# Library Website Project

by Dawn Grow Art337R | Kyle Iman

### Table of Contents

	<b>Exploration Research</b>		<b>Usability Testing</b>
3	Introduction	37	Usability Results 01
4	Libraries	40	Wireframes
8	Competition	44	Usabilty Test 02
11	Target Audience	44	Revised Scenarios
12	Interviews	45	Site Map
		46	Prototype
	Brainstorming	50	Usabilty Test 03
25	Molstead Library	51	Usabilty Test 04
26	Brainstorming	52	Usabilty Test 05
27	Sketches	56	Results & Refine
32	Personas	60	Presentation & Conclusion
35	Scenarios	61	References

### Introduction

### Library Website Overview

Design the interface for a university library website. Focus specifically on the search function and search results.

Choose an existing university library website (avoid the David O. McKay Library at BYU-Idaho so you aren't inhibited by concern for branding). Try locating a university library that is close to where you live so that you have access to students as test subjects. Design the homepage, search results page and three to five additional pages. Develop desktop versions of these pages using responsive web principles. The final project will include a presentation of your website design and a comprehensive process book. This assignment will explore information architecture, navigation, and personas—three important concepts in interaction design.

#### Project Steps

- Make sure to follow all the project steps in order to pass the project.
- The steps may be rearranged or repeated as your individual project requires.

### Library Website Design

- Design for desktop screen size
- Focus specifically on the search and search results features of the site
- Design multiple screens to demonstrate functionality

#### Presentation

- Keep your presentation to a five minute time limit
- Highlight the goals you established for your library website
- Discuss how user tests affected your final website design
- Present your final library website

# Process book (print, pdf, website)

- Cover
- Table of Contents
- Summary Section ("five minute presentation" version)
- Comprehensive Section (include research, design exploration, usability testing, refinements, etc.)

# **Exploration: Library Research**



### History

The first libraries consisted of archives of the earliest form of writing—the clay tablets in cuneiform script discovered in temple rooms in Sumer,[2] [3] some dating back to 2600 BC. The Library of Alexandria, in Egypt, was the largest and most significant great library of the ancient world. The Library of Celsus in Ephesus, now part of Turkey was built to store 12,000 scrolls and to serve as a monumental tomb for Roman Senator Celsus Polemaeanus. In the 5th century BC, classical Greece, private or personal libraries made up of written books appeared. By the time of Augustus there were public libraries near the forums of Rome. In the West, the first public libraries were established under the Roman Empire as each succeeding emperor strove to open one or many which outshone that of his

predecessor. Unlike the Greek libraries, readers had direct access to the scrolls, which were kept on shelves built into the walls of a large room. Around 330 AD, monastic library scriptoriums flourished throughout the East and West. Byzantine, Constantius II appointed Themistius, a pagan philosopher and teacher to create a university-like school centered around the library in Constantinople which in the 5th century when it had 120,000 volumes and was the largest library in



Europe. In the Early Middle Ages, monastery libraries chained books to the shelves, reflecting that they were valuable possessions. At the start of the 18th century, libraries were becoming increasingly public and were more frequently lending libraries. Montagu House became the first true

national library was founded in 1753 as part of the British Museum, as holdings increased from 235,000 to 540,000 volumes, making it the largest library in the world at the time.



# **Exploration: Library Research**

# Top 10 Academic Library Websites 2014

- 1) North Carolina State University
- 2) Cornell University
- 3) Portland State University
- 4) Wake Forest University
- 5) Ithaca College
- 6) Brigham Young University
- 7) Champlain College
- 8) University of Minnesota
- 9) University of British Columbia
- 10) McGill University

#### To be successful website:

- Ready access to search bar
- Simple, uncluttered
- Easy to navigate
- Easy to understand

#### Types of libraries:

- Monastic library
- Imperial library
- Patriarchal libraries
- Private libraries

### Library Uses:

- Borrow printed books
- Access historical documents or archives or genealogical records
- Access specialized databases such as legal or public records
- Get research help from a librarian
- Access or borrow magazines or journals
- Access or borrow newspapers
- Borrow audiobooks
- Borrow e-books
- Quiet study time
- Free wi-fi

# **Exploration: Technology Research**

### Current Learning Technology Trends

- 1 Educational tools
- 2 -Video, audio & image tools
- 3 -Communication tools
- 4 -Networking & collaboration tools
- 5 Web, blogging & wiki tools
- 6 –Bookmarking & curation tools
- 7 –Office tools & ancillaries
- 8 -Productivity tools
- 9 –Browsers, readers & dashboards
- 10 Mobile devices & synchronization tools

#### Wordlist

- Books
- Webs
- Ebooks
- Magazines
- Search
- Dewey decimal
- Periodicals
- Newspapers
- ISBN
- Barcode
- Scanner
- Online
- Media
- Author
- Titles
- Catalog
- Subject
- Fiction
- Non-fiction
- Novel
- Reference
- Librarian
- Archives

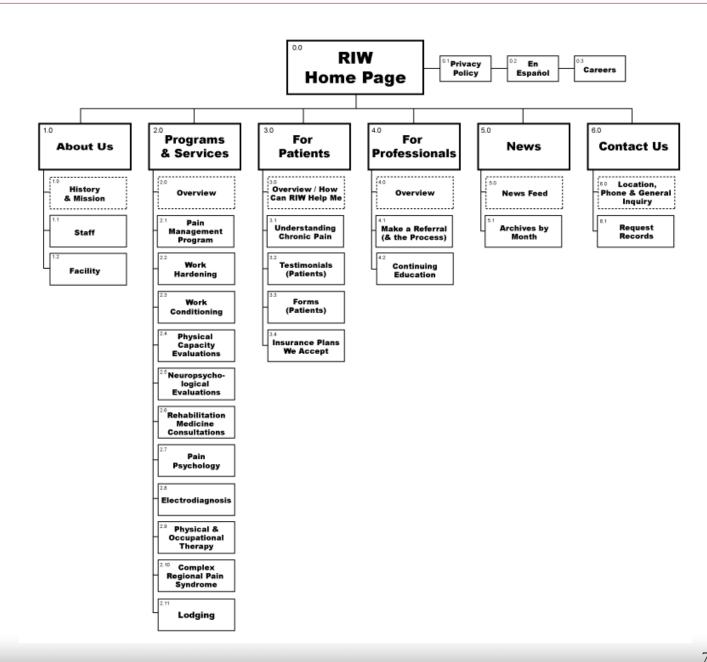
- Videos
- Shelves
- Loan
- Read
- Learning
- Alphabet
- Scholars
- Scrolls
- Museums
- Biographies
- Bibliographies
- Databases
- Quiet
- Cite
- Alumni
- Account
- Plagiarism
- Study
- Tutoring
- WorldCat
- Friends of the library
- Collections
- Internet

# **Exploration: Information Architecture**

#### Information architecture

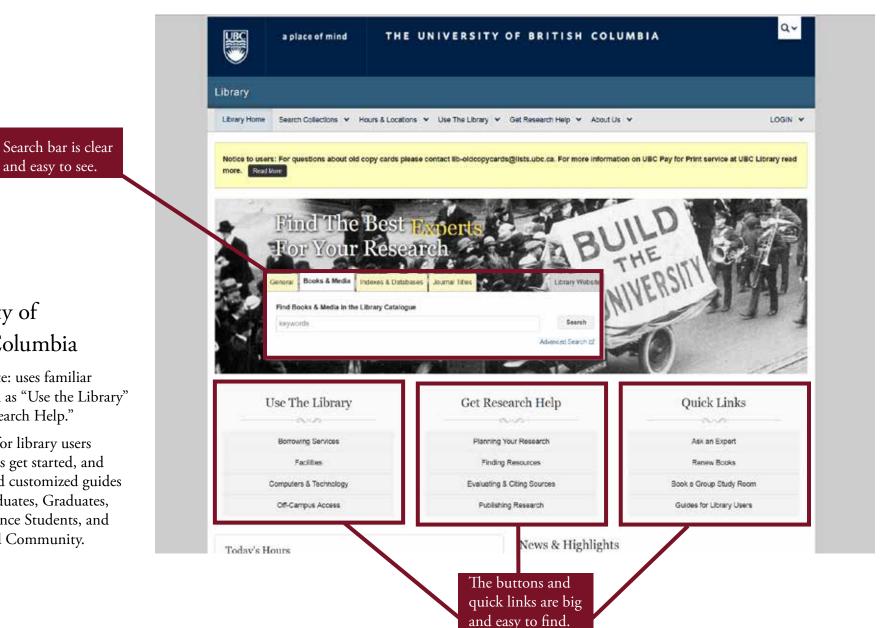
(IA) is the structural design of shared information environments; the art and science of organizing and labelling websites, intranets, online communities and software to support usability and findability; and an emerging community of practice focused on bringing principles of design and architecture to the digital landscape. Typically, it involves a model or concept of information which is used and applied to activities that require explicit details of complex information systems. These activities include library systems and database development.

Information architecture is considered to have been founded by Richard Saul Wurman



Project Library by Dawn Grow

# **Exploration: Competitive Research**



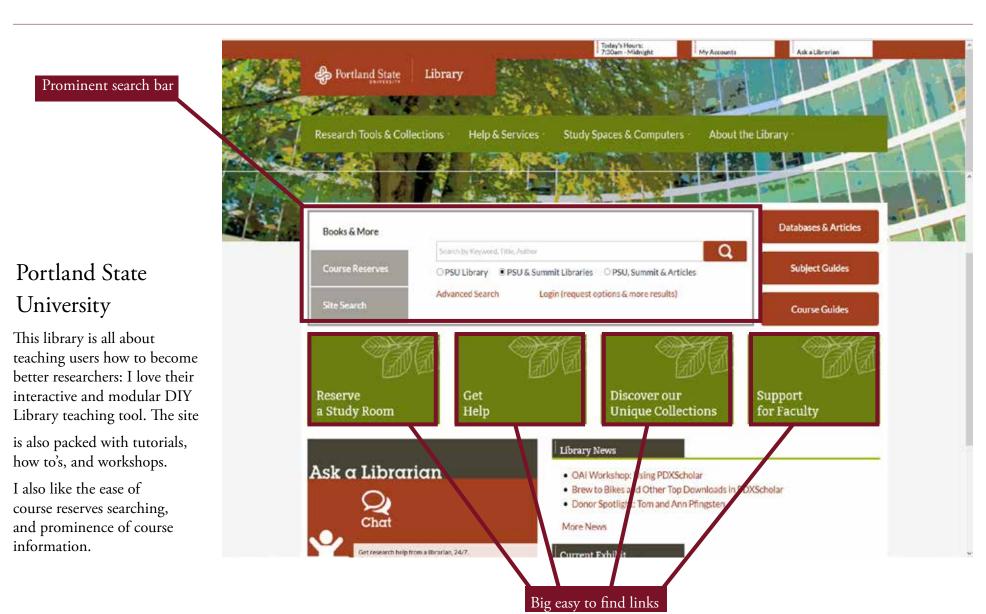
University of British Columbia

Jargon-free site: uses familiar language such as "Use the Library" and "Get Research Help."

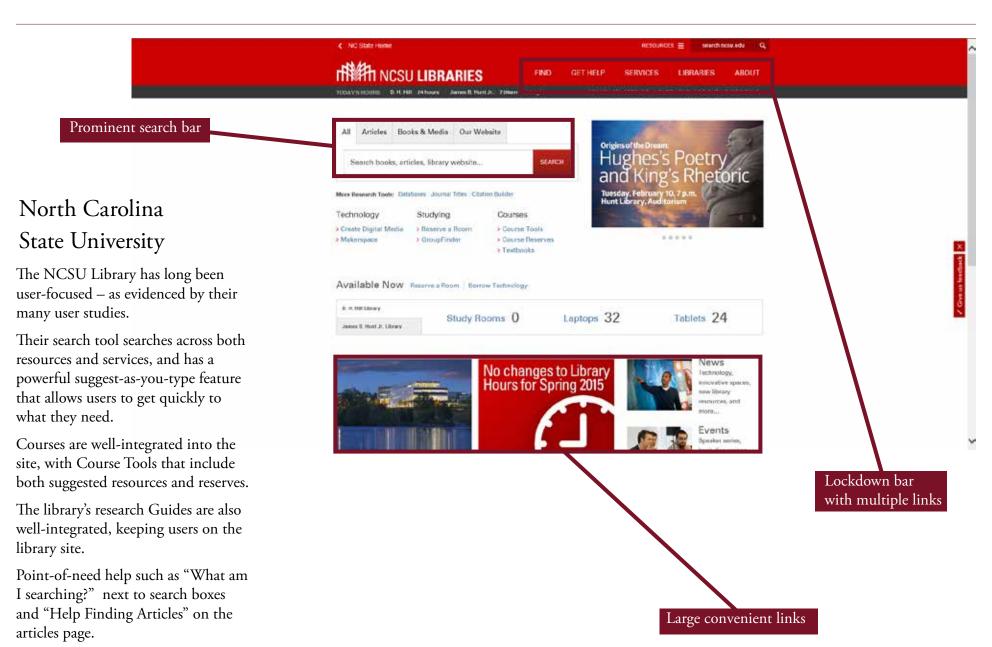
Their guides for library users help new users get started, and they've created customized guides for Undergraduates, Graduates, Faculty, Distance Students, and even Staff and Community.

Project Library by Dawn Grow

# **Exploration: Competitive Research**



## **Exploration: Competitive Research**



Project Library by Dawn Grow

# Target Audience

My target audience is students and faculty of North Idaho College. The students would be those on and off campus that would use the internet to access the library.

Due to online school, the student body can range in age.



Project Library by Dawn Grow

### Interview Questionaires

#### Questions:

What is your name?

What is your age?

What is your major?

How many times during the week so you use the library website?

What do you like about the website?

What's frustrating about the website?

What would you change about the website and/or the search function?

About what percentage of the site do you use?

#### Librarian Questions:

What do you use the website for?

What do you think students need access to? Is it easy?

What was the old interface like when you first started working here?

What is frustrating for you as a librarian?

In your opinion, why can't students find what they need?

Is there a part of the website that is exclusive to librarians?

Is there a section of the website that should be mostly for librarians?

Jacob M Name:

> Age: 24

Major: History; on-campus

How many times during

Twice a week the week so you use the library website?

What do you like about

It is really easy to find books. Easy setup. Has a filter

the website?

for that specific library.

What's frustrating about

the website?

Not really, pretty easy

What would you change about the website and/or

the search function?

Add more schools in the system to pull from.

About what percentage of the site do you use?

Mainly the search engine

Name: Matt S

Age: 22

Computer Science; on-campus

How many times during

Four times in the past semester, I go to the physical the week so you use the

library website? library

What do you like about

the website? Free

What's frustrating about It is difficult to use, I would rather google research

the website? topics or physical library

What would you change about the website and/or

the search function?

It opened about 4 different tabs on him randomly.

About what percentage of the site do you use?

Name: Sierra S

Age: 18

Major: Pre-Vet Medicine; on-campus

How many times during

the week so you use the library website? This semester, none; last semester, every week

What do you like about

the website? No comments

What's frustrating about

the website? No comments

What would you change about the website and/or

about the website and/or No comments the search function?

About what percentage of

t what percentage of the site do you use? Only used it for academic journals

Roxie B Name:

> Age: 36

Early Childhood Development; online

How many times during

the week so you use the One time

library website?

What do you like about

the website? Not cluttered

What's frustrating about

the website? It doesn't show enough search items per page

What would you change about the website and/or

I have to go to the next page the search function?

About what percentage of Not much the site do you use?

Isaac P Name:

> Age: 20

Major: Diesel Technology; on-campus

How many times during

the week so you use the Once

library website?

What do you like about

the website?

It was straight forward and organized

What's frustrating about

the website?

Too many tabs and sections

What would you change about the website and/or

the search function?

Update the graphics and streamline the search engine

About what percentage of the site do you use?

Name: Barry B

Age: 39

Major: Pre-Nursing; online

How many times during the week so you use the

library website?

I have never used the website and didn't even know they had one. I usually google anything I am searching for or the teacher

provided videos and information that we use.

What do you like about

the website?

No comment

What's frustrating about

the website?

No comment

What would you change

about the website and/or the search function?

No comment

About what percentage of 0 the site do you use?

Name: Katie W

Age: 19

Major: Elementary Education; on-campus

How many times during

the week so you use the Less than once a week, I really haven't had to use the

library website? library so far this semester.

What do you like about

the website? No comment

What's frustrating about

the website? Can't think of anything

What would you change about the website and/or

about the website and/or Can't think of anything to change

the search function?

About what percentage of

the site do you use? Only about 15%

Samantha B Name:

> Age: 17

Major: Theatre; on-campus

How many times during

the week so you use the Once maybe library website?

What do you like about

the website? It is easy to get to what you want to find

What's frustrating about Nothing so far, I have not used it too much to know

the website? for sure if some features are frustrating

What would you change about the website and/or

I would not change anything. the search function?

About what percentage of About 15%

the site do you use?

Name: MaKenzie C

Age: 19

Major: Elementary Special Education

How many times during I haven't gone to the library this semester or used the week so you use the the website because. I only used the website to

library website? connect to my blackboard account.

What do you like about

the website? It is hard to navigate through.

What's frustrating about

the website? No comment

What would you change

about the website and/or No comment

the search function?

About what percentage of the site do you use? 0

### Interviews: Librarian

First name: Jim

Title: Information Services/Distance Education Librarian

How long have you

worked for the school? 12 years

What do you use the

website for? It's my everything

What do you think students need access to?

The catalog, the databases, ask the librarian and help. Everything.

Is it easy to use?

Probably articles, research, tools are more challenging.

What was the old interface like when you first started working here?

I can't remember, that was 12 years ago. Pretty bad, it was Voyager. I made our first one, it was simple, with front page.

What is frustrating for you as a librarian?

Trying to keep from getting in trouble. We do what we can to put out fires so students can do with a minimum frustration. There is a new campus rule, no smoking yet guns are allowed. The staffing need better communication.

In your opinion, why can't students find what

they need? When they can't, it's because we don't have access to information.

Is there a part of the website that is exclusive

to librarians? Yes, but we're not using it.

Is there a section of the website that should be mostly for librarians?

Yes, future designs will have reference blogs and troubleshooting for communication.

### Interviews: Librarian

First name: Ann

Title: Technical Services Librarian

How long have you

worked for the school? 25 years

What do you use the When working reference I access the database, videos, books etc

website for? I demonstrate how to use the catalog

What do you think Everything, primarily the resource for journal article and

students need access to? databases 24 hours a day

Is it easy to use? It is somewhat easy, it needs improvement

What was the old interface like when you first started working here?

In 1990 we didn't have the ILS system, we used the card catalog. In 1992, we got ILS.

What is frustrating for you as a librarian?

On a small campus, getting the administration to understand what we do and that success is essential for learning. Librarians have skills that are necessary, the administration question our status. They want to hire people with a lesser degree than a master because they are lower pay rate. The administrators are more business men.

In your opinion, why can't students find what they need?

Students are overwhelmed with the variety of information. They are intimidated by the library and afraid to ask for help.

Is there a part of the website that is exclusive to librarians?

There is but we don't use it very often. So, no.

Is there a section of the website that should be mostly for librarians?

It would be a good option to add and use.

She admits the site needs to be changed, it is too cluttered.

# Interviews: Summary

# Typical problems that students face

Some students ...

- Found it easier to Google research topics than to search it out in the library database.
- The mapping of the site was confusing.
- There were too many options, would like it simpler.

# Existing library website features

- Search bar
- Find articles
- Library hours
- Contact information
- Library news

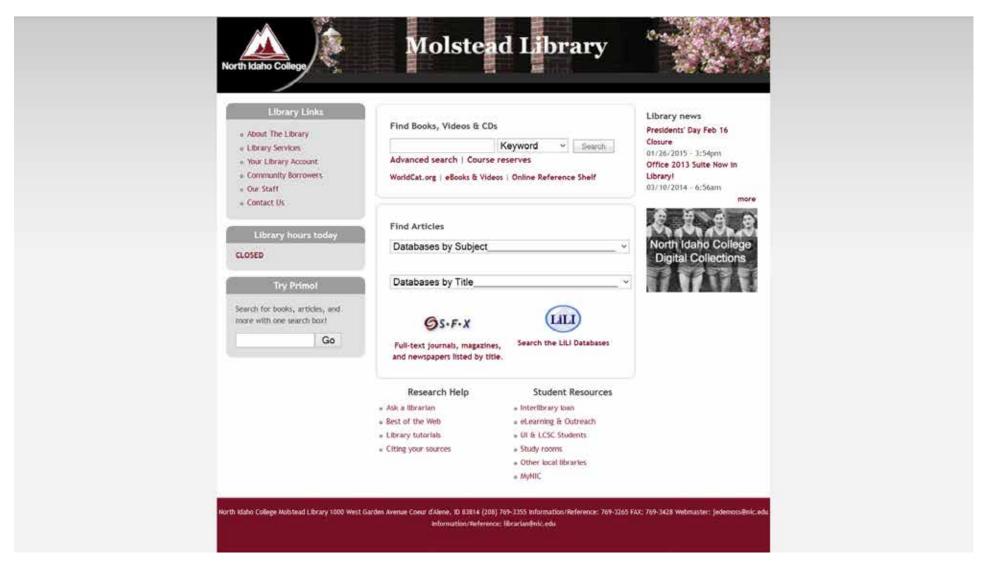
### My Findings

From my research and interviews, of all the oncampus and online students, most of them are not using the school website. The on-campus students go to the actual physical library to study, sleep or use Wi-Fi. The online students are using other sources like Google or teacher references. It seems that unless the teacher has required a use for the school website such as English or history research, the site isn't being used much by the students.

#### Solution

A solution to provide more flow to the site would be to have links to all teacher videos and visual aids. This would enable students ready access to the online resources provided for the courses they need. The links could be accessed then by a course password if necessary for each individual course. This would provide one location for all class materials and while they are there, they would be more likely to use the site for the purpose in which it was created.

# Molstead Library's current website

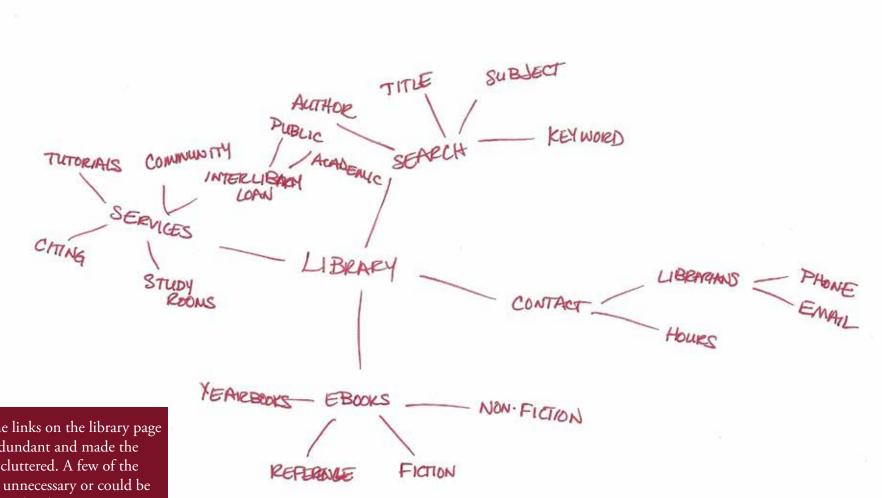


The wbsite can be viewed here: http://molstead.macminicolo.net/

Project Library by Dawn Grow

25

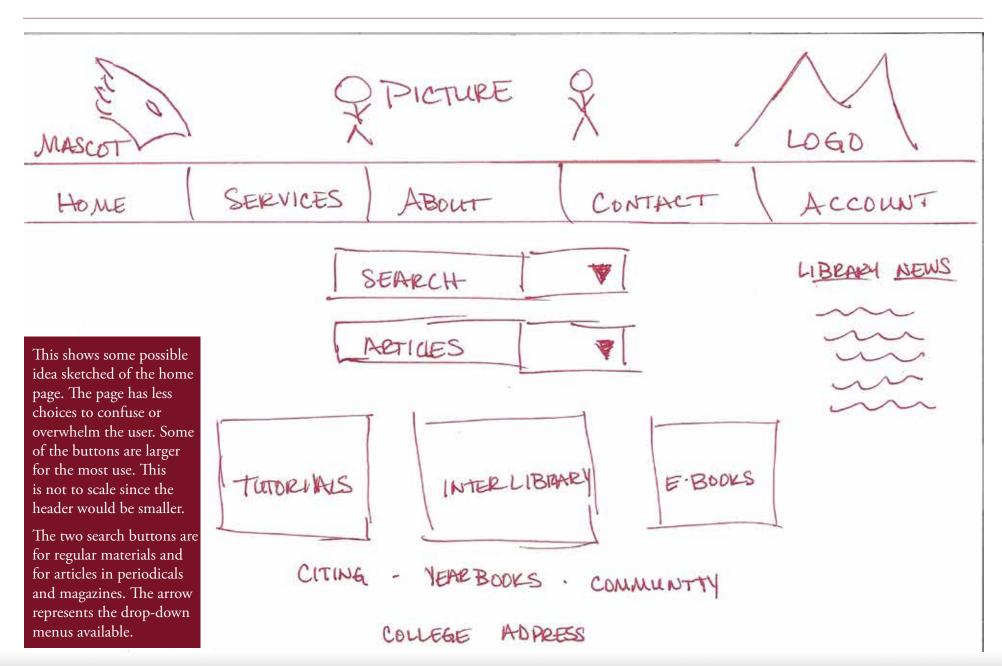
# **Brainstorming**



A lot of the links on the library page seemed redundant and made the page look cluttered. A few of the links were unnecessary or could be combined with others.

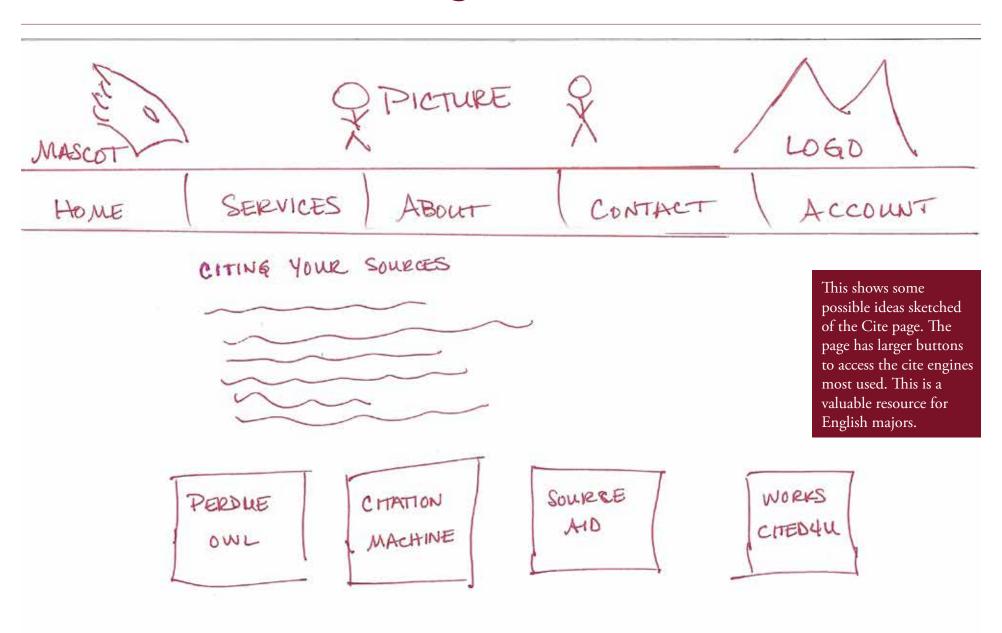
The header was also not repeated on each of the pages which meant if they wanted to go back or navigate to another page, they couldn't from that secondary page.

# Sketches: Home Page

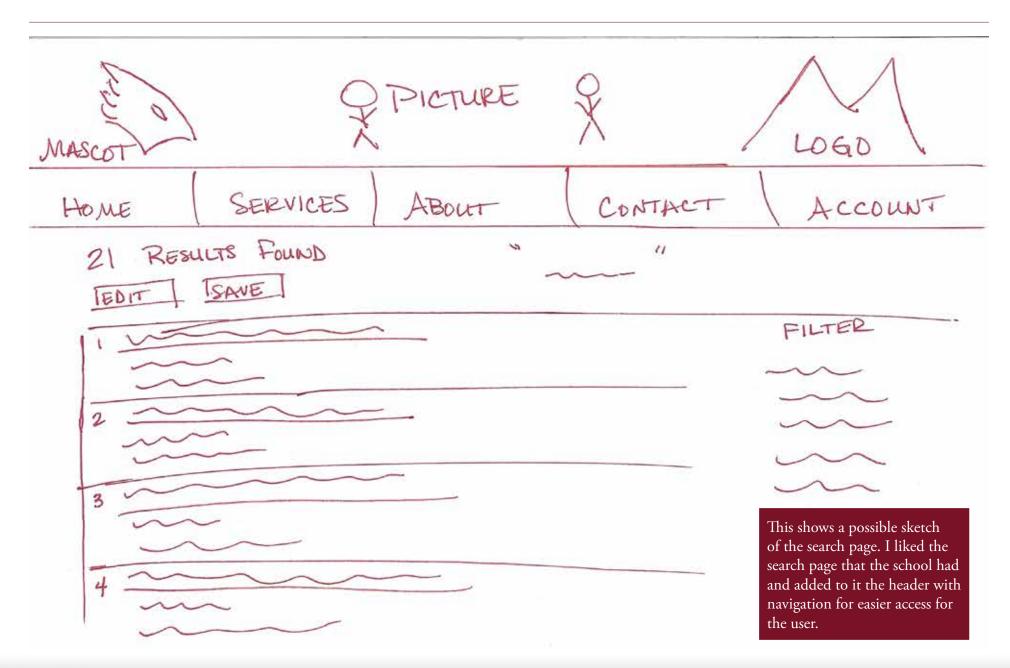


Project Library by Dawn Grow

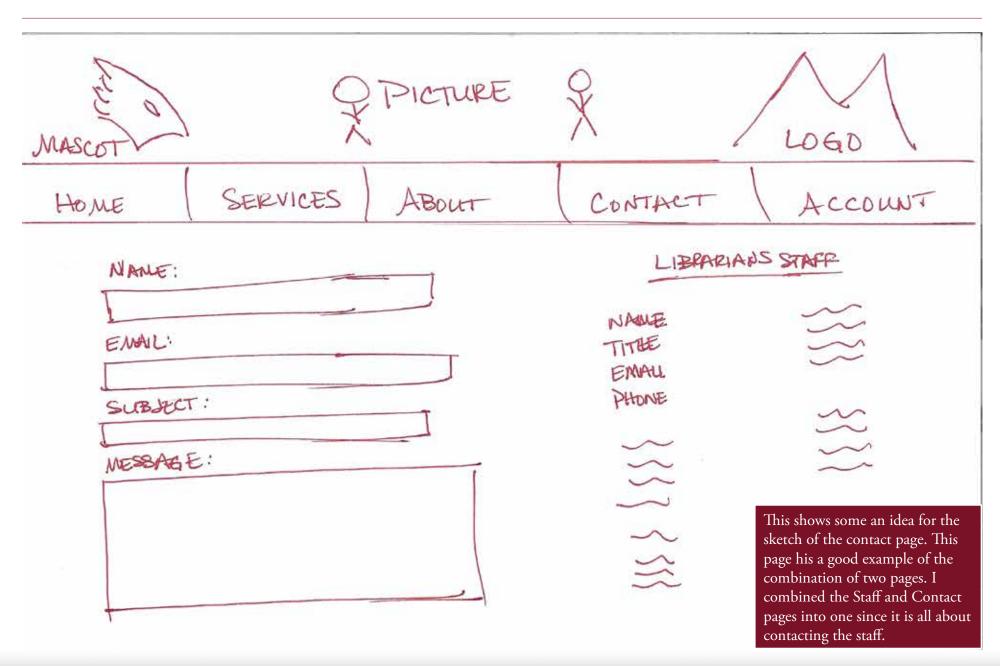
# Sketches: Cite Page



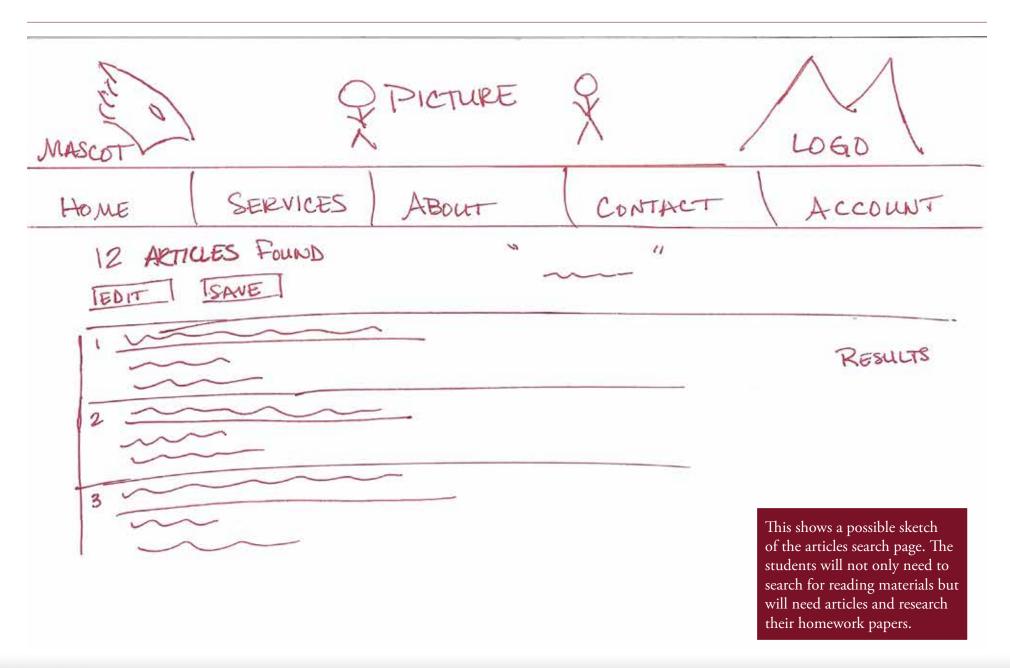
# Sketches: Search Page



# Sketches: Contact Page



# Sketches: Articles Search Page



### Persona 1

Name: MaKenzie C.

Age: 19

Lives: North Idaho

Major: Elementary Special Education

MaKenzie is a young student who just graduated high school. She has decided to attend North Idaho College to study Elementary Special Education. She has found that studying is hard work when not hanging with friends.

MaKenzie is the middle child of three and the only girl. She is involved with sports. She also enjoys communicating with her boyfriend who is in the military.



### Persona 2

Name: Mat S.

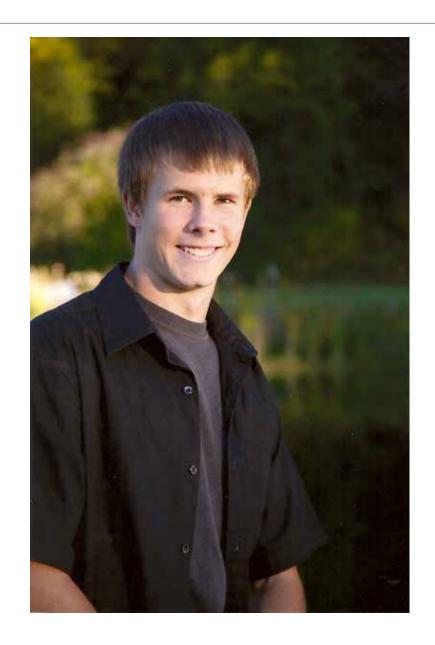
Age: 22

Lives: North Idaho

Major: Computer Science

Mat graduated high school and chose to attend North Idaho College for their Computer Science program. Mat spends his spare time either playing online computer games with friends or hanging out with his current girlfriend.

Mat is the youngest of 2 children. He is proud to termed a 'nerd'.



33

Project Library by Dawn Grow

### Persona 3

Name: Samantha B.

Age: 17

Lives: North Idaho

Major: Theatre

Samantha is an only child. She graduated high school early and chose to attend NIC. She is studying Theatre.

Samantha loves to hang with friends, work with theatre, play the guitar and smile.



Project Library by Dawn Grow

### Scenarios

#### SCENARIO 1

MaKenzie needs to finish up her English paper but cannot remember how to cite it correctly. She remembers the librarian told her once that the website had links for citing.

#### **SCENARIO 2**

Mat has a history course which requires him to access a video on the Liberty Bell. He remembers that the library has one online. He can access it with the search bar. While he is there, he can access the articles for more information with that search option.

#### SCENARIO 3

It is after hours and Samantha needs to get hold of one of the library staff before she forgets. She needs to ask them a question. She remembers that they have their emails and contact information on the library website.

#### To be successful website:

- Ready access to search bar
- Simple, uncluttered
- Easy to navigate
- Easy to understand

# **Usability Test 01**

#### SCENARIO 1

- 1. Log in to the library website
- 2. Find the "cite sources" link
- 3. Clicks on the link
- 4. When the page opens, chose one of the four citing sources.
- 5. Continue onto your choice.

#### SCENARIO 2

- 1. Type in "liberty bell"
- 2. Click on "keyword"
- 3. Click "search"
- 4. When the page comes up, filter the results based on location, NIC Library,
- 5. Filter type, All Videos

#### **SCENARIO 3**

- 1. Click on the "Contact" button.
- 2. Fill in "name"
- 3. Fill in "email"
- 4. Fill in "subject"
- 5. Type in a "message"
- 6. Click "Send email"

# Usability Results 01

### Test subject for MaKenzie

name: Chelsea

age: 22

#### Questions

Was the main page easy to understand? Yes

Does the site appear too busy? No

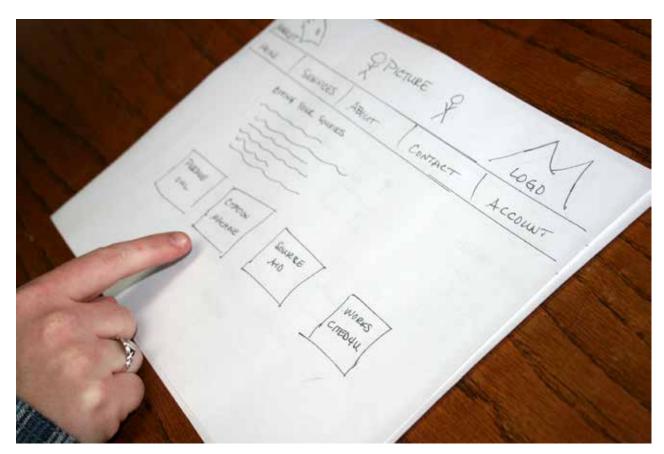
Could you find the "cite sources" link easily? Yes

Did you understand where you needed to go? Yes

Did you have any problems with the website? No

What changes would you make if you could? I

don't know



### Subject Results

The test subjects did well and understood the paper site and how to works it for the most part. She was able to find where she needed to go and didn't have any problems. She even explained which cite source she would have chosen.

#### Possible solution

There are no suggestions that she would make at this time.

# **Usability Results**

### Test subject for Mat

name: Jake

age: 24

#### Questions

Was the main page easy to understand? Yes

Does the site appear too busy? No

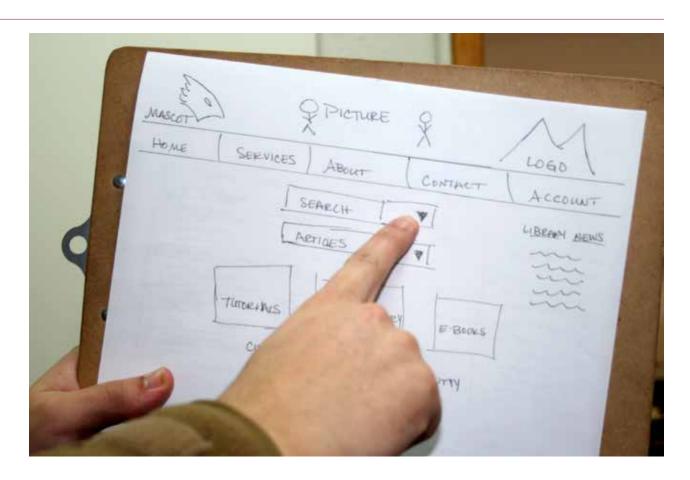
Could you find the "search" bar easily? Yes

Did you understand how to chose the keyword? Yes

Did you understand where you needed to go? Yes

Did you have any problems with the website? No

What changes would you make if you could? Nothing



### Subject Results

The test subject did well and understood the paper site and how to work it for the most part. Jake found the site easy to use and understand. He did like the addition to have the header on each of the pages.

#### Possible solution

At this time, Jake did not see any changes or adjustments to be made yet.

# **Usability Results**

### Test subject for Samantha

name: Sheridan

age: 68

### Questions

Was the main page easy to understand? Yes

Does the site appear too busy? No

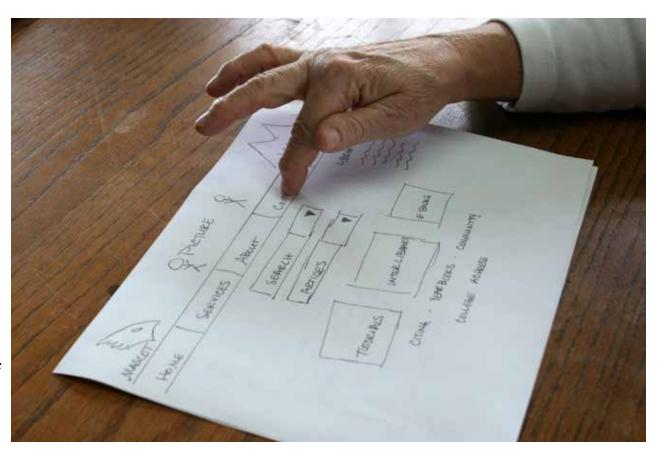
Could you find the "Contact" link easily? Yes

Did you understand where you needed to go? Yes

Did you have any problems with the website? No

What changes would you make if you could? None

The site appeared balanced and simple



### Subject Results

The test subjects did well and understood the app and how to work it for the most part. She is familiar with computers and liked how simple and balanced it was.

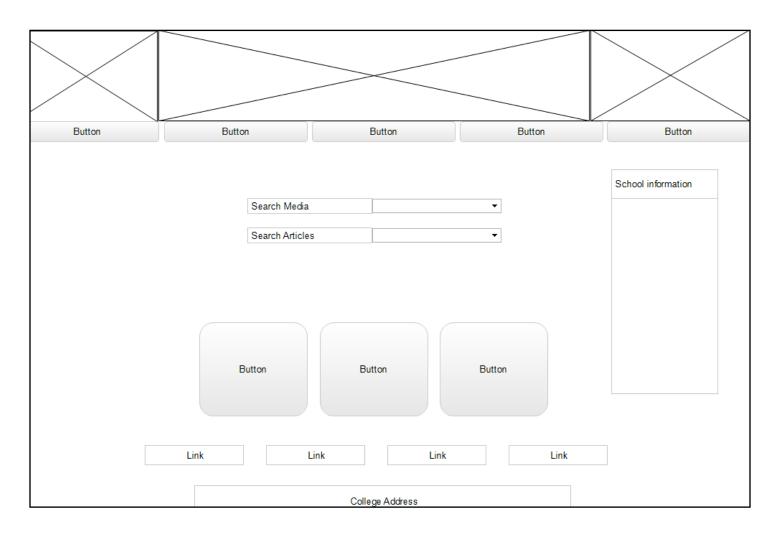
#### Possible solution

Sheridan had no suggestions for improvement at this stage of the prototypes.

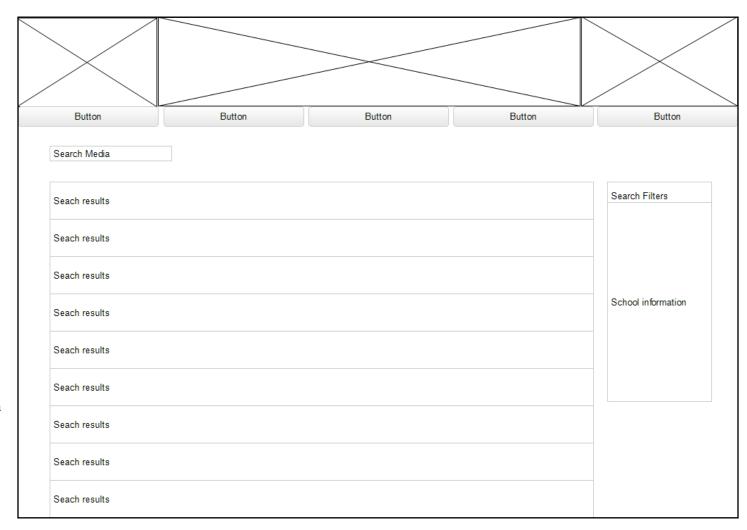
# Wireframes: home page

Shown are the main pages needed for the wireframes of the library website; home, search, contact and citing. The home page will have a main image in the center of the header with two logos, one on each side and 5 navigation buttons. The header will be continued all throughout the website.

The search will have 2 options, one for books and one for articles. It will also have library announcements, as well as links to other resources. It will finish up with the library address in the footer that will continue throughout the website.

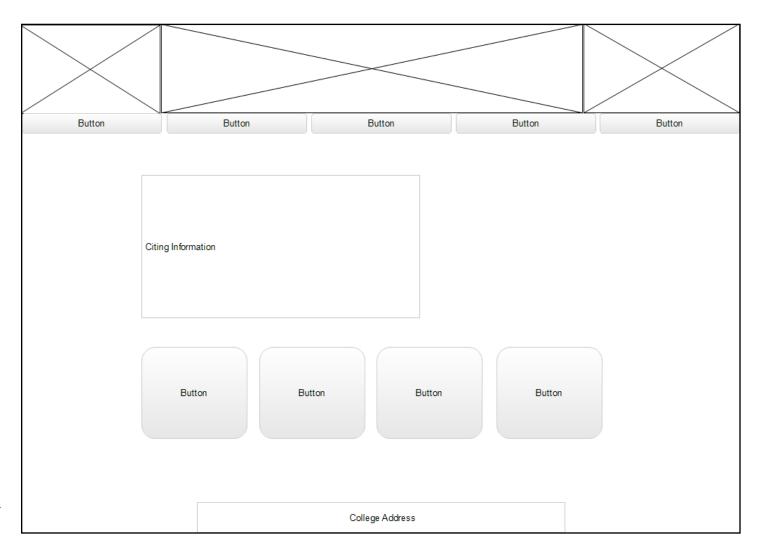


# Wireframes: search page



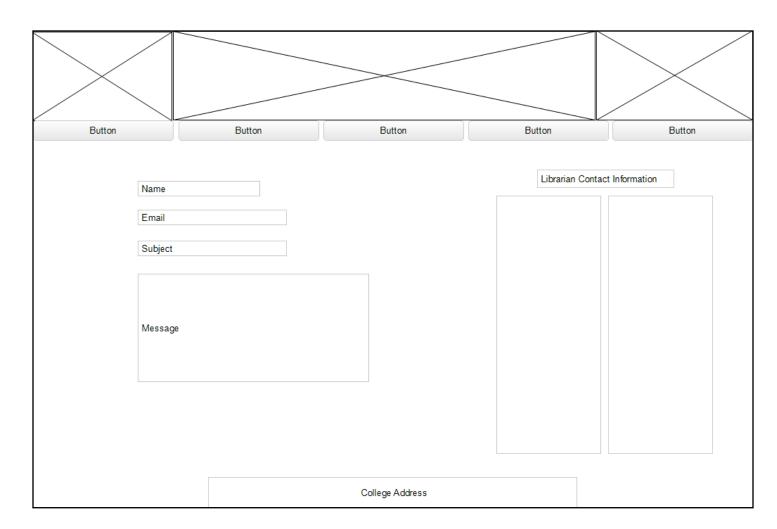
The search page will have more than one but the secondary are similar to the first so only one is shown. The search engine and appearance the school had was well built and only needed minor tweaks to improve it.

# Wireframes: cite page



The old cite page had wording with the links hidden within. The new design will have each of those links with a bigger button so it is more visible. This will enable greater visibility so they can click and reach their destination faster.

# Wireframes: contact page



The contact page and the staff page were on two separate pages on the old site. This new page will have the staff listed newt to the contact information so the user can find the staff name and information faster.

# Usability Test 02

#### SCENARIO 1

From the website, find how to cite an English paper.

### Subject 1

Name: Tamra

Age: 16

#### Results

It was not very easy for them to find the cite link, at this stage in the process it only had 'link' on the wireframe on the button. They liked the setup and couldn't find anything else wrong with it. Maybe leave a margin on each side as well as shrink down. It seems like the search needs more options than just media and articles?

#### **SCENARIO 2**

You have a paper to do on the Liberty Bell. Find a video on it.

### Subject 1

Name: Gayle

Age: 48

#### Results

When asked to search for "Liberty Bell", one tester responded that she would just raise her hand to get the librarians help. There were a few boxes on the search page that had the 'school information' instead of the 'filters' that were supposed to be there.

#### SCENARIO 3

You need to contact the librarian over Distance Education.

### Subject 1

Name: Preston

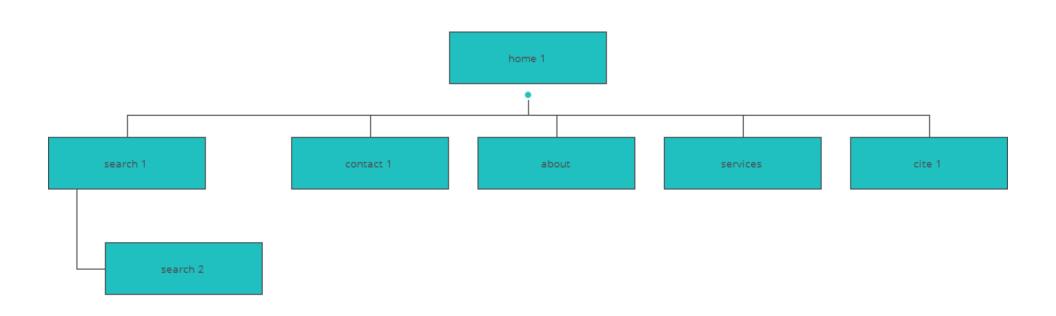
Age: 23

#### Results

The users were confused what a box with a large "X" in it was (the image box). They found the testing of the wireframes 'hard to visualize' because they were all 'empty'. It seems like there is a lot of buttons on every page.

Refine the scenarios and conduct usability test 02 using wireframes

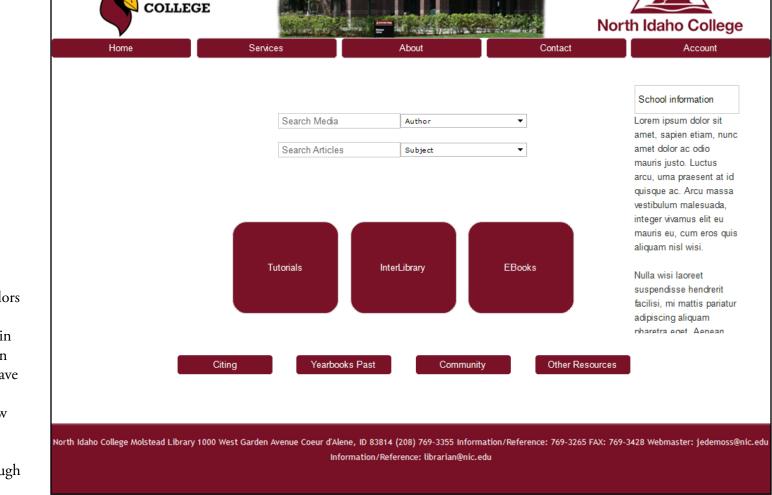
# Site Map



The site map shows how each of the pages connects and shows how the user would navigate the site. The search bar goes to two pages for my prototype, each of them connecting back to the home page.

# Prototypes 01: home

Prototypes after refined wireframes and results from conducting user tests.



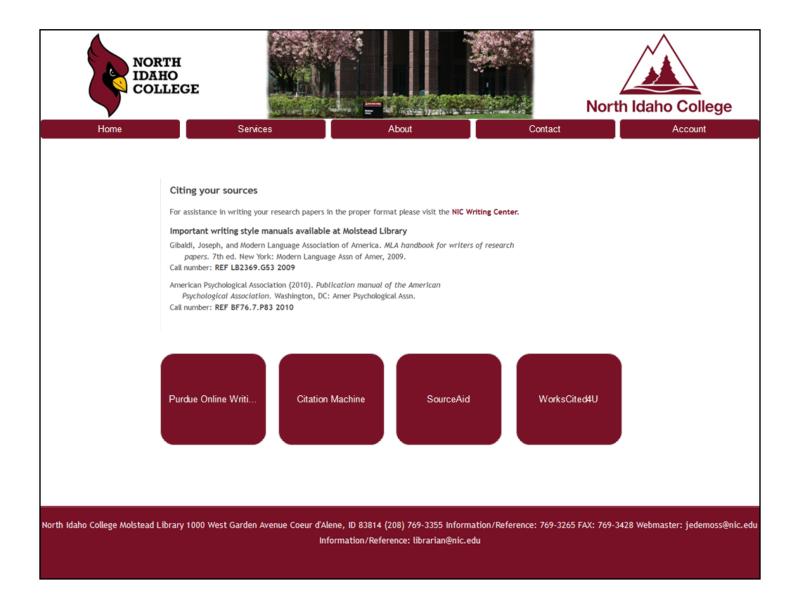
46

The maroon was the school colors so it was the feature here. The random words off to the right in the School Information column are temporary. The idea is to have the teacher's tutorials included with the library tutorial on how to navigate the website. A few students requested that their 'blackboard' be accessible through the 'account' tab.

Project Library by Dawn Grow

NORTH IDAHO

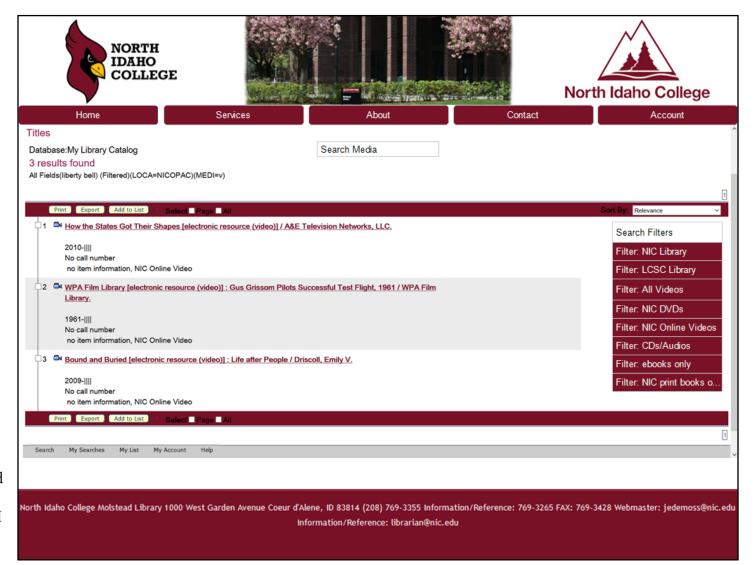
# Prototypes 01: citing



47

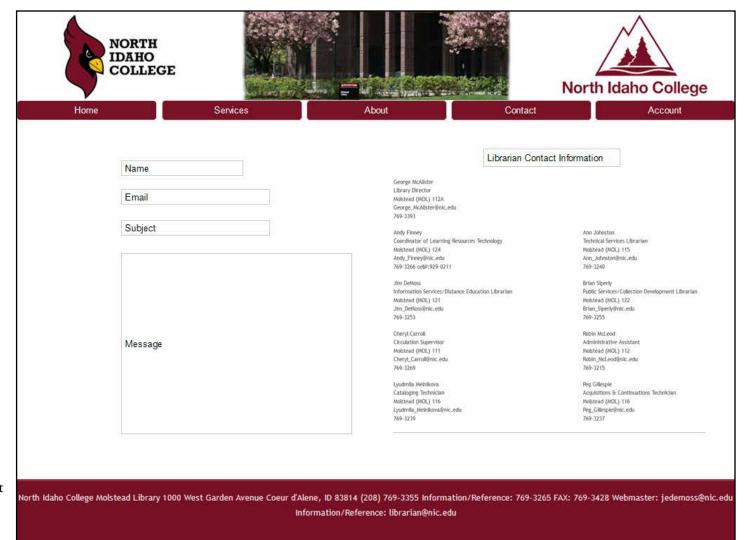
On the cite page, the goal was to make the cite links more visible. The large maroon buttons did that. Note that the header and footer remain throughout all the pages.

# Prototypes 01: search



I found the search page to very good and liked the setup they had for their search engine. The only thing I changed was the header, footer and the filter menu.

# Prototypes 01: contact



49

The contact page was a combination of the contact and staff pages. It made more sense to combine and get a better feel for who you are trying to contact. In case you forgot their name, you could look it up.

### Usability Test 03: Results

Each of my test subjects were taken though all three scenarios.

Subject 1	Su	bject	: 1
-----------	----	-------	-----

Name: Neil

Age: 48

#### Results

He thought the site was great. He liked the colors and couldn't find anything wrong with it.

### Subject 2

Name: Leela

Age: 35

#### Results

Leela was confused by the search page. She couldn't figure out how to add an item to search for it. she thought the search bar needed to be more simple.

#### Subject 3

Name: Carey

Age: 43

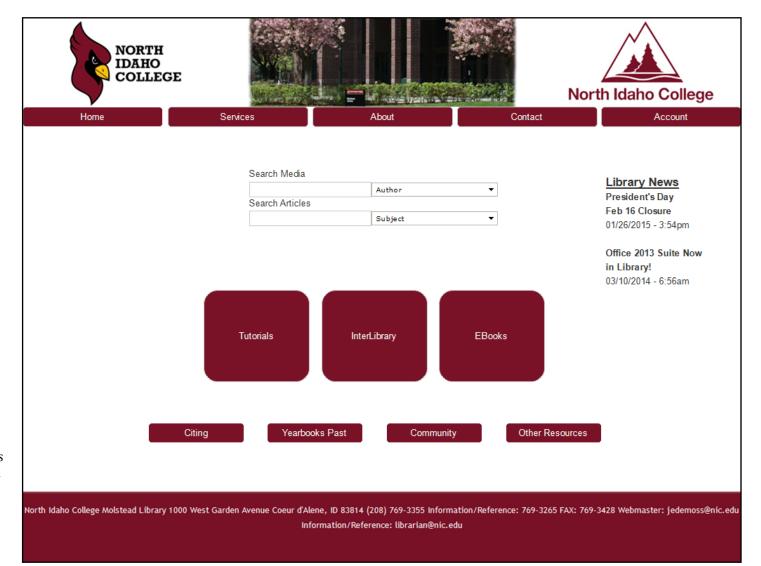
#### Results

Carey also liked the site. She was slightly confused with the random wording in the School Information box but understood later.

The prototype at this stage can be viewed here:

https://www.justinmind.com/usernote/tests/13811681/14082402/14082404/index.html

# Usability Test 04



Due to the test subject's complaints only being on the home page, I am only showing the changes made for that page. The search text was moved to the top and some school notices were added to the School Information area.

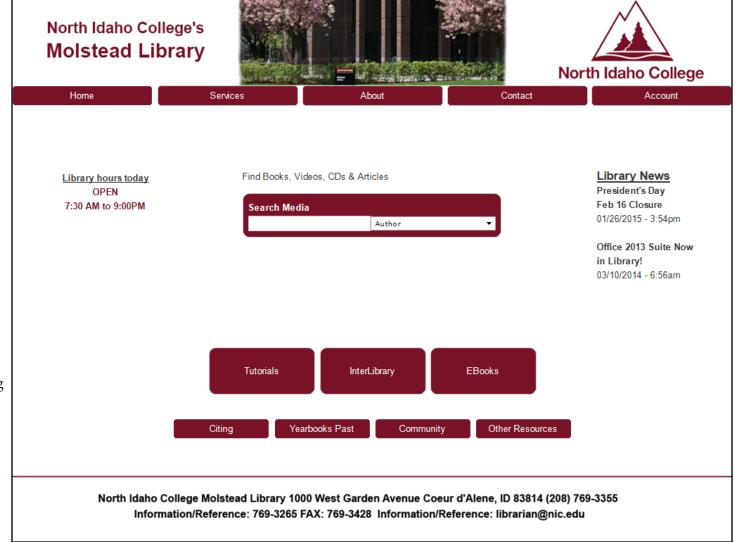
# Usability Test 05 & Results: home

The persons testing for usability group 04 were all average people. I decided to run my test 05 on people in the same field. These are the results:

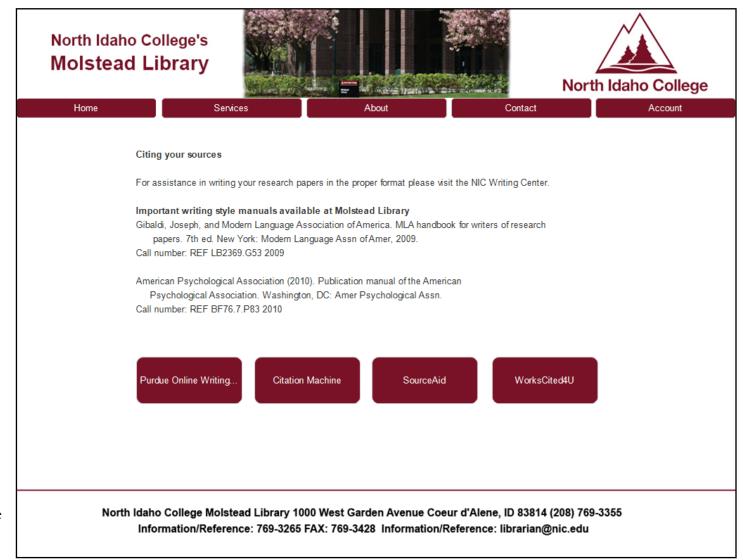
### Results & changes:

It was found that the search bar was getting lost in all the maroon. It was also decided that it was too confusing with 2 bars and to condense to one with the article option included in it. The maroon was added behind to increase the visibility.

The School Information left the page unbalanced so the library hours were added on the left.



# Usability Test 05 & Results: cite

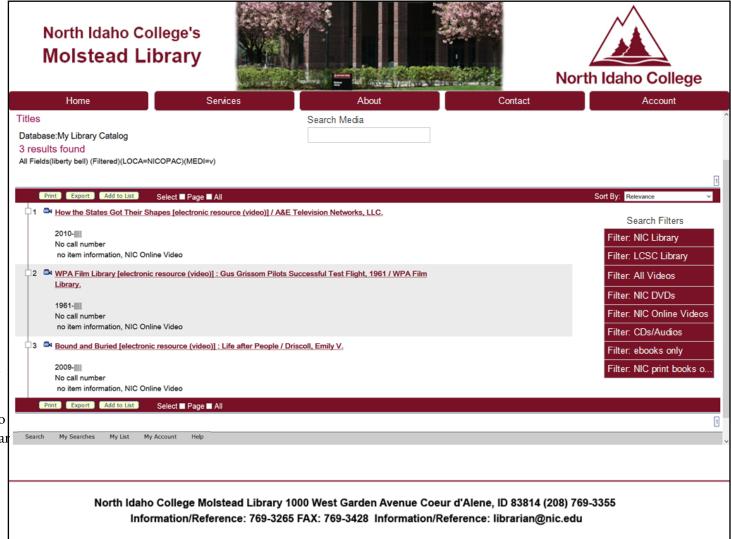


### Results & changes:

While going through this, it was noticed that I omitted the library name so it replaced the extra North Idaho College in the header.

The three large buttons on the home page and the cite buttons were reduced in size.

# Usability Test 05 & Results: search



### Results & changes:

The search bar was acceptable except for the black writing on the maroon bars. This was changed to white to be more visible.

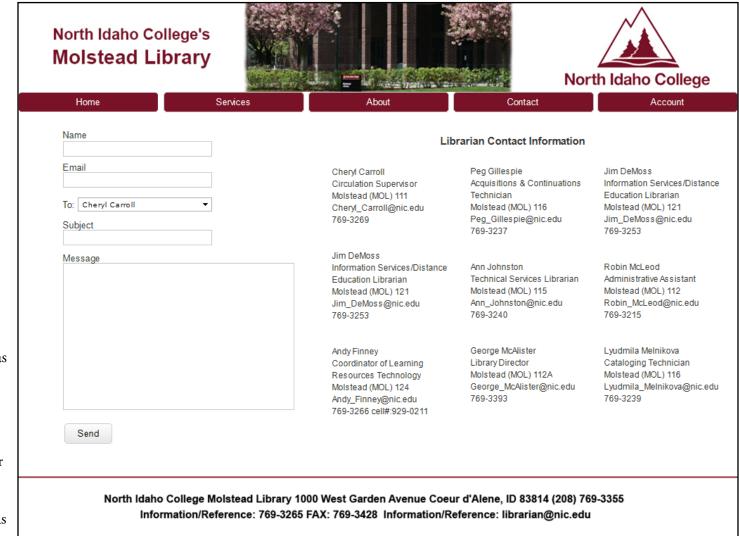
The footer was reduced on all pages to a white background with a maroon bar to reduce the sense of overpowering maroon color.

Some of the boxes were found to be input boxes instead of text boxes so they were changed.

# Usability Test 05 & Results: contact

The prototype at this stage can be viewed here:

https://www.justinmind.com/usernote/tests/13811681/14082163/14082165/index.html



### Results & changes:

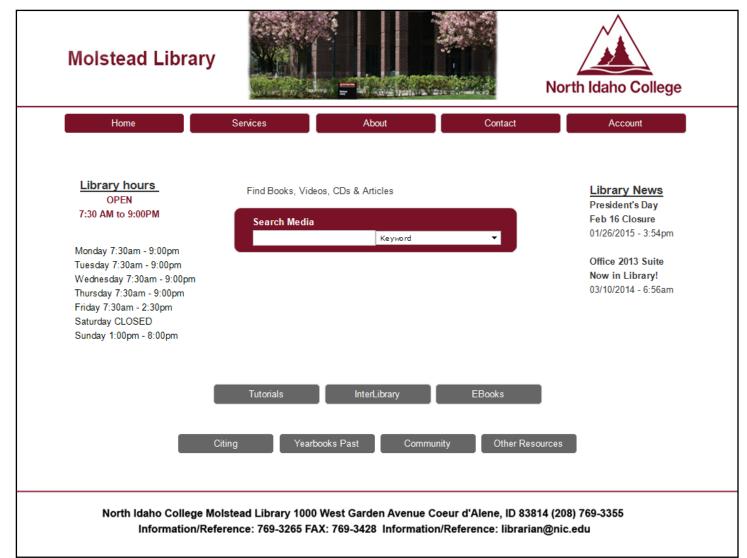
The format of the staff information was changed to three columns to fit all nine librarians better. The size was changed also.

The contact boxes were changed so they were more like an email with a drop-down with all the names of the librarians. This made it easier for the user to select the librarian they were trying to contact. The send button was also added whereas it was missing before.

### Results & Refine: Home

The prototype at this stage can be viewed here:

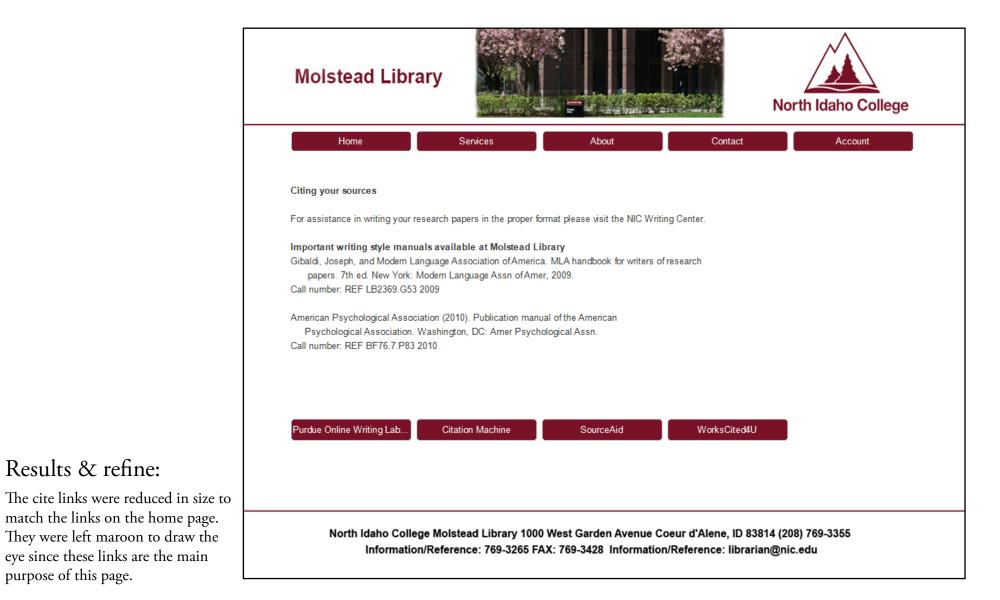
https://www.justinmind.com/usernote/tests/13811681/14098030/14098032/index.html



#### Results & refine:

It was ran again to see if more improvements could be made. The bigger links on the bottom were reduced to match the links in the navigation. They were turned gray which is a color they used in the original website.

### Results & Refine: Cite

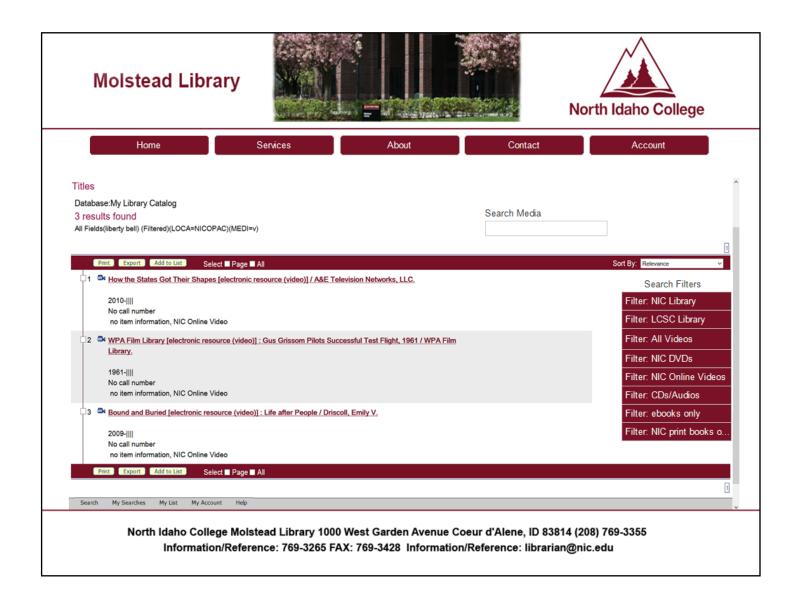


#### Project Library by Dawn Grow

Results & refine:

purpose of this page.

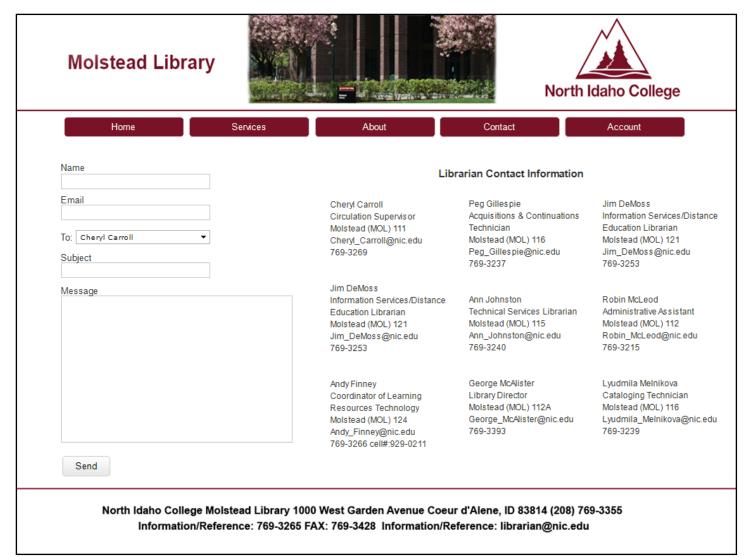
### Results & Refine: Search



#### Results & refine:

The header changes were repeated throughout the website for conformity.

### Results & Refine: Contact



#### Results & refine:

The header was still a little close to the navigation. The navigation was reduced to create a bit of a margin on the sides. The footer had the line going horizontally so I repeated the line in the navigation. The larger buttons were reduced in size again and turned gray to reduce the margon color.