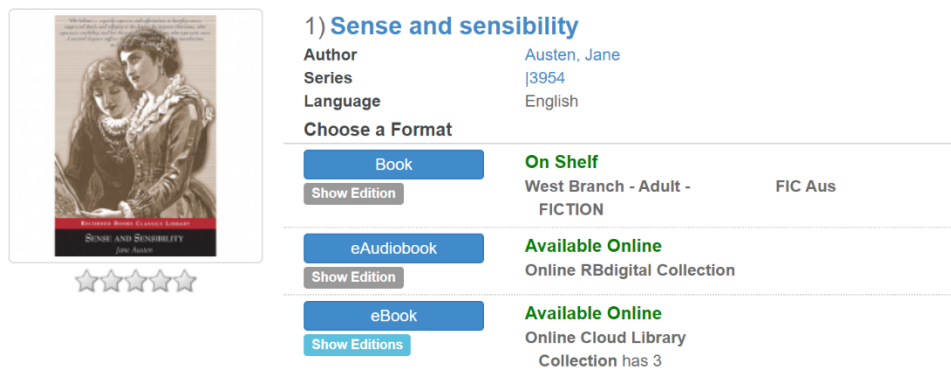
Recommendation 3: SWAN should work with Aspen on making sure the position in line data in Aspen can remain for our patrons.

Recommendation 3b: Hold position information should be highlighted somehow by location on page, or color.

Recommendation 3c: Investigate changing the wording in the holds section of user accounts.

Finding 4: Aspen's FRBRized display was novel to participants and reactions to it were all over the place.

A FRBRized display groups all item types under one title entry in a catalog. See picture 1 below. Enterprise isn't FRBRized. Participants were easily able to use filters to find the desired format. When presented with the Aspen results, participants either didn't notice the FRBRized display, or commented favorably on it. One participant commented that it would be very helpful for classics, as there were so many versions. Often, those that did not notice the results display did not because they went straight to filter the results, behavior that was consistent with their use of Enterprise.



Picture 1

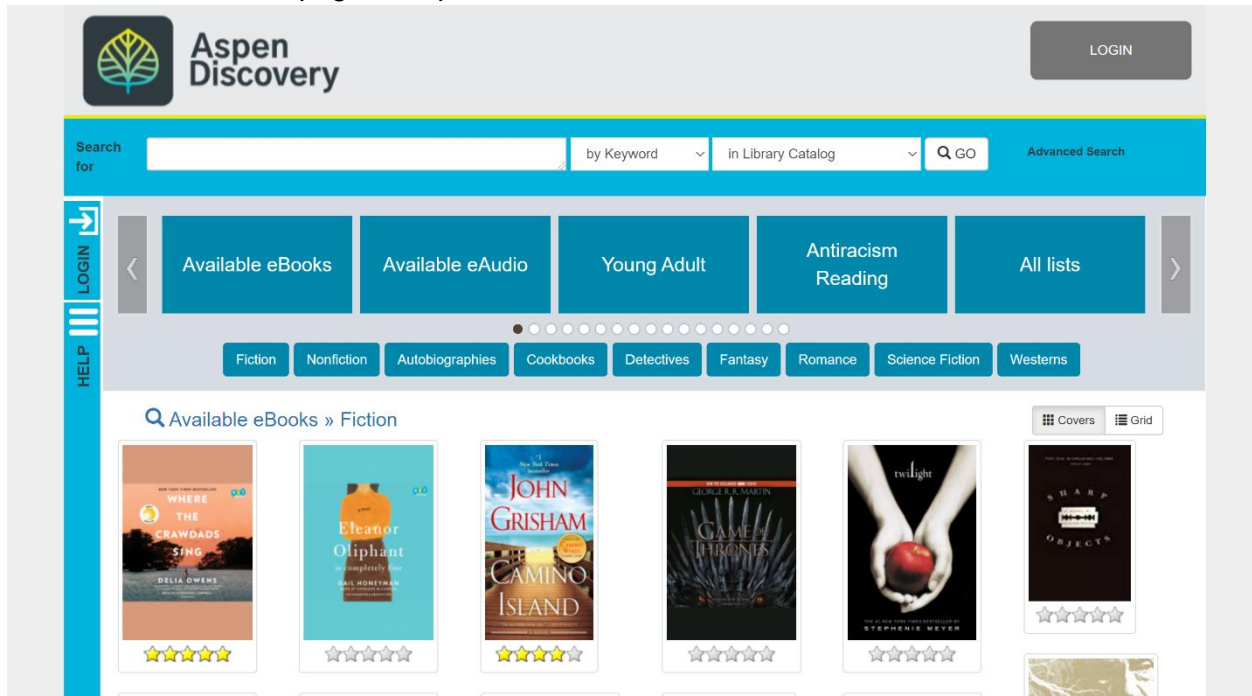
Recommendation 4: It may take time for staff/patrons to become used to a FRBRized display. A small amount of instruction may be required for some users.

Recommendation 4b: Conduct user testing with SWAN patrons, to examine how patrons interact with a FRBRized display.

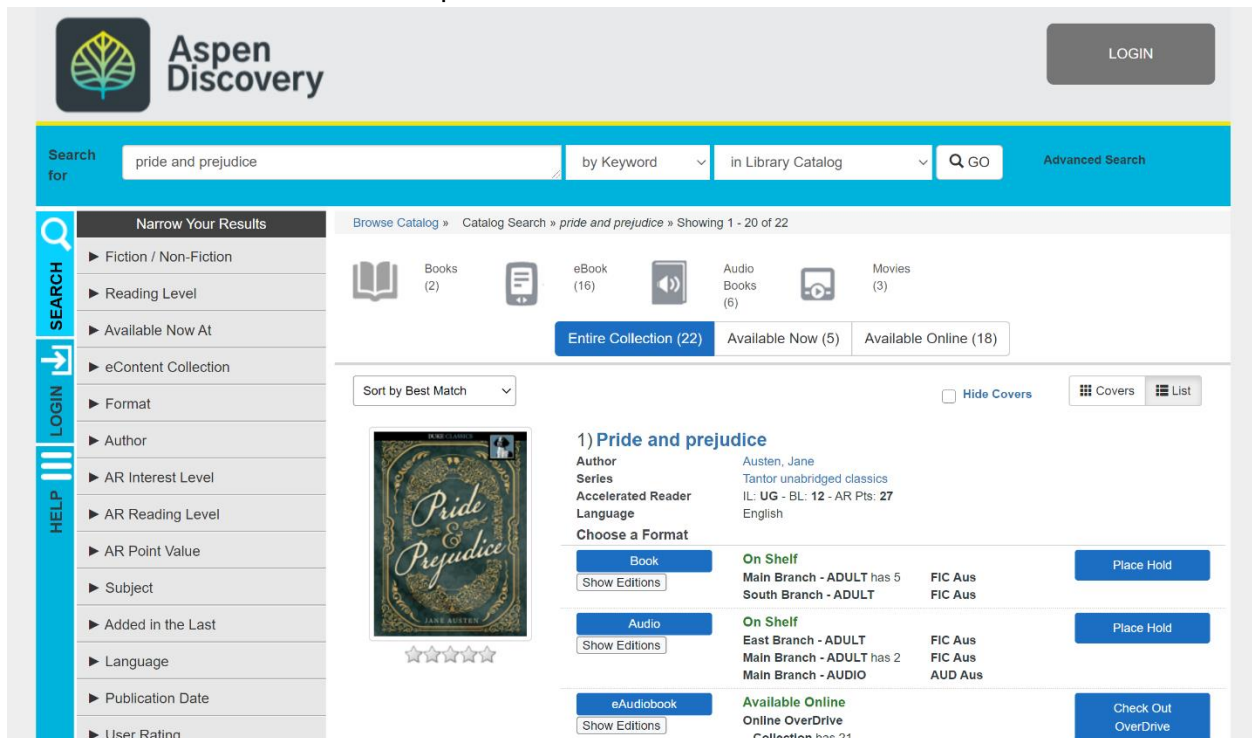
Finding 5: Aspen's use of large buttons for formats and their Available Now feature were almost universally appreciated.

The home page of Aspen's catalog contains buttons with suggestions for themed reading, but also has features for eBooks, eAudio, and Movies that are currently available. In addition, when a user searches for an item, buttons are available at the top of the search results for popular format types and to show which items are available now. When first introduced to the home page, the majority of users commented that they liked the filter buttons at the top of the page and liked that they could quickly find items available now. When asked to look for specific formats during search tasks in Aspen, users often used the buttons at the top of the search results to narrow to a specified format. They also used this button to find items that were "Available Now".

Filter buttons on homepage in Aspen



Filter Formats within search in Aspen



Recommendation 5a: In Enterprise, add an “Available Now” feature to enhance users’ ability to find currently available materials. Enterprise has no feature that allows users to sort a search by items that are “Available Now”. Currently, if users want to look for an item that is immediately

available, they must scroll through the search results to find if an item is currently listed as “On Shelf”. Depending on the search that is performed, this can lead to a lot of scrolling through multiple search results for the user and sometimes requiring the user to go on secondary search pages to find materials. Adding an “Available Now” feature to Enterprise would enhance the ability for the user to find currently available materials during a search session.

Recommendation 5b: In Enterprise, add popular format buttons to narrow results at the top of the results page. While we have this ability through the filters on the left-side of the catalog, we found that searchers often had a difficult time when trying to revise their searches to find different formats. Aspen’s format buttons have a “remove” option which users can click on to quickly change between formats.

Issues & Task Completion Rates

Task 1 & Task 11

Success Criteria: Able to find large print copy of Pride and Prejudice

Enterprise Pass: 5 pass, 1 fail

Most participants completed this task quickly. The one fail get stuck on hitting apply when using the check box for limiters and with not scrolling enough to find all the format limiter options.

Aspen Pass: 5 pass, 1 fail

Participants mostly had no trouble with this, a few noticed that all format types were listed under a single heading. One participant successfully used the advanced search format limit instead of searching and then limiting.

Comparison: In both catalogs the majority of participants were successful. The stumbling block on both seemed to be with identifying where the correct facet was located

Task 1a & Task 11b

Success Criteria: Locates the Large Type publication date

Enterprise Pass: 5 pass, 1 fail

Publication date was listed on the results page, the one fail did not find a large type copy and therefore no publication date

Aspen Pass: 3 pass, 3 fails

One participant was unable to find a large type copy so had no record to check for publication date. Another participant struggled with the multiple formats listed and attempted to use the publication date filter instead of checking the record.

Comparison: Overall, participants were more successful in Enterprise. The multiple formats under a single record seemed to cause some confusion for participants in Aspen. In each catalog, at least one user had been unable to locate a large type copy so therefore had nothing to check for a publication date.

Task 2 & Task 18

Success Criteria: Able to find a book about gardening

Enterprise Pass: 6 pass

All participants were able to find a book on gardening through a keyword search. A few narrowed down to just OLPL or just a book format

Aspen Pass: 6 pass

All participants were able to find a book on gardening through a keyword search.

Comparison: All six participants successfully passed this task in both catalogs

Task 3 & Task 12

Success Criteria: Locate a book by Nora Roberts

Enterprise Pass: 6 pass

Participants searched for Nora Roberts using the author limiter and successfully located titles

Aspen Pass: 6 pass

Participants searched for Nora Roberts using the author limiter and successfully located titles

Comparison: Participants successfully located titles by Nora Roberts in both catalogs.

Task 3a & Task 12a

Success Criteria: Locates a currently available copy, specifically by using the Available Now option in Aspen

Enterprise Pass: N/A

Participants scrolled through results to locate an on shelf copy. Enterprise does not currently have a filter or sort by option for available now.

Aspen Pass: 3 pass, 3 fail

Participants who failed this task were able to locate an on shelf item by scrolling through results but did not notice or use the Available Now filter.

Comparison: In both catalogs, participants were able to locate an on shelf title by scrolling through the results. The focus of the task was track the ability of participants to use the Available Now filter in Aspen, which had only some success. Since Enterprise does not include that filter, participants may have just defaulted to scrolling for results in Aspen as they did in Enterprise.

Task 3b & Task 12b

Success Criteria: Locates an audiobook copy using the audiobook facet

Enterprise Pass: 6 pass

Participants used the format limiter for audiobook CD and successfully located an audiobook copy.

Aspen Pass: 5 pass, 1 fail

The one fail on this task located the audiobook version on the record so did not look for or use a filter to achieve the results.

Comparison: Overall, participants were able to complete this task fairly easily. The FRBRized display in Aspen did allow one participant to locate the desired format without using a filter.

Task 3c & Task 12c

Success Criteria: Locates an ebook copy using the ebook facet

Enterprise Pass: 2 pass, 4 fail

Participants struggled with this task in Enterprise. The audiobook filter from the previous task may have contributed to some of these difficulties.

Aspen Pass: 4 pass, 2 fail

One of the fails from this task located the ebook copies in the record without the use of a filter. Another clicked the ebook copy option but did not adjust any other settings when nothing came up. Participants seemed to have the most success once they realized the additional filters needed to be cleared.

Comparison: In both catalogs, filters from the audiobook task seemed to make it more difficult for participants to locate ebooks.

Task 4 & Task 13

Success Criteria: Able to use the “Sort by” dropdown to sort by publication date

Enterprise Pass: 2 pass, 4 fail

Most participants used the publication date filter. One participant mentioned assuming that the items were already in chronological order with most recent first.

Aspen Pass: 1 pass, 5 fail

Majority of participants bypassed the sort by menu and attempted to use the publication date filter or the last added filter. This produced recent releases, but nothing in chronological order

Comparison: In both catalogs, the majority of participants used the publication date filters and did not even attempt the sort by menu.

Task 5 & Task 14

Success Criteria: Able to place a hold on a title.

Enterprise Pass: 6 pass

All participants were able to place a hold.

Aspen Pass: 6 pass

All participants were able to place a hold and navigate to their list of holds

Comparison: In both catalogs, participants were able to easily place a hold.

Task 5a & Task 14a

Success Criteria: Can view the current hold position to estimate a wait time

Enterprise Pass: N/A

There is no ability in Enterprise to see hold position or anticipated wait time, but all participants did navigate to their list of holds successfully.

Aspen Pass: 4 pass, 2 fail

Two did not notice the hold placement and could not determine when the hold might arrive.

Comparison: In both catalogs, participants were able to locate their list of holds. Enterprise does not provide any info on hold position and most participants were able to locate that in Aspen.

Task 6 & Task 15

Success Criteria: Able to suspend a hold

Enterprise Pass: 6 pass

All participants were able to suspend the hold. A couple did not initially check the box next to the title before clicking suspend but corrected after seeing the error message.

Aspen Pass: 6 pass

Participants were able to easily find the freeze hold option. One participant did mention not liking the “Thaw” language for setting the end date.

Comparison: Participants were able to complete this task easily in both catalogs.

Task 7 & Task 16

Success Criteria: Able to cancel a hold

Enterprise Pass: 6 pass

All participants were able to successfully cancel their hold. As with suspending, a couple did not initially check the box next to the title before canceling but corrected after seeing the error message.

Aspen Pass: 6 pass

All participants were able to successfully cancel the hold.

Comparison: In both catalogs, participants were able to easily cancel a hold.

Task 8 & Task 17

Success Criteria: Able to turn on checkout history/reading history

Enterprise Pass: 2 pass, 4 fail

Only two participants were able to locate the “Record/Show Checkout History” option under personal preferences. A number of participants went to their list of current checkouts. There may have been some confusion about what the task was asking them to do.

Aspen Pass: 5 pass, 1 fail

Most participants were able to find the reading history. The failed task checked under My Account and Checked Out Titles but did not seem to notice Reading History.

Comparison: Some difficulties may be due to the wording of the task. Participants in both tests seemed to initially think they were looking for their current checkouts.

Task 9 & Task 19

Success Criteria: Notices the autocorrection and “Searching for X instead” box

Enterprise Pass: N/A

Participants did spot the misspelling after locating a title with the correct spelling in the results. Enterprise does not include an autocorrect function or “Searching for X instead” function

Aspen Pass: 4 pass, 2 fail

Most participants noticed the misspelling and the autocorrection, but did not notice the “Search instead for” box.

Comparison: Participants were able to identify the misspelling fairly easily in both catalogs after viewing the titles that were returned. Since Aspen autocorrects, there seemed to be more confusion about the returned results until participants noticed “Souls” in the search bar.

Conclusion/Next Steps

Based on the findings outlined above, we believe SWAN should send enhancement requests to SirsiDynix to see about the possibility of adding some of the features that testers found useful within the Aspen catalog. SWAN may also want to see if Aspen can make adjustments to the SWAN test installation of Aspen that may be helpful in future testing activities. We absolutely believe that this usability test should also be conducted with patrons. If the same script was used, we may be able to discover useful information about how patrons use our catalog versus how library staff members use the catalog. If Aspen makes some changes based on the initial recommendations, this may help create a more intuitive experience for future users, and may allow us to test some of the pain points that we discovered during this first round of usability testing.

Appendix

The Testing Script:

Introduction

€ ***Facilitator will have catalog urls ready to send to tester in Zoom chat***

Hi, _____. My name is _____, and I’m going to be walking you through this session today.

Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

You probably already have a good idea of why we asked you here, but let me go over it again briefly. We're asking people to try using different library catalogs. One version will be familiar to you. The other will be new. The session should take about an hour.

The first thing I want to make clear right away is that we're testing the sites, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes. There might be times during the test that something may not work and we will need to reset, and that is just the site and not you.

As you use the site, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us. Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the site, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them to help. But if you still have any questions when we're done I'll try to answer them then. And if you need to take a break at any point, just let me know.

With your permission, we're going to record what happens on the screen and our conversation. The recording will only be used to help us figure out how to improve the site, and it won't be seen by anyone except the people working on this project. And it helps me, because I don't have to take as many notes. If you would, I'm going to ask you to verbally consent to recording your screen and our conversation.

Pre-Test Questions

Do you have any questions so far? OK. Before we look at the site, I'd like to ask you just a few quick questions.

- A. Where do you work in the library?
- B. Do you use the library's catalog at work?
 - a. What kind of materials do you look for?
 - b. What do you like about the library catalog?
- C. Do you use the library catalog when not at work?
 - a. What kind of materials do you look for?
 - b. Do you ever use the library catalog to look at information about your library account? What do you look up? Why or why not?

- c. What was the last thing you used the catalog for, if you can remember! Or, what is something that you'd like to look up in the library catalog but haven't had a chance to yet?

Testing Tasks

Now we are going to look at two different catalogs; one you will be familiar with, the other will be brand new. At this point, could you please share your screen with us? This will allow us to watch while you complete the tasks. Now, I'm going to put a link into the chat box for you to open. This is the first catalog we will look at: https://catalog.swanlibraries.net/client/en_US/ols-in

€ **Open Enterprise (https://catalog.swanlibraries.net/client/en_US/ols-in)**

1. Let's say you want to find *Pride and Prejudice* and you are interested in a large type copy. Can you try to find that?
 - a. Can you tell me when that large type copy was published?
Looking for ability to find Large Print copy and either click on "Large Print" button or click on "Show Edition" to find publication year (2003)
2. Now, let's look for a book about gardening.
 - a. How would you find a book about that topic?
3. Let's say you'd like to search for books by Nora Roberts. How would you search for those?
 - a. Can you find one on shelf at Oak Lawn?
 - b. What if you're interested in an audiobook copy?
 - c. Can you tell if there are ebook copies available?
Looking for: Use of facets, book owned by Oak Lawn
4. How would you find the newest books by this author?
Looking for: Use of the "Sort by" dropdown
5. Let's place a hold on this item (pick an item from the results)
 - a. I'm going to put the account number and PIN for you to use in the chat box
 - i. Account Number: 21186002176958
PIN: 4990
 - b. How would you check to see how long it will take to get that?
 - c. (If doesn't go to My Account)
 - i. How would you see a list of your holds?
6. If you were going on vacation, how would you make sure your hold didn't come in while you were out of town?

7. How would you cancel that hold?

Looking for: What is confusing about holds? Can they suspend and cancel holds?

8. If you wanted to start tracking your checkouts, how would you turn that feature on?

9. If you're looking for the book named in the chat, what do you find?

- a. Facilitator types in *Souless* in the chat
- b. Do you see anything with that exact title?

Looking for: Enterprise returning the correct titles for the book Soulless by Gail Carriger. Looking to see if patrons notice the misspelling and how that corrects in the search results, especially the difference between misspellings in Enterprise and Aspen.

Okay, now we're going to test a completely different catalog. We'll do some of the same tasks.

€ **Open Aspen** (<https://aspen-model.bywatersolutions.com/>)

10. What's the first thing you notice about this catalog?

11. Let's say you want to find *Pride and Prejudice* and you are interested in a large type copy. Can you try to find that?

- a. What's the first thing you notice about the results?
- b. Can you tell me when that large type copy was published?

Looking for ability to find Large Print copy and either click on "Large Print" button or click on "Show Edition" to find publication year (2003)

12. Let's say you'd like to search for books by Nora Roberts. How would you search for those?

- a. Can you find any titles on shelf?
- b. What if you're interested in an audiobook copy?
- c. Can you tell if there are ebook copies available?

Looking for: Use of facets

13. How would you find the newest books by this author?

Looking for: Use of the "Sort by" dropdown

14. Let's place a hold on this item (pick an item from the results)

- a. How would you check to see how long it will take to get that?
- b. (If doesn't go to My Account)
 - i. How would you see a list of your holds?

15. If you were going on vacation, how would you make sure your hold didn't come in while you were out of town?

16. How would you cancel that hold?

Looking for: What is confusing about holds? Can they suspend and cancel holds?

17. If you wanted to start keeping your checkout history, how would you turn that feature on?

18. Now, let's look for a book about gardening.

a. How would you find a book about that topic?

19. If you're looking for the book named in the chat, what do you find?

a. Facilitator types in *Souless* in the chat

b. Do you see anything with that exact title?

Looking for: Enterprise returning the correct titles for the book Soulless by Gail Carriger. Looking to see if patrons notice the misspelling and how that corrects in the search results, especially the difference between misspellings in Enterprise and Aspen.

Wrap Up

Thanks, that was very helpful.

€ **Prompt note taker and observer to ask any questions they have**

€ **Ask their questions, then ask any follow up questions you have**

Do you have any questions for me, now that we're done?

€ **STOP the SCREEN RECORDER**

Displays

€ **Display A (Enterprise)**

☞ https://catalog.swanlibraries.net/client/en_US/ols-in

€ **Display B (Aspen)**

☞ <https://aspen-model.bywatersolutions.com/>

Recruitment Email and Form

Email:

Hello all!

The UX group has been working with SWAN to do some user testing of library catalogs. We're looking for 4-6 staff members (from any department in the library, at any level) to participate in

the testing. It will be about an hour of work, in a virtual Zoom environment. (Anyone who volunteers will need an internet connection and a computer.)

If you are interested, fill out this form:

https://forms.office.com/Pages/ResponsePage.aspx?id=hNXTVu5q_0i4WbPR75Gtt-ozs9qmb5ROinpkZvbfuxUNE1OUzZTOVFKODBDS1ozVEpGTzhPV1RPSS4u

If we end up getting more volunteers than we need, we'll keep your names for future UX opportunities.

This testing will happen starting at the end of next week, so please fill in the form ASAP; we're closing this form on Wednesday, May 13 at noon. Please DO NOT reply to this email. Only form fillers will be considered.

Thanks all!

The UX working group

Form:

Help the UX Group and SWAN!

Are you interested in participating in remote user testing? Fill out the form below!

1. Your Name
2. What department are you in?
3. How often do you use the library catalog at work?
Options (Choose one): Daily, Weekly, A few times a month, A few times a year, I never have
4. How often do you use the library catalog for personal reasons?
Options (Choose one); Daily, Weekly, A few times a month, A few times a year, I never have
5. Do you have access to a computer with internet at your home? (must be a computer, not a tablet or phone!)
Options (Choose one): Yes. No
6. Have you ever used Zoom before?
Options (Choose one): Yes, No