



SVA Library

User Testing Report

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Executive Summary

The SVA Library announced its new redesign in October this year, showing off a sleek, attractive interface with illustrations from alumnus Donica Ida (Stein, 2015). With new navigation icons, changing graphics, and a prominent search bar, the new site is designed to connect users to important goals (search, databases, services, etc.) right off the bat.

Our team of researchers conducted a series of user tests to better evaluate the experience of searching for information on the new site, which we tested by moderating eight users as they navigated through a series of tasks. General reports were positive, especially in regard to the visual appeal of the site, though a number minor issues arose regarding the search flow:

- Search results on different pages confused participants
- Prominent visuals distract from important actions
- The volume of results in the 'Everything' search was overwhelming

To address these issues we recommend a series of changes, including: **providing more accurate information on search result labeling; formatting graphics on the homepage for different screen sizes;** and **providing deeper context for extensive search results.** By implementing these recommendations, the SVA Library will be able to further improve their searching experience, and better help users find the information they're looking for.

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Introduction

The SVA Library unveiled its newly renovated website in October 2015, showing a bright, beautiful site with a new style, layout, and search. With searching at the core of the library's services, the new system provides access to all the resources of library collections and databases in the prominent 'Everything' search on the homepage. This new search system suggests a simpler starting point for its users, allowing them to jump into their searches without worry.

With results covering any number of resource types, dynamic filters and sections display models highlighted new figure at the search result page. This poses a number of great opportunities for an engaging, in-depth search experience for library users. To test the new design to see if it was working as intended with users, our team of four researchers conducted a series of user tests.

Our usability testing was focused on the desktop search environment and the user's workflow during and surrounding searches. This report outlines the team's findings and recommendations on improving the search experience, as observed from the performance of eight target users.

Methodology

Overview

User testing was conducted in order to gain practical insights about the usability of the SVA library website from real users. “User testing” is often used as an umbrella term for usability testing, though the specific definition of a traditional user test involves real users and a controlled testing environment. In this environment, a team of usability professionals define the target user group and outline goals for the evaluations. Next, the researchers prepare the some or all of the following test materials:

- **Pre-test questionnaire:** Provides demographic information, and ensures that the participants closely represent the website's actual users.
- **Post-test questionnaire:** After all of the tasks are finished, each participant is asked to rate their impressions of the interface overall.
- **User scenario:** A quick description of the context in which users should imagine using the interface. This familiarizes the participants with the website in a narrative format.
- **Tasks:** Based on real-world usage scenario, the usability experts design a set of tasks to be completed during each user test.
- **Test recording software/equipment protocol:** A method of recording the sessions is agreed upon, and software is tested and set up for the sessions. Software can be chosen to support either remote or in-person testing. Recording software typically includes both screen capture and audio recording functions.

Once the materials are prepared for the test, participants are recruited and screened. A script is determined for consistent moderating. After pilot testing materials, the proper testing sessions can begin. Qualitative and quantitative information is gathered about each participant's overall experience, which are then aggregated into findings and recommendations from the researchers.

Procedure

In order to assess the SVA library website's new interface, our team recruited **eight participants** who fit within the target user group of the site. The core users of the SVA library website were determined to include people who have **college or postgraduate-level education in an artistic/creative field**.

During the test, each participant was given a descriptive scenario to provide a fictional, but realistic, usage environment:

Hello!

You're a current graduate animation student studying at SVA (the School of Visual Arts) in New York City. Although 2D animation is your concentration, you are also required to take courses in art history, film, and storytelling.

Please use the SVA library's website (<http://library.sva.edu>) to complete the following 4 tasks.

Here is the username and password information, in case you need it:

Username: student-test

Password: Stsva1234

Thank you for your participation!

After reading the usage scenario, the moderator guided the participant through four tasks. Users were asked to think aloud while navigating the tasks in order for moderators to better understand and record the participant's thoughts. The tasks were designed to have participants search using the main search bar of the website, since this was stated as a primary area of interest at the outset of the project.

The four tasks that guided the user tests:

- **Task 1: Maurice Noble**

You are beginning your thesis research about visual storytelling. The focus of your thesis is about the background artist Maurice Noble and his work with Looney Toons. You would like to find all books and videos available to you in the library on this subject. Write the call number of a particular book or video.

- **Task 2: Tsukioka Yoshitoshi**

You are also currently enrolled in an art seminar course. The course instructor tells you about all the wonderful resources available online through the SVA Library. For an assignment, you are asked to write a paper about Tsukioka Yoshitoshi. You are not that familiar with Japanese Art, but the course instructor has told you that the biographies in Oxford Art Online are a good starting point.

- **Task 3: Film Library Hours**

In the summer, you decide to catch up on credits and sign up for a film class. You work full-time during the week and only have time to study on the weekends. Will you be able to use the Film Library during your free time?

- **Task 4: Wacom Tablets**

Your friend mentioned that he used to check out equipment from his college's library, so you decide to see what options are available at the SVA library. Look to see if you can check out a Wacom tablet. Does it cost any money?

Analysis

Four user tests were conducted remotely using useresting.com software, and four tests were completed in-person. All participants were asked to complete a pre-and post-test questionnaire; four participants elected to complete these forms. The post-test questionnaire used is the industry-standard System Usability Scale (SUS), which asks the user to answer a series of questions about their experience with the interface on an 1-5 rating scale. Copies of the questionnaires and results are included in the Appendix.

The findings from the eight test sessions and questionnaires were then aggregated by the usability team into key insights about the usability of the SVA library website.

The following Findings & Recommendations section outlines a selection of problem areas discovered during the user tests, and provides actionable solutions to remedy the problems. The team prioritized the recommendations based on findings that related directly to the user's experience with the main search bar and resulting pages.

Findings & Recommendations

One of the common responses was that the SVA library website has a beautiful interface that impressed users; over 50% of respondents agreed that they “would like to use this website more frequently”, when asked in the post-test questionnaire. Regarding the search function of the site, the new design’s large search box eliminated confusion about beginning a query. A majority of the respondents indicated that “most people would learn to use this website very quickly”, and were quick to start searching due to the layout of the site.

Once searching began however, comments began to express confusion about the interface. 50% of respondents answered “Disagree” to the statement: “I found the various functions of this website were well integrated” in the post-test questionnaire. Detailed below are specific findings relating to areas of improvement on the current interface, along with recommendations for design revisions.



Finding #1: Users are confused by the changing number of sources

When looking for books or videos about artist Maurice Noble, participants simply typed “Maurice Noble” into the Everything tab in the search bar. The results provided a summative list of source types on the far left of the display window, which users were generally able to figure out.

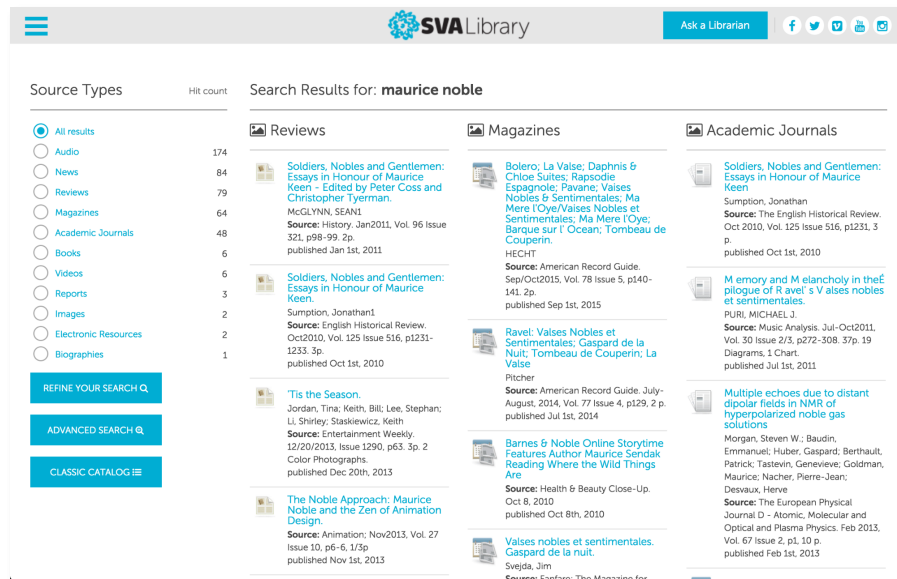


Fig. 1 Default view for search results

Confusion really occurred once a user scrolled down the page to the books section, and clicked on the “More Books” button. After clicking this button, participants are taken to a the SVA Library One Search results interface. Although the previous results page indicated that 6 books exist in the collection related to Maurice Noble, the following window shows that there are 104,916 related results.

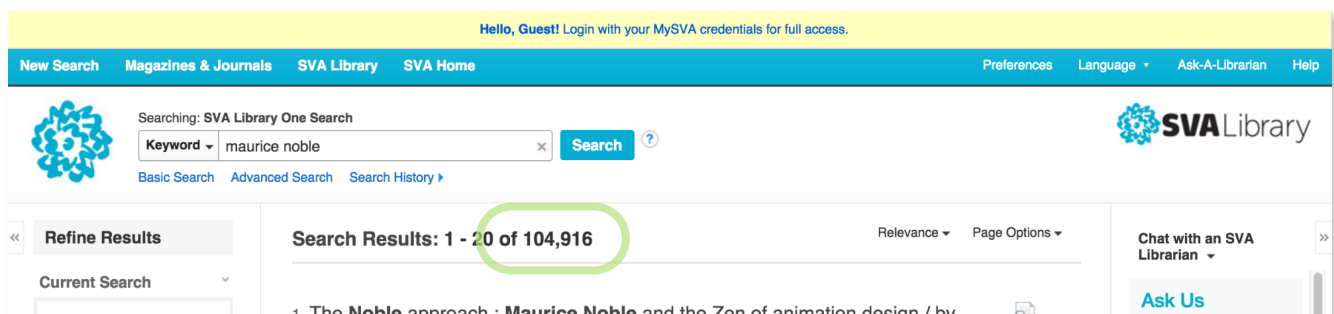


Fig. 2 Results after clicking 'More Books'

Here again, the total number of related Books is different from the initial results page, (66,186 in the Library One Search vs. 6 on the first results page).

Since the interface switches both its visuals and information, the change caused some users to become disoriented. One user, in particular, gave up the search after becoming overwhelmed with choices. He expressed frustration with having to start his search over again from the One Search screen: "I should be able to type in a search term and whatever it comes back with, maybe then I could narrow down where I want to look."

Solution #1: Revise the button and section labels

A simple change in labels might enhance the user's experience of the library website, and improve the understandability of where the source results come from. This applies the design principle of consistency and mapping - the name of the button creates a logical indication of the following result (Nielsen, 1995). By renaming the "More Books" buttons to "Books in Library One Search," or "Magazines in Library One Search," users will know that clicking the button will bring them into a different interface (Fig. 3).

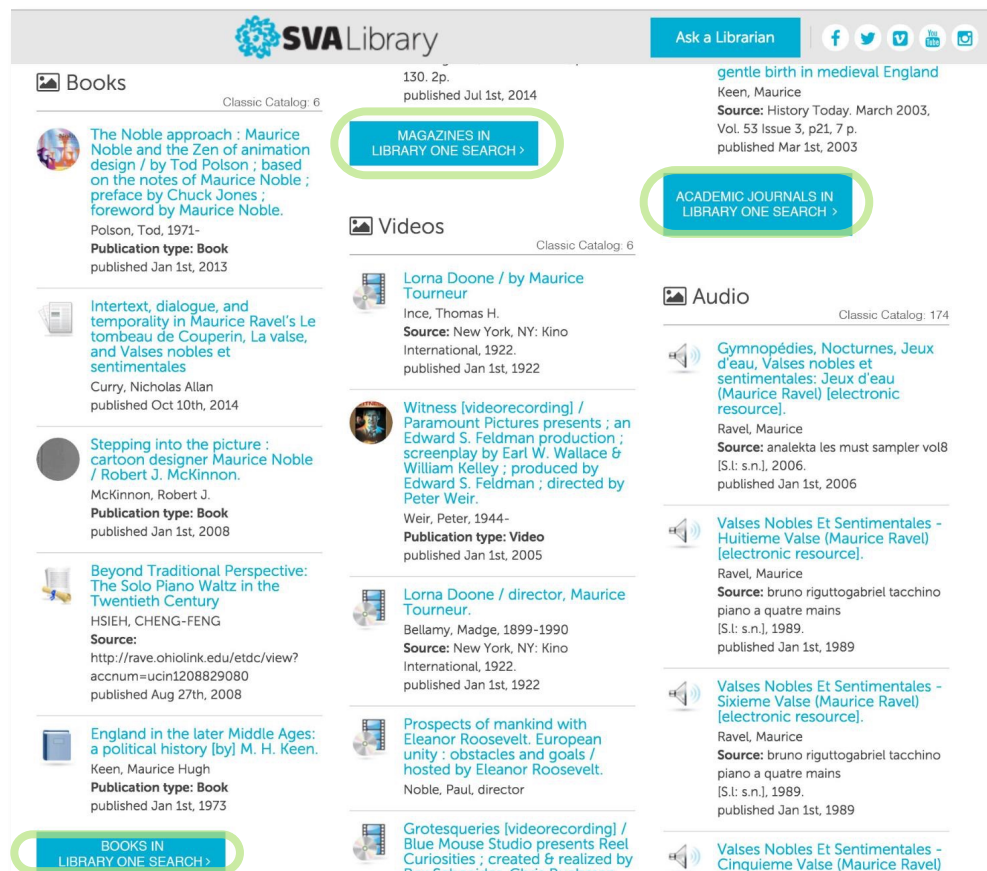


Fig. 3 Mockup of more accurate labels in search

In addition, the “Source Types” section on the initial results page could be renamed to “Classic Catalog Sources.” The “All results” label can be changed to “All source types,” further clarifying the labelling. In the center section of the page, a small line of text with the number of Classic Catalog sources is placed next to the source type titles (e.g. “Classic Catalog: 6”). These changes provide multiple cues to emphasize that the number of source types displayed on this page refer to the SVA Library Vision Catalog resources.

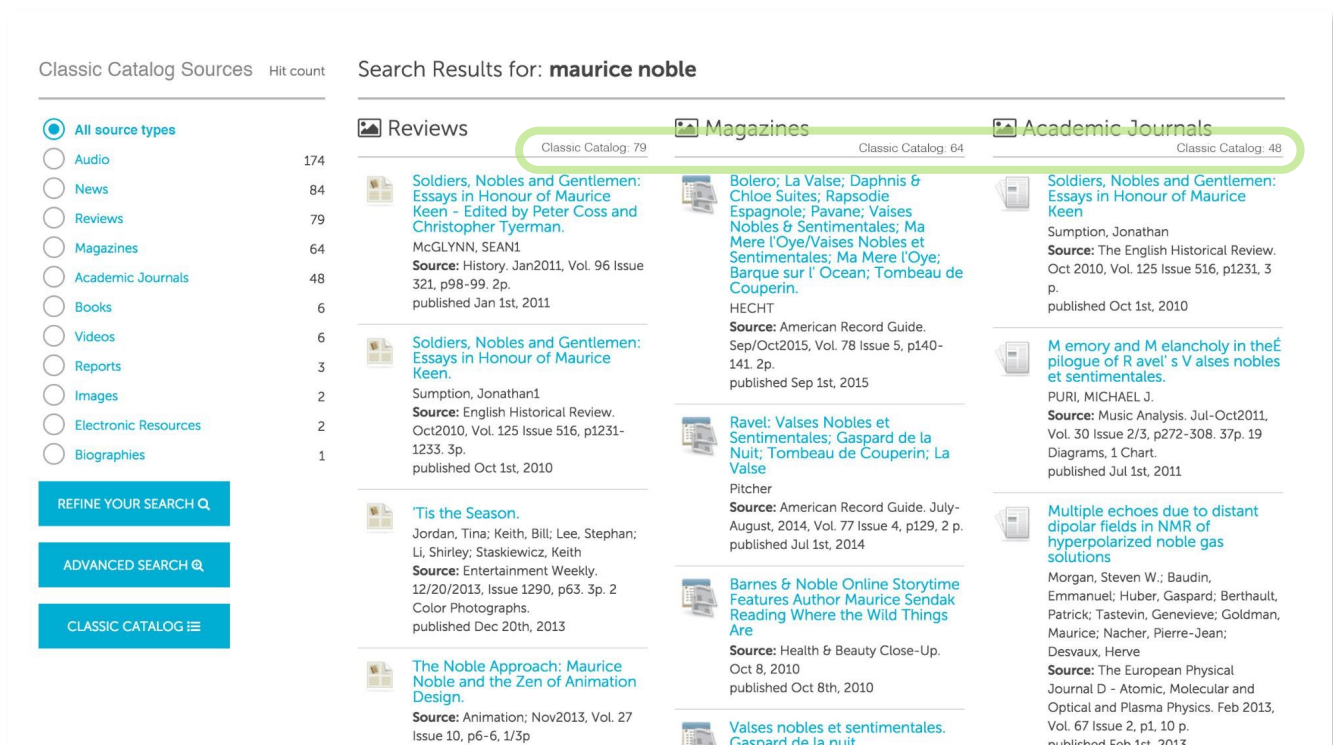


Fig. 4 Reflecting source information in the results

By programming the results of the SVA Library One Search page to automatically account for the preferences on the homepage, the transition between pages will become more seamless. For example, if a user clicks on “Books in Library One Search” from the Maurice Noble results page, the SVA Library One Search results page would automatically filter the results to filter for books. This will be crucial in reducing confusion with numerical gaps.

Finding #2: Search and navigation attract attention from common tasks

Initial reactions to the SVA Library home page were overwhelming positive, with some users describing it as “amazing”, “phenomenal”, and that it “looks very nice”. While the look and feel has been meticulously designed to be in line with the School of Visual Arts mission of educating artists, designers, and creative professionals, the visuals did seem to help guide users to their destinations.

One of the areas attracting too much attention are the row of animated images that act as secondary navigation. Through our in person and remote user testing, all but one tester accessed the site on a laptop. From this we learned that the layout of the homepage is not optimized for smaller screens found on most laptops, and the labels of the animations wound up below the fold of the browser window. The majority of our users trying to find information not related to items found in the catalog either noticed the top navigation or the animations, but usually not both. We strongly believe this is down to two alternate experiences: the animations attract too much attention on the page and users can't see the top navigation, or the user interprets them as “decorative” and not an option to find additional information.

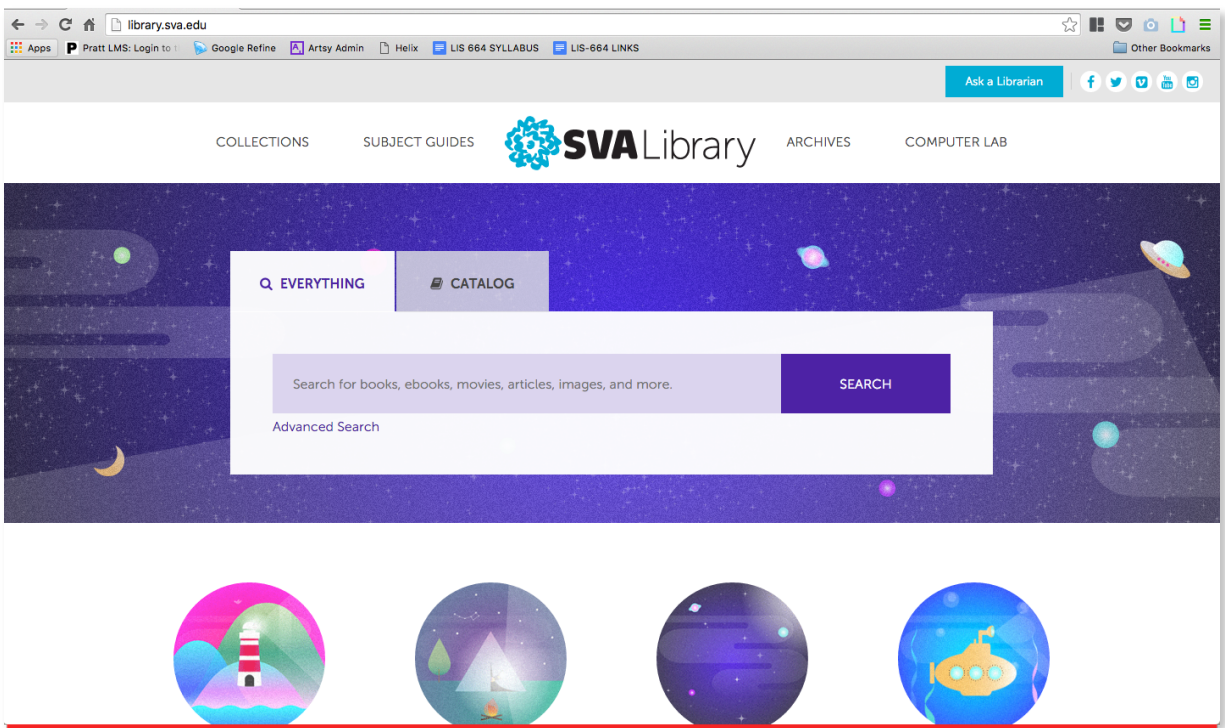


Fig. 5 Homepage on 13" MacBook Air with fold emphasized in red

The great design of the homepage is also apparent in the “Everything” search bar. Users described the search bar as a call to action similar to “a Google search”. However, the call to action appears to be so strong that it diverts attention away from other information resources on the page. Despite having helpful text in the search bar, over 70% of our users attempted to use the “Everything” search bar to unsuccessfully search for information such as library hours, databases, or borrowing privileges.

Solution #2: More prominent, clear labeling

To optimize the experience of using the beautiful homepage, we recommend ensuring the labels of the animated gifs are visible by default on laptop screen sizes. To better match the expectations of users, we also recommend changing the “Everything” search bar to one tab called “All Collections”. With this change, the limitation of the search bar to only retrieve resources will be better communicated to users and help them find relevant information elsewhere on the home page.

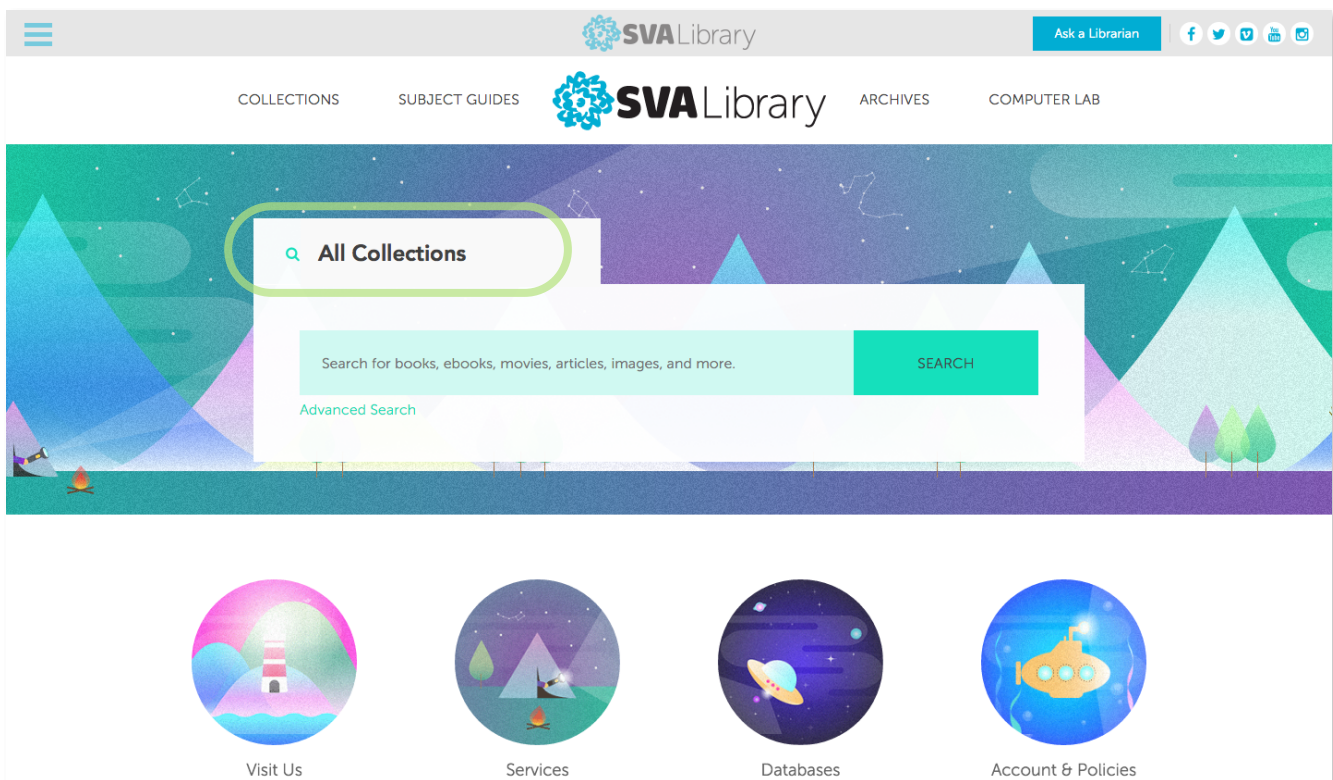


Fig. 6 Re-labeling the search bar, and making labels present on all screen sizes

Finding #3: Users expect the 'Everything' search to function like Google

Users tended to use the search box as a general search engine, while current searches do not return results outside of the collections. Several users in our tests attempted to search for information regarding visiting hours, available services, and general information about the library, but were met with confusion when their searches didn't return relevant information. Judging from their recorded responses, it wasn't clear to them why this information was not present in their searches.

Solution #3: Provide context within the search query

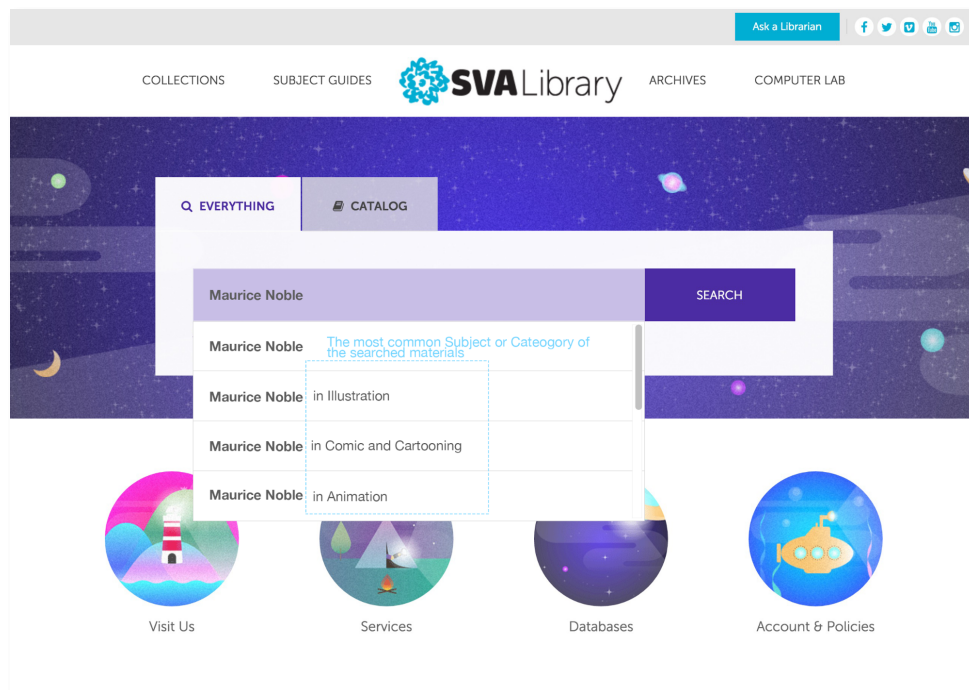


Fig. 7 Additional information in the early stages of searching

An autocomplete-style suggestion for the simple search box can provide additional context on an item's subject or category. By doing this, the scope of the search can be focused before using the result filters, mimicking the information retrieval of larger search engines. This also allows users to better frame their searches by suggesting available categories that the user may be unfamiliar with. This could also be expanded to sections outside of the catalog, which would help guide users to different sections on the site such as services, policies, and visiting information.

Conclusion

User testing found that users loved SVA Library's new design, praising its beautiful graphics, dynamic colors, and uniqueness as a library site. While the majority of users self-reported positive experiences, our research identified several areas that created issues with searches.

We recommend better streamlining the transition between search pages with more informative labels on the homepage. We also feel that minor changes to the homepage navigation can better help users find the information they're looking for. Finally, providing more in-depth context for search results will better equip users to filter information more easily.

By following our changes and recommendations, the newly designed SVA Library site will be able to improve the overall experience for its users, and provide a seamless searching experience on par with its attractive visuals.

Appendix

A. Participant Consent Form

Purpose:

The purpose of this study is to evaluate the SVA Library website. The study is part of the Usability of Digital Information graduate level class, under the supervision of Professor Craig MacDonald.

Procedure:

If you agree to be in this study, you will be asked to do the following:

1. Perform a search on SVA Library website for a single condition.
2. Perform a search on SVA Library website for a multiple condition.

The total time required to complete the study should be approximately 20 minutes. This includes a pre-test questionnaire, a series of four tasks to be completed on the SVA Library website, very short post-task questionnaires, and a post-test questionnaire. During this process, we will record the sound of your voice and a video of your mouse moving on the screen, to help us get a sense of your process in completing the tasks. As a reward for your participation in this study, you will be served a coffee after completing the tasks.

Voluntary Nature of the Study/Confidentiality:

Your participation in this study is entirely voluntary and you may decide to take a break or be finished with the study any time. You may also skip a question if you desire, all portions of this test are completely optional. Please ask the moderator any questions that may come up.

All of your responses are confidential and your answers will be anonymously published in our report. Your name will never be connected to your results or responses; instead, a number will be used for identification purposes. The data will be accessible only to those related to the project: working members, instructor and the client.

At this time you may ask any questions you may have regarding this study. If you have questions later, you may any member of the evaluation team:

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Carlos Acevedo acevedo.e.carlos@gmail.com

Cassie Hickman cassie.p.hickman@gmail.com

Statement of Consent:

I have read the above information. I have asked any questions I had regarding the experimental procedure and they have been answered to my satisfaction. I consent to participate in this study.

Name of Participant _____ Date: _____ (please print)

Signature of Participant _____

B. Moderator Checklist

To get ready for the sessions, I will:

- Distribute copies of the user scenario and session tasks, participant characteristics, and session schedule to web site team
- Rehearse with the team and adjust the script
- Set up bookmarks and links for participants to use

Before each session:

- Make sure the browser is set up properly
- Gather forms for the participant
- Set up the starting point

After each session:

- Close browser sessions
- Clear the history and cache in the browser
- Note particular issues and surprises
- Debrief with observers

C. Session Introduction Script



Thank you for agreeing to take part of our usability research. My name is _____ and this is _____. May I have your consent form, please? Thanks.

[If they haven't brought a signed one with them, give it to them now and have them review and sign]

We are two of three members of a team of usability design students. We are doing a user study of the website SVA Library website. We will spend the next 15-20 minutes using this computer in front of you to conduct our study: this includes a pre-test questionnaire, a series of four tasks to be completed on the SVA Library website, very short post-task questionnaires, and a post-test questionnaire. Your feedback will give us valuable information which will be used to assess the usability design of SVA Library website. We won't be sharing the recording outside the evaluation team, although we may review it with our professor. Are you comfortable with that?

[If not, place sticky paper over the camera.]

Please know that we're not testing you, and there is no such thing as a wrong answer. You are doing this helps us understand what works or doesn't work about the site. Do you have any questions before we begin?

[Answer any questions.]

D. Tasks Description

- **Scenario:**

You're a current graduate animation student studying at SVA (the School of Visual Arts) in New York City. Although 2D animation is your concentration, you are also required to take courses in art history, film, and storytelling.

Please use the SVA library website (<http://library.sva.edu>) to complete the following tasks.

User name and password (in case you need them):

Username: student-test

Password: Stsva1234

- **Task 1: Maurice Noble**

You are beginning your thesis research about visual storytelling. The focus of your thesis is about the background artist Maurice Noble and his work with Looney Toons. You would like to find all books and videos available to you in the library on this subject. Write the call number of a particular book or video.

- **Task 2: Tsukioka Yoshitoshi**

You are also currently enrolled in an art seminar course. The course instructor tells you about all the wonderful resources available online through the SVA Library. For an assignment, you are asked to write a paper about Tsukioka Yoshitoshi. You are not that familiar with Japanese Art, but the course instructor has told you that the biographies in Oxford Art Online are a good starting point.

- **Task 3: Film Library Hours**

In the summer, you decide to catch up on credits and sign up for a film class. You work full-time during the week and only have time to study on the weekends. Will you be able to use the Film Library during your free time?

- **Task 4: Wacom Tablets**

Your friend mentioned that he used to check out equipment from his college's library, so you decide to see what options are available at the SVA library. Look to see if you can check out a Wacom tablet. Does it cost any money?

E. Questionnaire Results

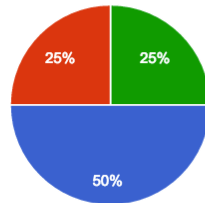
Pre-test Questionnaire

Summary

What is your major?

Industrial Design
dual art history and library science
Digital Arts
Creative field

How often do you use a university library website?



Never	2	50%
1~10 times per a week	1	25%
More than 10 times per a week	0	0%
Everyday	1	25%

Have you ever performed research in a university library?



Yes	4	100%
No	0	0%
Other	0	0%

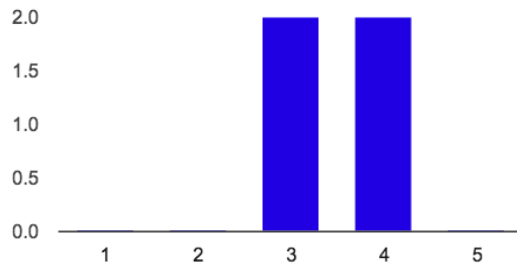
If your answer was 'Yes' at the question above, what type of research did you performed at library website?

All kinds
Finding books
art history

Post-test Questionnaire

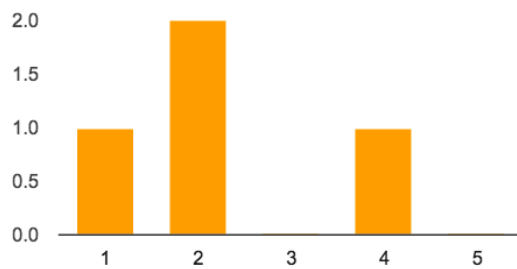
Summary

I think that I would like to use this website frequently.



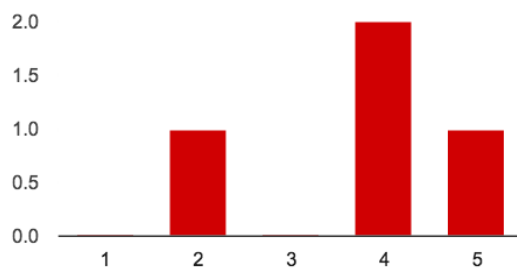
Strongly Disagree: 1	0	0%
2	0	0%
3	2	50%
4	2	50%
Strongly Agree: 5	0	0%

I found the website unnecessarily complex.



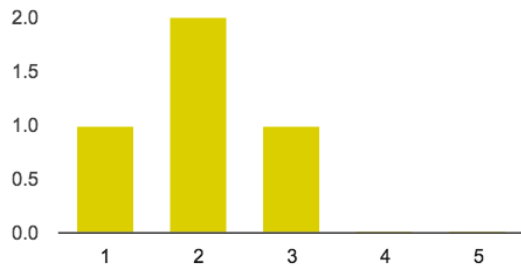
Strongly Disagree: 1	1	25%
2	2	50%
3	0	0%
4	1	25%
Strongly Agree: 5	0	0%

I thought the website was easy to use.



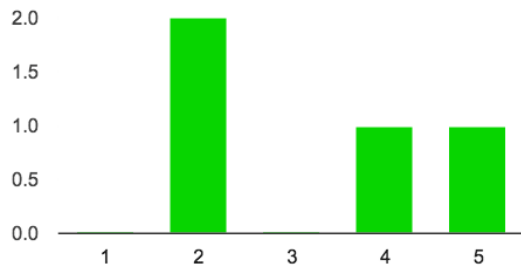
Strongly Disagree: 1	0	0%
2	1	25%
3	0	0%
4	2	50%
Strongly Agree: 5	1	25%

I think that I would need the support of a technical person to be able to use this website.



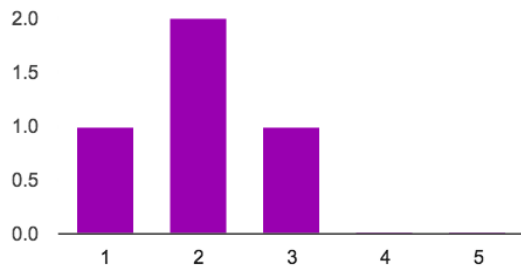
Strongly Disagree: 1	1	25%
2	2	50%
3	1	25%
4	0	0%
Strongly Agree: 5	0	0%

I found the various functions in this website were well integrated.



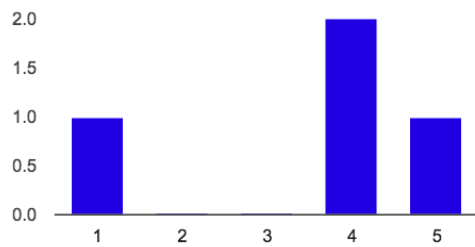
Strongly Disagree: 1	0	0%
2	2	50%
3	0	0%
4	1	25%
Strongly Agree: 5	1	25%

I thought there was too much inconsistency in this website.



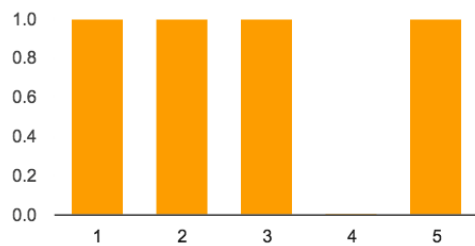
Strongly Disagree: 1	1	25%
2	2	50%
3	1	25%
4	0	0%
Strongly Agree: 5	0	0%

I would imagine that most people would learn to use this website very quickly.



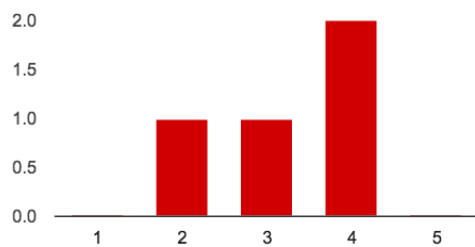
Strongly Disagree:	1	1	25%
	2	0	0%
	3	0	0%
	4	2	50%
Strongly Agree:	5	1	25%

I found the website very cumbersome to use.



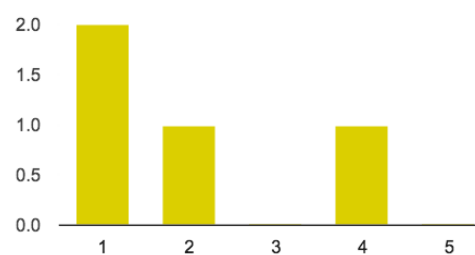
Strongly Disagree:	1	1	25%
	2	1	25%
	3	1	25%
	4	0	0%
Strongly Agree:	5	1	25%

I felt very confident using the website.



Strongly Disagree:	1	0	0%
	2	1	25%
	3	1	25%
	4	2	50%
Strongly Agree:	5	0	0%

I needed to learn a lot of things before I could get going with this website.



Strongly Disagree:	1	2	50%
	2	1	25%
	3	0	0%
	4	1	25%
Strongly Agree:	5	0	0%

References

Nielsen, J. (1995). 10 Usability Heuristics for User Interface Design. *Nielsen Norman Group*. Retrieved from <http://www.nngroup.com/articles/ten-usability-heuristics/>

Stein, P. (2015). SVA Library's New Website. *SVA Library*. Retrieved from <https://svalibrary.wordpress.com/2015/10/19/sva-librarys-new-website/>

Usability.gov (n.d.). Diary Study. <http://www.usability.gov/what-and-why/glossary/diary-study.html>