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# 4 Little Tests, 1 Big Change: A Multifaceted Approach to Usability Testing

Stacy Taylor

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# 4 Little Tests, 1 Big Change:

## A Multifaceted Approach to Usability Testing

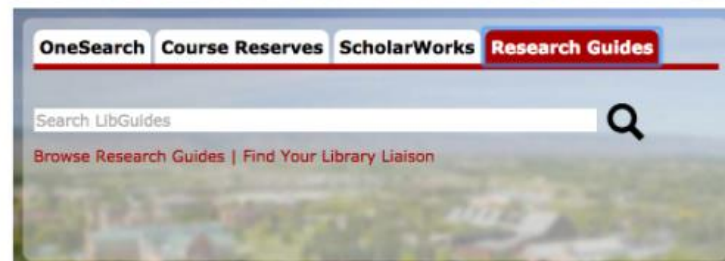
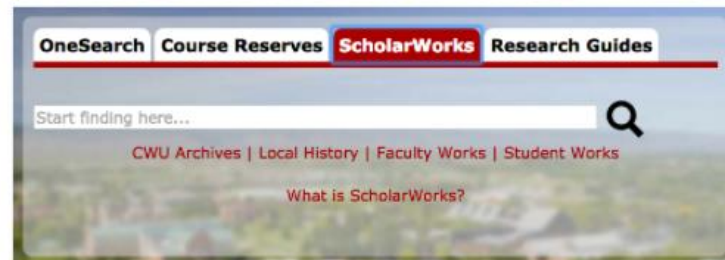
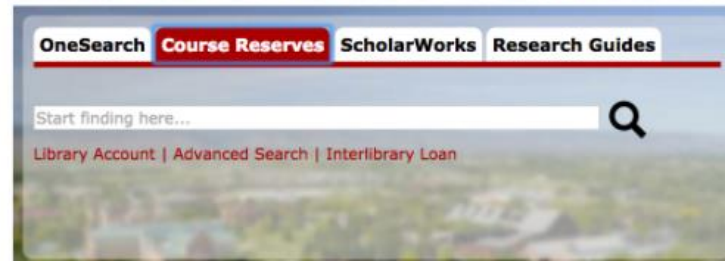
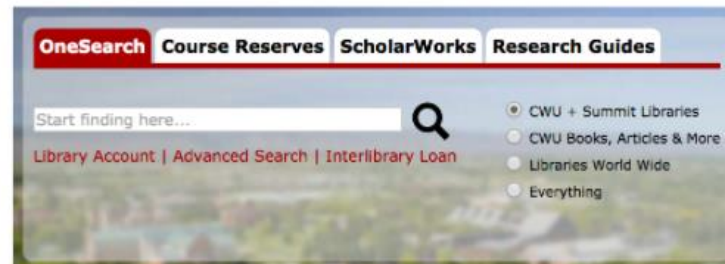
Stacy Taylor  
User Experience Librarian  
Brooks Library,  
Central Washington University




LEARN. DO. LIVE.

# THE (OLD) NEW SEARCH BOX

Implemented Fall 2015



# THE (OLD) NEW HOMEPAGE



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## What's Happening

- Reasons To Enroll In Library And Information Science Courses At The Brooks Library
- June 2016 Newsletter

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**Brooks Main**  
7:30a-9:00p  
**Research Desk**  
7:30a-8:00p  
**Archives**  
By Appointment Only  
Government Documents  
8:00a-9:00p  
Interlibrary Loans  
8:00a-5:00p  
**Music Library**  
8:00a-9:00p  
**Jimmy B's**  
9:00a-3:00p  
**Des Moines Library Resources**  
9:00a-7:00p  
**Lynnwood Library Resources**  
9:00a-7:00p  
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Coffee Shop open this summer!

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Q

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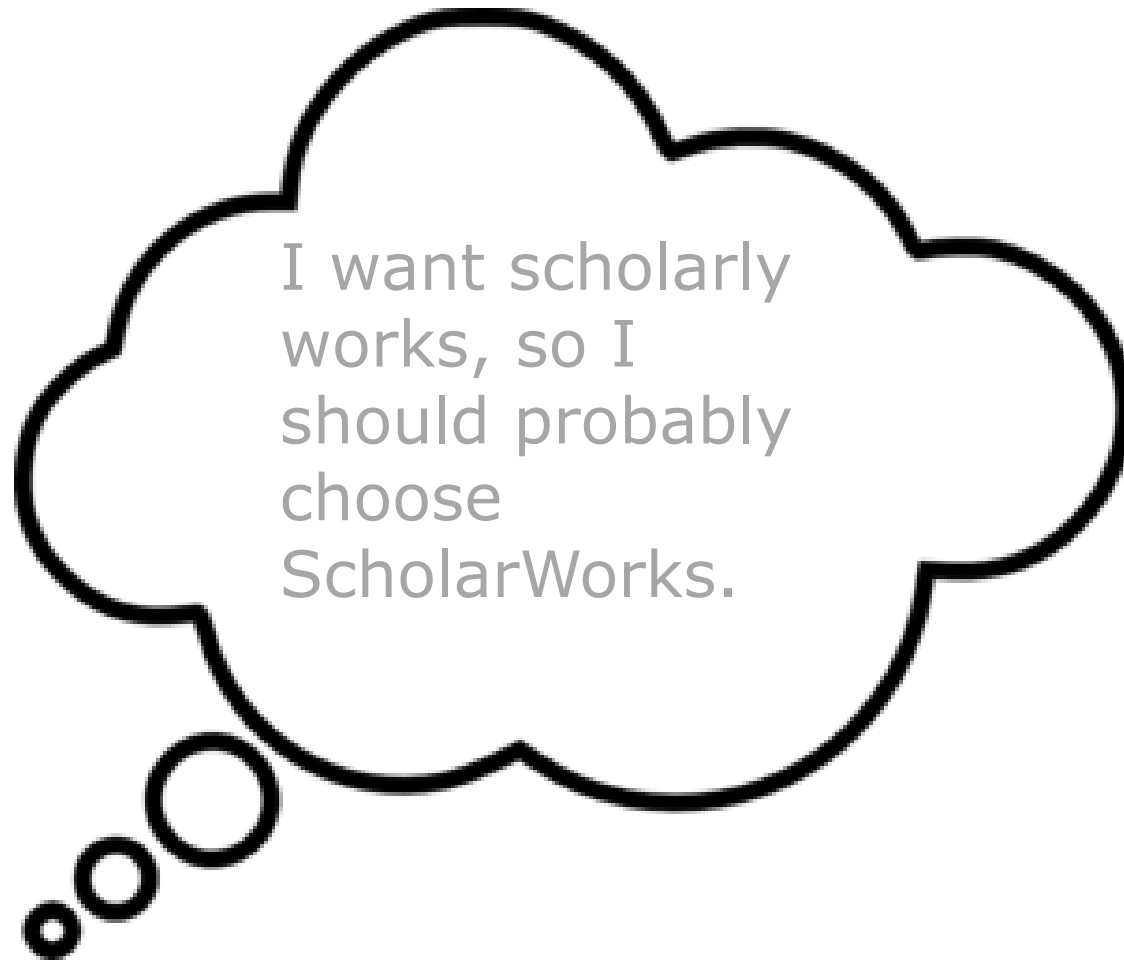
<b>Brooks Main</b> 7:30a-9:00p <b>Research Desk</b> 7:30a-8:00p <b>Archives</b> <b>By Appointment Only</b> Government Documents 8:00a-9:00p Interlibrary Loans 8:00a-5:00p Music Library 8:00a-9:00p Jimmy B's 9:00a-3:00p <b>Des Moines Library Resources</b> 9:00a-7:00p <b>Lynnwood Library Resources</b> 9:00a-7:00p
---

[Hours Calendar](#)

## What's Happening

- Reasons To Enroll In Library And Information Science Courses At The Brooks Library
- June 2016 Newsletter

# THE SCHOLARWORKS CONUNDRUM



# FALL 2015 USABILITY TESTING

Performed moderated in-person usability testing on the Brooks Library website with five students.

Focus was on overall website usability, but found some issues with the search box.

# WEBSITE USABILITY RELEVANT FINDINGS

- 50% used ScholarWorks tab to try to find scholarly sources.
- When asked, 100% said they believed ScholarWorks was for finding sources like books or articles.
- 0% used Library Account link in search box when asked how to renew a book.
- Students did not read the links or text in the search box.
- One student did not recognize the links in the search box as links due to being color blind.
- Students indicated they would click other tabs but did not know what they were for.



# LIS 110: RESEARCH FUNDAMENTALS

1 credit online course to teach university level research skills

Extra credit option:

Choose one library from each list: choice of 3 Orbis Cascade libraries, and 3 non-Orbis Cascade libraries.

Explore their website, then reflect on what you like and dislike about each. Reflect on what you like and dislike about the Brooks Library website.

# LIS 110: RELEVANT FINDINGS

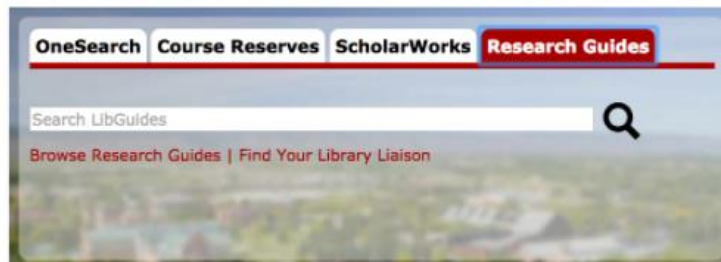
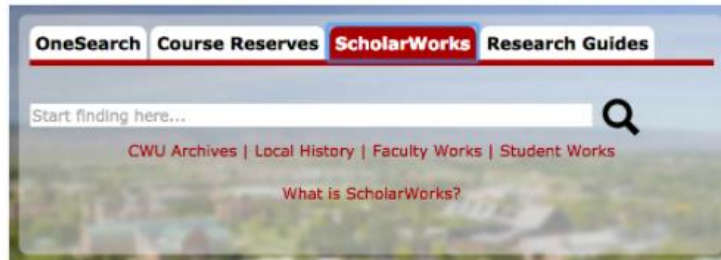
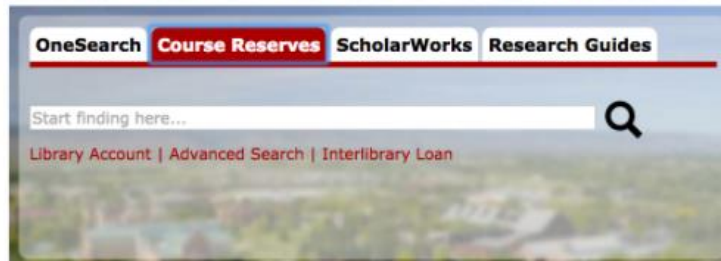
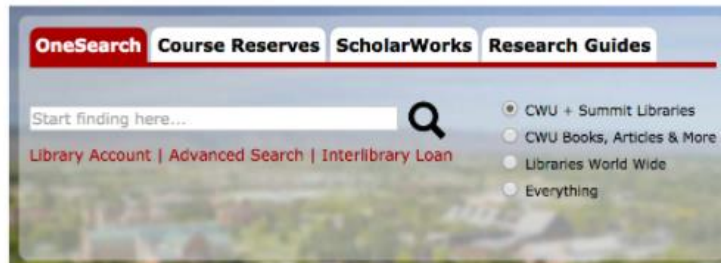
- Students like large, prominent, labeled search bars.
- Students want to browse, not search, for Research Guides.
- Some students like tabs, but most feel our search bar is too cluttered.
- For students who like tabs, they prefer tabs for formats, not collections.
- Students like having “quick links” on the homepage.
- Students like when the hours for the day are clearly displayed.

## Brooks Library:

- Search box too small.
- Search box too cluttered.
- Search box not emphasized enough.
- Couldn't find research guides.
- Difficult to find databases.

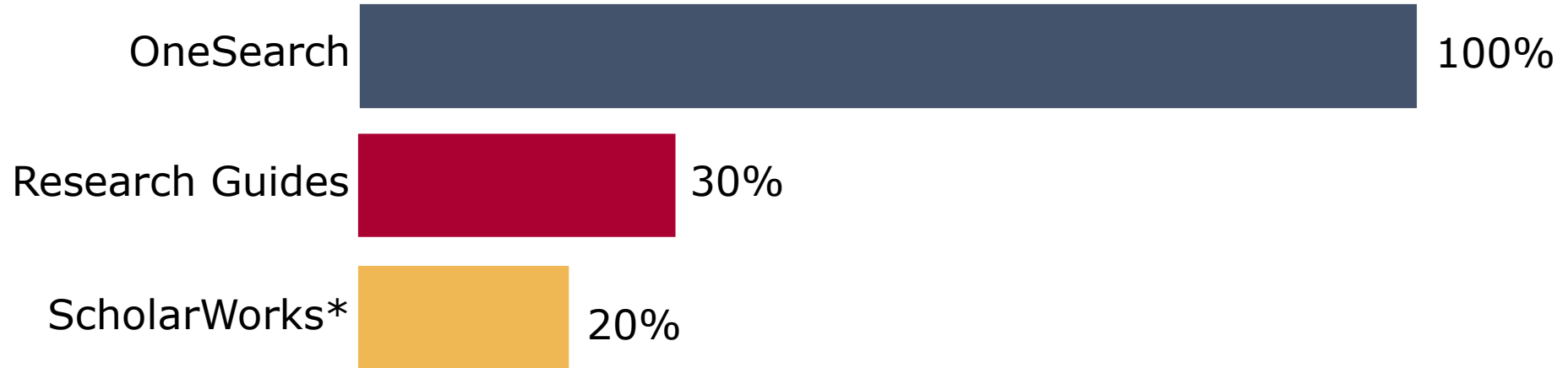
# SIMPLE CIRCLE TEST

Presented 10 students with a printed version of our search box and asked them to circle the features they used.

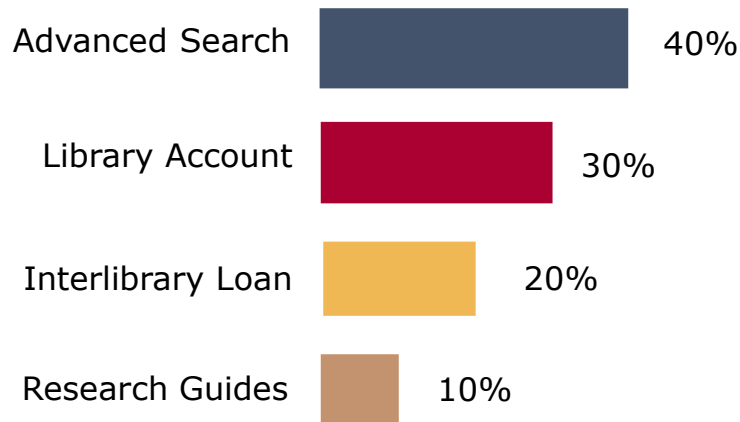


# SELF REPORTED SEARCH BOX USE

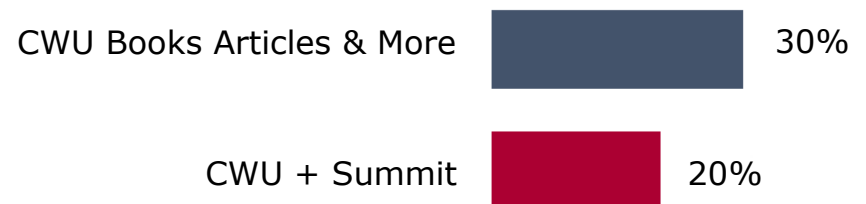
## Tabs:



## Links:



## Scopes:



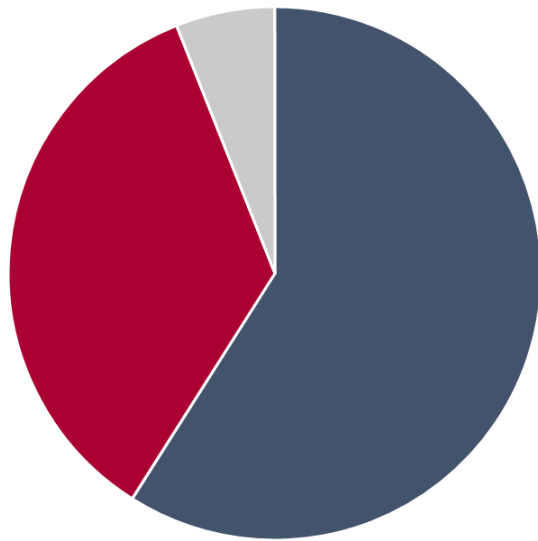
\*10% report using ScholarWorks to search for articles

# COMPETITIVE ANALYSIS

Looked the search boxes for all 37 libraries in the Orbis Cascade Alliance (OCA).

Compiled data on use of tabs, scopes, links, menu options.

# ORBIS CASCADE USE OF TABS



- 59% use tabbed search box
- 35% use simple search box
- 6% don't use search box

- Primo - 22
- Reserves - 13
- Databases and/or Articles - 12
- Journals - 7
- Research Guides - 6
- Site Search - 3
- Institutional Repository - 2

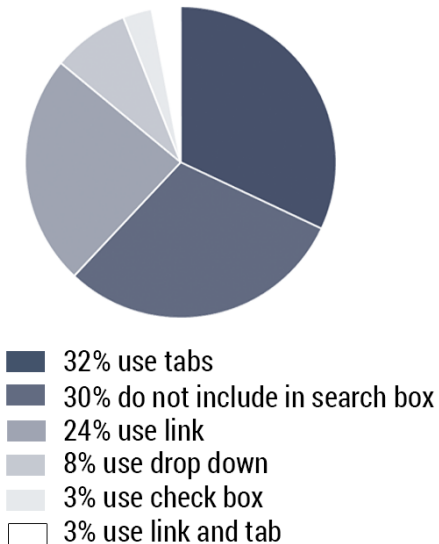


# LINKS, RESERVES & GUIDES

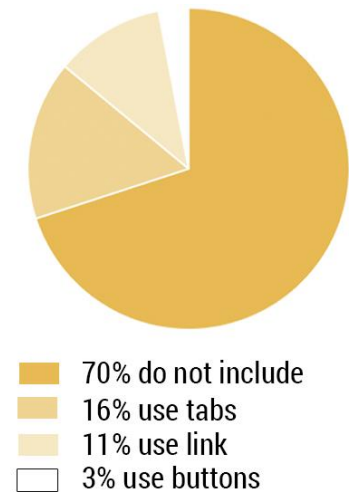
## Links:



## Course Reserves:

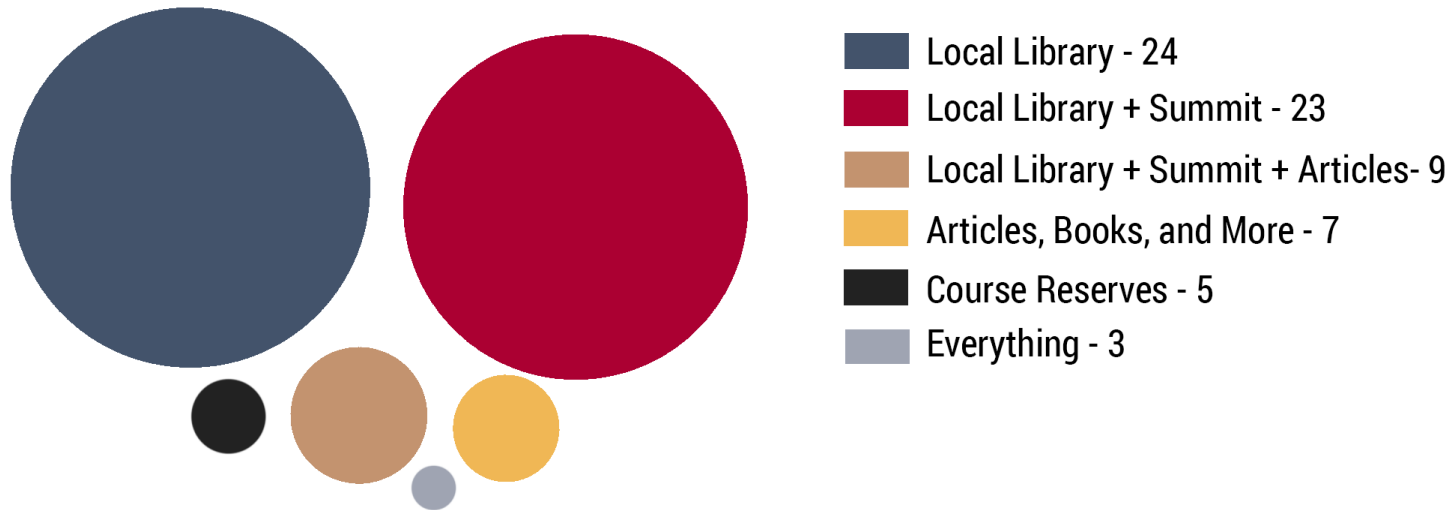


## Research Guides:

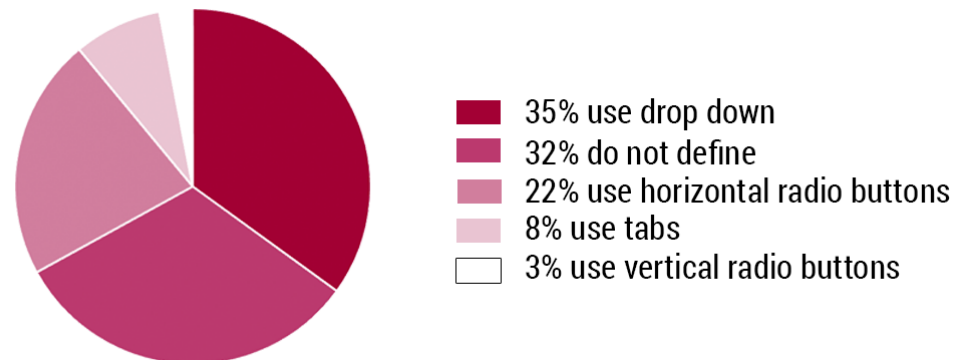


# ORBIS CASCADE SCOPES

## Most common scopes:



## Handling of scopes:





# SETTING UP THE TEST SITE

Based on feedback from usability testing, the extra credit assignment, and the OCA analysis.

Included large, simple search box and a list of quick links.

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## OneSearch

Search for articles, books, course reserves, research guides, and more.

Advanced Search

My Account

## Quick Links

Course Reserves  
Research Guides  
ScholarWorks

Databases  
Interlibrary Loan  
Reserve A Study Room

## What's Happening

- Test Title
- Minor in Library and Information Sciences Gets the Okay!
- Library Gala A Huge Success!
- Opportunities for SOURCE participants
- Announcing ScholarWorks, CWU's new institutional repository
- New U.S. Government Mobile Apps



More...

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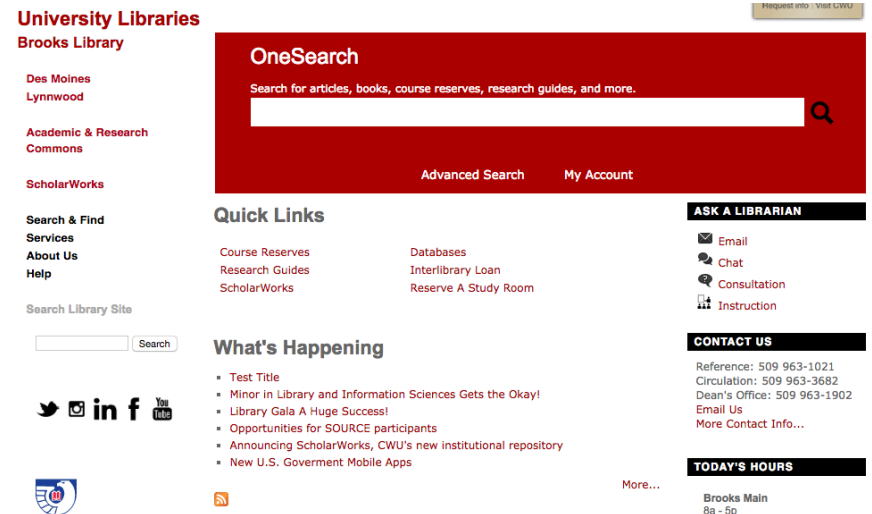
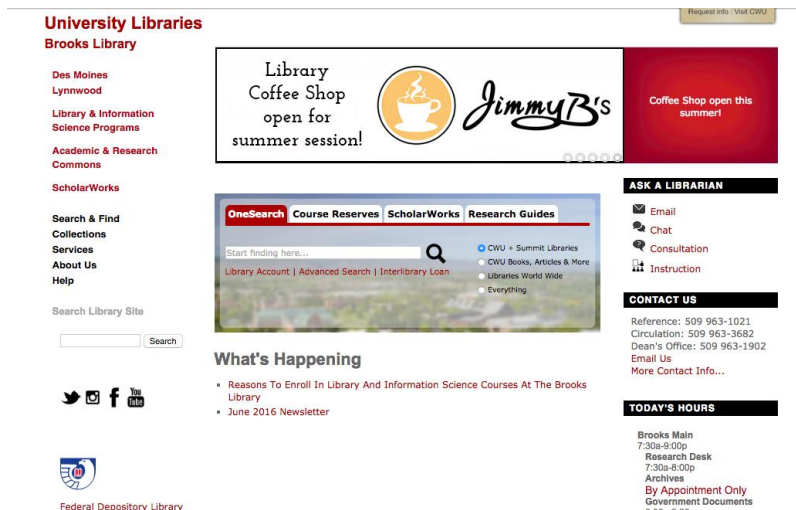
Brooks Main  
8a - 5p

# SEARCH BOX USABILITY TESTING

5 students were given 5 scenarios designed to test their use of search box features.

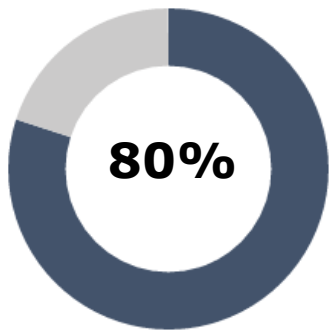
They performed the same tasks on our current homepage and a test version of the page with a simplified search box and quick links.

Their self reported level of familiarity with the Brooks Library website on a scale of 1-5: 1, 2, 3, 3, 4



# FIND A PEER REVIEWED ARTICLE

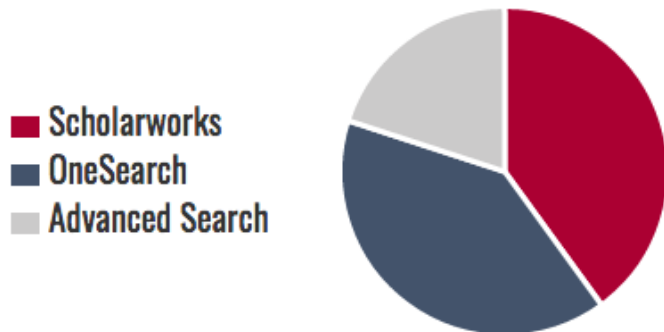
## Homepage



Successfully completed task

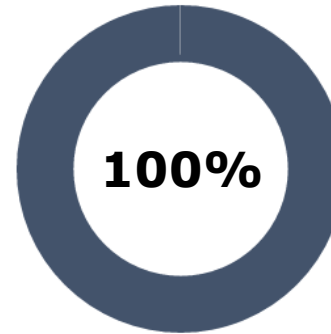
Average time on task:

**77** seconds



■ Scholarworks  
■ OneSearch  
■ Advanced Search

## Test page



Successfully completed task

Average time on task:

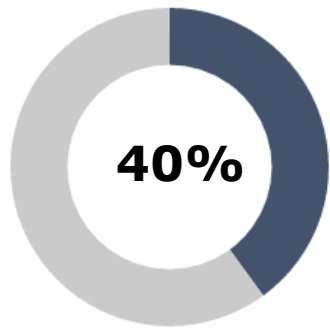
**21** seconds



■ OneSearch  
■ Advanced Search

# FIND A SOURCE PRESENTATION

Homepage



Successfully  
completed  
task

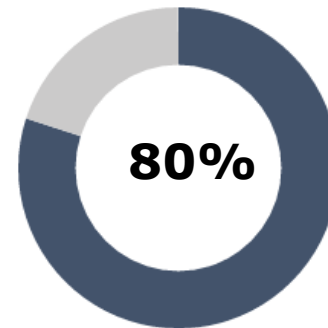
Average time  
on task:

**52** seconds

■ Scholarworks in menu  
■ OneSearch  
■ Clicked randomly



Test page



Successfully  
completed task

Average time  
on task:

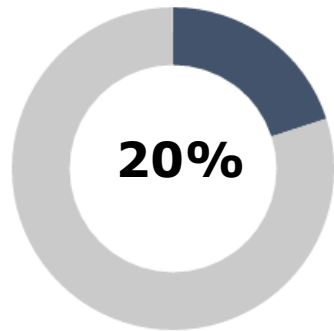
**64** seconds

■ Scholarworks in menu  
■ OneSearch  
■ Quick Link



# FIND A COURSE RESERVE

## Homepage



**20%**

Successfully  
completed  
task

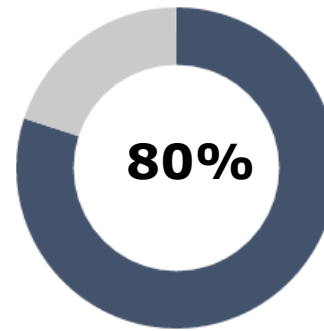
Average time  
on task:

**57** seconds

■ Course Reserve Tab\*  
■ OneSearch  
■ Clicked randomly



## Test page



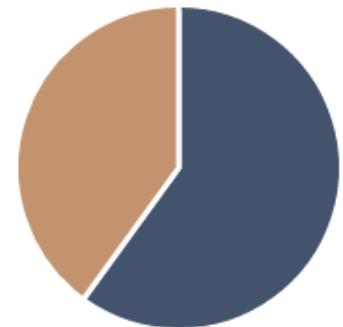
**80%**

Successfully  
completed task

Average time  
on task:

**22** seconds

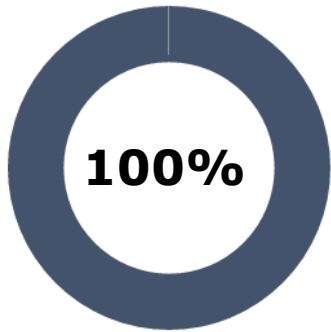
■ OneSearch  
■ Quick Link



\*failed due to misspelling PSY

# FIND A BOOK

## Homepage



Successfully  
completed  
task

Average time  
on task:

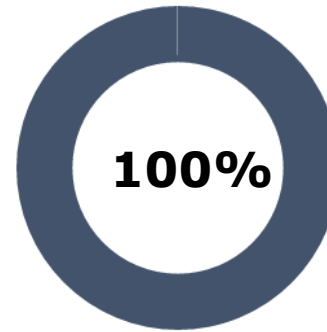
**20** seconds

■ OneSearch\*  
■ Search and Find



40% changed scope first

## Test page



Successfully  
completed task

Average time  
on task:

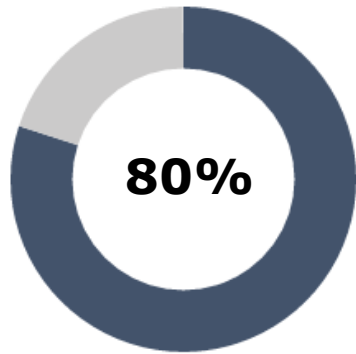
**8** seconds

■ OneSearch



# FIND A RESEARCH GUIDE

Homepage



Successfully  
completed  
task

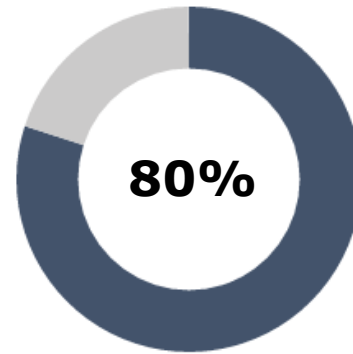
Average time  
on task:

**53** seconds

■ OneSearch  
■ Search and Find  
■ Research Guides Tab



Test page



Successfully  
completed task

Average time  
on task:

**16** seconds

■ OneSearch  
■ Quick Link



# SYSTEM USABILITY SCALE

Industry standard Likert scale test. Possible scores range from 25-100.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think that I would like to use this search engine frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the search engine unnecessarily complex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought the search engine was easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would imagine that most people would learn to use this search engine very quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the search engine very cumbersome to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt very confident using the search engine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I needed to learn a lot of things before I could get going with this search engine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# SYSTEM USABILITY SCALE RESULTS

Homepage  
average score:

45.45

Test page  
average score:

81.56

# OVERALL RESULTS

24%

MORE LIKELY TO  
SUCCESSFULLY COMPLETE  
TASKS ON TEST PAGE

48%

AS LONG TO SUCCESSFULLY  
COMPLETE TASKS

80%

OF STUDENTS  
STRONGLY PREFERRED  
THE SIMPLE SEARCH BOX

# LESS EXPERIENCED STUDENTS

LESS EXPERIENCED STUDENTS

**EXCLUSIVELY USED  
ONESEARCH**

ON THE TEST PAGE

**SLIGHTLY HIGHER 90%  
SUCCESS RATE THAN vs  
EXPERIENCED USERS 87%**

**30% HIGHER  
SUCCESS  
RATE**

ON TEST PAGE VS HOMEPAGE

COMPLETED TASKS IN

**LESS  
THAN HALF**

THE TIME AS EXPERIENCED USERS

“I’M LITERALLY JUST GOING TO TYPE EVERYTHING IN THIS BOX.”

# OBSERVATIONS

Students who rated themselves less familiar with library website were more eager to rely on the search box on the test page.

More familiar students spent more time searching and trying other links. They seemed to expect the site to be more complicated than it was.

Students strongly prefer browsing for Research Guides over searching. From the LibGuides homepage 80% scrolled to correct guide; 20% searched.

Every student who used the ScholarWorks tab did so incorrectly. Every student who correctly used ScholarWorks used a link or OneSearch.

When given multiple search terms, more advanced users tend to go directly to advanced search.

# RECOMMENDATIONS

Adopt a simple search box with no tabs, no scopes, and no more than 2 links (Advanced Search and Library Account).

This is in line with the direction that Primo is heading and is easier for our students to use.

Add a list of “Quick Links” near the search box. Students expressed appreciation for these links and they were actively used during testing.

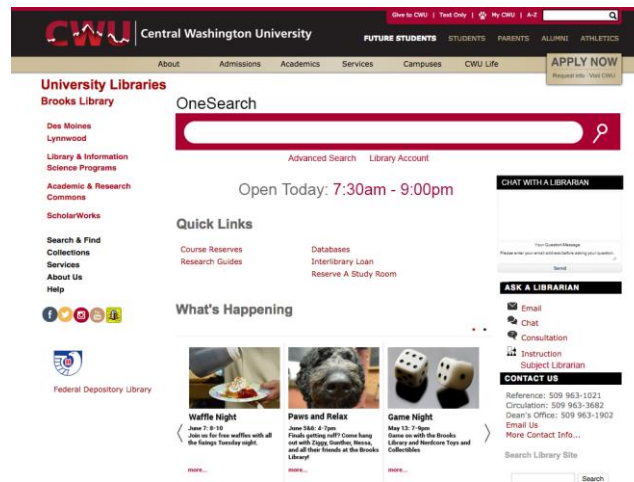
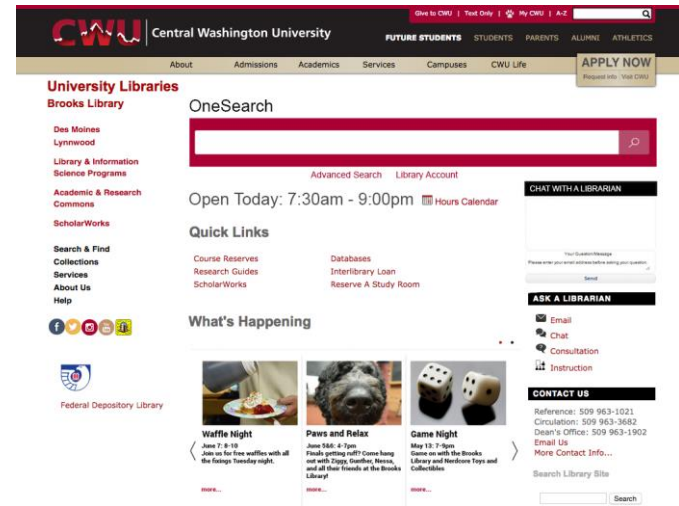
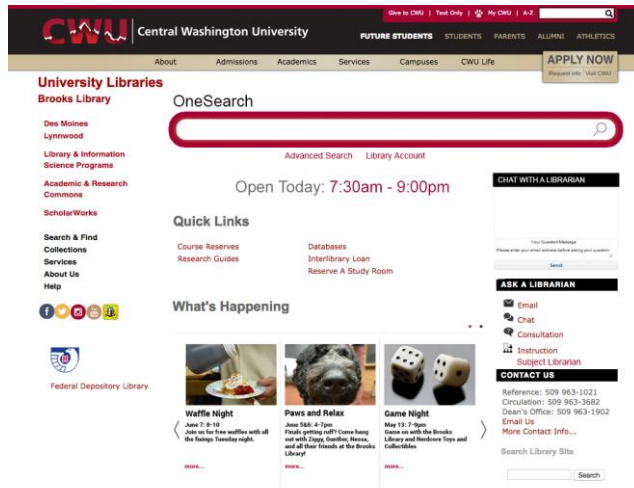
# GETTING BUY-IN

Presented the full results and recommendations to the Primo Working Group, which agreed to make recommendations to Web Development Committee.

Presented results and recommendations to Web Development Committee, which agreed to make the recommendation to Library Council. Developed mock-ups to present to Library Council.

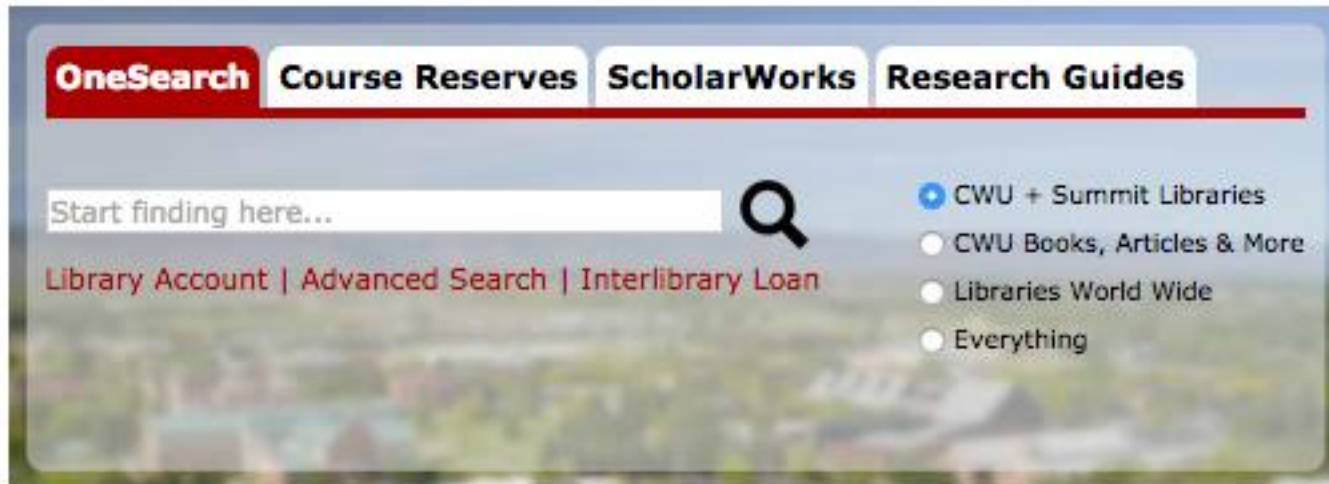
Presented summary of results and mock-ups to Library Council. After minor modifications, Library Council approved the change.

# MOCK-UPS



# BEFORE AND AFTER

September 2015:



September 2016:

OneSearch





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User menu

My account

Log out

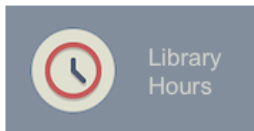
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## OneSearch

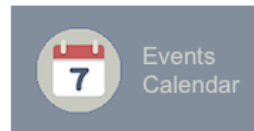
[Advanced Search](#)

[Library Account](#)

## Open Today: 7:30am - 2a



Library  
Hours



Events  
Calendar

## Quick Links

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[Research Guides](#)  
[ScholarWorks](#)

[Databases](#)  
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[Reserve A Study Room](#)

## Ask A Librarian Chat



E-mail address

Your Question/Message

Please enter your email  
address before asking your  
question.

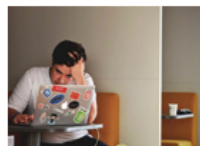
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## What's Happening



### Test Anxiety

Freking out about



### Paws and Relax

Dec 4 2016 to Dec 5  
2016

Finals getting ruff?



### Finals Week at the Brooks Library

Dec 4 2016 to Dec 9  
2016

Finals Week Events:

# EARLY ASSESSMENT

Compared site search results from October 2015 to October 2016.

## October 2015

Total number of searches: 1312

Searches for Resources: 346

Searches for Services: 164

Searches that should have been  
OneSearch: 802

## October 2016

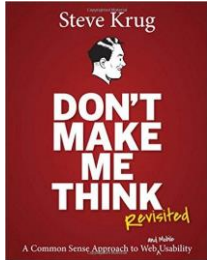
Total number of searches: 375

Searches for Resources: 117

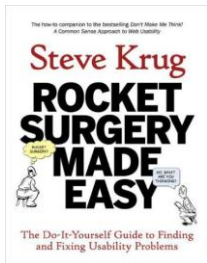
Searches for Services: 91

Searches that should have been  
OneSearch: 167

# RECOMMENDED READS



Don't Make Me Think – Stephen Krug



Rocket Surgery Made Easy – Stephen Krug



Just Enough Research – Erika Hall

System Usability Scale: <https://www.usability.gov/how-to-and-tools/methods/system-usability-scale.html>

# Questions?



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