User Experience in the Discovery Ecosystem: Morning Workshop

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*EBSCO*

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[https://stars.library.ucf.edu/ucfscholar/812](https://stars.library.ucf.edu/ucfscholar/812)
WiFi access

• Portola Hotel & Spa
• Go to browser and enter:
  • infotoday
  • Your email

Twitter:
  #internetlibrarian
  #ilw6
User Experience
in the Discovery Ecosystem

Internet Librarian 2015
Today’s Agenda

• Introductions
• The current state of discovery
• User journeys
• Activity: mapping out the user journey
• Designing search with the user in mind
• Break
• Usability testing
• Activity: planning for usability testing and its challenges
• Finding from existing studies
• Activity and discussion: solutions
## The Speakers

<table>
<thead>
<tr>
<th>Rebecca Blakiston</th>
<th>Athena Hoeppner</th>
<th>Eric Frierson</th>
</tr>
</thead>
</table>
| **User Experience Librarian**  
*University of Arizona*  
Project Manager  
User Researcher  
Content Awesomist  
*University of Central Florida*  
EDS Implementation Lead  
Discovery wonk  
*EBSCO Information Services*  
Trying not to lose library cred  
Hacker and tinkerer, problem solver, and a ‘yes’ man in the best way  
Inventor and developer of Curriculum Builder |

- **Summon**  
- **EBSCO Discovery Service**  
- **EBSCO Discovery Service**
Your Turn!

Name
Who are you?

Institution
Where do you work?

Title
What do you do?
Web Scale Discovery
A Nickle Tour
A working definition…

**WSD systems couple…**

*a pre-harvested central index of metadata and content...*  
... *with a richly featured discovery layer.*
Pre-harvested Index

CENTRAL INDEX

Mutually Licensed Sources

Open Access FT and A/I

Library Subscriptions Vendor

Publisher Supplied

Library Supplied

Gale OneFile
LexisNexis
HathiTrust
arXiv.org
DOAJ
MEDLINE
IRs
MARC
Digitized
Springer
Elsevier
Wiley
OUP
T&F

Scopus
Biological Abs
MLA
INSPEC
CINAHL
ASP Videos

Pre-harvested Index
Discovery Layer on Your Homepage

Your University Library

Ask | Reserves | Hours | ILL | Your Account

Search Everything:
Keywords, titles, authors...

Go

Books Articles Journals Digital
Small Business Ventures Capitol Incubator on Your University Campus.

Venture Capitol Quarterly

How venture capital works.
Author: Christian Science Monitor (1908-Current file)
ISSN: 0145-8027 Date: 03/11/1985

Full Text
The Big Discovery Vendors

WorldCat
Local

EBSCO
Discovery Service

Summon

Primo

Encore

OCLC

EBSCO

ProQuest

ExLibris

Innovative
Personas
Personas

Cheyenne Williams
freshman, undecided major, 18 years old

How’s Academic Life?
I’m taking five classes – Spanish, English 102, College Algebra and two gened courses. I really have to hustle to keep up with everything. I’m still trying to decide on a major, but I’m interested in political science.

About me:
- Friends call me “Chey” even though I’m anything but shy
- I’m glued to my MacBook and iPhone 24/7
- I like to listen to music when I’m studying, so I always have my headphones
- I wish I had a car, but do fine getting around by bike and on the bus

What’s your Research Process?
In English 102, we have to choose a controversial topic and write an analysis. I chose rising college costs. We are supposed to both scholarly and popular articles that show different perspectives on the topic. I Googled “rising college tuition” and found some good websites. My professor suggested Google Scholar, which had some good articles I can use for my paper, although some of them were kind of dated (from 1990s). She also showed me links in D2L (our course management system) to a few different library search engines.

My challenges:
- I only know the resources shown by my teachers
- I tend to procrastinate and usually need things available right now
- I have trouble finding things that are scholarly, relevant, and current
Consider the User’s Context

Device of the user

Performance of the system

Concurrent Tasks
Personas

A profile with a given context of how the user approaches a task.

Personas provide empathy for the user
Scenarios Are the User’s Needs and Context

Primary goal

Mood (relaxed or flustered?)

Concurrent tasks (focused or distracted?)
Seeking Behaviors

Understanding the User Journey in the Information Ecosystem
The Literature Search Process

1. Recognize an information need
2. Formulate query
3. Search
4. Access full content results

Simple, right?
Iterative searching

- Initial query
- Revise query
- Gather more data
- Use facets
- Access content
- Save content
- Review content
- Export content
- Request content
- Ask for help
- Revise query
- Email results
- Get advice
- Save results
- Get knowledge
- Narrow topic
- Use facets
Assessing User Behavior: Data Sources

- Google Analytics
- Discovery Statistics
- Link Resolver Statistics
- Ezproxy and Shibboleth Logs
- COUNTER Statistics
Google Analytics Behavior Flow

**Source**
- Direct: 226K
- Google: 146K
- Webcourses.ucf.edu: 27K
- Bing: 8.5K
- Ucf.edu: 8.3K
- ...: 40K

**Starting pages**
- 457K sessions, 334K dropoffs

**1st Interaction**
- 123K sessions, 45K dropoffs
- /portald/efault.asp: 148K
- /default.asp: 14K
- /databases: 53K
- /databases/subjects: 6.3K
- /databases/journals: 6.2K
- /canvas: 28K
- /rosen: 15K
- (>100 more): 39K

**2nd Interaction**
- 78K sessions, 42K dropoffs
- /default.asp: 13K
- /databases/subjects: 11K
- /databases/...efault.asp: 7.8K
- /databases/...efault.asp: 5.8K
- /databases/portal/default.asp: 14K
- /databases/titles: 5.8K
- (>100 more pages): 35K

**3rd Interaction**
- 36K sessions, 13K dropoffs
- /databases/...efault.asp: 8.7K
- /databases/subjects: 7.1K
- /databases/...efault.asp: 2.5K
- /databases/portal/default.asp: 2K
- /databases/portal/default.asp: 27K
- (>100 more pages): 14K

© 2015 Google
### Google Analytics: Mobile Use Stats

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Sessions</th>
<th>% New Sessions</th>
<th>New Users</th>
<th>Bounce Rate</th>
<th>Pages / Session</th>
<th>Avg. Session Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>591,592</td>
<td>58.95%</td>
<td>348,758</td>
<td>49.99%</td>
<td>4.69</td>
<td>00:04:07</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Linux</strong></td>
<td>211,584</td>
<td>99.51%</td>
<td>210,548</td>
<td>94.44%</td>
<td>1.34</td>
<td>00:00:22</td>
</tr>
<tr>
<td><strong>Windows</strong></td>
<td>202,272</td>
<td>42.09%</td>
<td>85,139</td>
<td>29.23%</td>
<td>6.68</td>
<td>00:06:54</td>
</tr>
<tr>
<td><strong>Macintosh</strong></td>
<td>148,909</td>
<td>28.33%</td>
<td>42,191</td>
<td>17.47%</td>
<td>6.87</td>
<td>00:05:49</td>
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<tr>
<td><strong>iOS</strong></td>
<td>21,685</td>
<td>38.08%</td>
<td>8,258</td>
<td>37.74%</td>
<td>3.98</td>
<td>00:03:03</td>
</tr>
<tr>
<td><strong>Android</strong></td>
<td>5,776</td>
<td>37.29%</td>
<td>2,154</td>
<td>39.32%</td>
<td>4.01</td>
<td>00:03:24</td>
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<tr>
<td><strong>Chrome OS</strong></td>
<td>1,124</td>
<td>28.65%</td>
<td>322</td>
<td>17.62%</td>
<td>6.24</td>
<td>00:05:44</td>
</tr>
<tr>
<td><strong>Windows Phone</strong></td>
<td>124</td>
<td>50.81%</td>
<td>63</td>
<td>35.48%</td>
<td>3.98</td>
<td>00:03:19</td>
</tr>
<tr>
<td><strong>BlackBerry</strong></td>
<td>53</td>
<td>54.72%</td>
<td>29</td>
<td>26.42%</td>
<td>4.02</td>
<td>00:02:08</td>
</tr>
<tr>
<td><strong>(not set)</strong></td>
<td>47</td>
<td>87.23%</td>
<td>41</td>
<td>70.21%</td>
<td>1.70</td>
<td>00:00:53</td>
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<tr>
<td><strong>Samsung</strong></td>
<td>7</td>
<td>42.86%</td>
<td>3</td>
<td>42.86%</td>
<td>2.29</td>
<td>00:01:19</td>
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</table>
## Ecosystem Flow

<table>
<thead>
<tr>
<th>Source / Medium</th>
<th>Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sessions</td>
</tr>
<tr>
<td>1. primo02v1.hosted.exlibrisgroup.com:8991 / referral</td>
<td>494,948</td>
</tr>
<tr>
<td>2. (direct) / (none)</td>
<td>51,376</td>
</tr>
<tr>
<td>3. web.library.emory.edu / referral</td>
<td>28,091</td>
</tr>
<tr>
<td>4. pitts.emory.edu / referral</td>
<td>4,816</td>
</tr>
<tr>
<td>5. oxford.library.emory.edu / referral</td>
<td>2,229</td>
</tr>
<tr>
<td>6. sfxhosted.exlibrisgroup.com / referral</td>
<td>1,986</td>
</tr>
<tr>
<td>7. worldcat.org / referral</td>
<td>1,614</td>
</tr>
<tr>
<td>8. sfxhosted.exlibrisgroup.com.proxy.library.emory.edu / referral</td>
<td>1,008</td>
</tr>
<tr>
<td>9. guides.main.library.emory.edu / referral</td>
<td>750</td>
</tr>
<tr>
<td>10. dc02kg0497na.hosted.exlibrisgroup.com:8991 / referral</td>
<td>674</td>
</tr>
</tbody>
</table>
Data Isn’t the Answer, but it helps…

…tells us what users are doing.

But why are they doing it?

How can data inform usability?
User Journeys

Cheyenne Searches
Cheyenne Gets A Little Library Instruction

Content

Access
Restriction
Systems

EZproxy
Shibboleth

Federated
ID

Learning
Management
System

Assignment

Library
Sites

Link Resolver

Library Search

Librarian
Instruction
Information Ecosystem: Cheyenne’s Devices and Settings

- Content!!
- Google!!
- Paywall!!

- Link Resolver
- Library Search
- Library Sites
- Librarian Instruction
The Mobile Library Search Experience...
Systems and Users at One

- Promote focus and flow
- Reduce cognitive load
- Consistent cues
- Familiar and predictable options
- Integration and interaction throughout
- Seamless transitions
- Clarity of purpose
- Positive emotions
Journey Maps

Journey map is a visual or graphic representation of an individual’s perspective illustrating the complete interaction with an organization or service over time and across channels.

- based on a definition from **UX Mastery**
Let’s do this: Exercise #1

Map out the user journey
Let’s discuss

What are possible pain points in the user journey?
Designing Search with the User in Mind
Who are Your Users?

• Undergrads?
• Grads?
• PhD candidates?
• Distance students?
• Faculty?
• Clinicians?
• Staff?
• Visiting researchers?
• Community members?
“One of our problems is we try to design search for everyone.”

~Tyler Tate, *Designing the Search Experience* @tylertate
Cheyenne Williams, *Undergraduate Student*

<table>
<thead>
<tr>
<th>Common Tasks</th>
<th>Common Challenges</th>
<th>Domain Expertise</th>
<th>Technical Expertise</th>
</tr>
</thead>
</table>
| ● Find a textbook based on a title  
● Find a scholarly article on a topic  
● Find an article based on a citation | ● Juggling work & school  
● Can’t afford textbooks  
● Tends to procrastinate and usually needs things available right now | ● Hasn’t chosen a major yet  
● Used her high school library once or twice  
● Assigned her first college research paper | ● Glued to her MacBook and iPhone  
● Regularly searches on Netflix, Amazon, Pinterest, and eBay |
Basic Search Must Be *Really* Easy to Use.

Rectangular search box with a button.
Search at Top of the Page

Request Materials

Article or Book Chapter

We'll email you articles, book chapters, and more free of charge.
Especially on Smaller Screens
Pagination Should Be at the Page Bottom

<table>
<thead>
<tr>
<th>Title</th>
<th>Author/Editor</th>
<th>Publisher</th>
<th>Year</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usability Success Stories: How Organizations Improve by Making Easier-To-Use Software and Web Sites</td>
<td>Paul Sherman</td>
<td>Farnham, Ashgate Publishing Ltd.</td>
<td>2007</td>
<td>Online access</td>
</tr>
<tr>
<td>Multimodal usability</td>
<td>Niels Ole Benssen</td>
<td>Berlin, New York: Springer</td>
<td>2009</td>
<td>Online access</td>
</tr>
<tr>
<td>Distributed user interfaces: Usability and Collaboration</td>
<td></td>
<td></td>
<td>2013?, 2014</td>
<td>Online access</td>
</tr>
</tbody>
</table>

Results 1 - 10 of 20,877 for Everything
Results Tally: Show How Many Results There Are

Results 1 - 10 of 20,877 for Everything
Sorted by: Relevance

Sign in to see all search results

1. **Usability**
   Stewart, Tom
   Taylor & Francis
   EDITORIAL Usability It's easy to get
   Full text available

2. **Distributed user interfaces : usability and collaboration**
   Niels Ole Bemsen
   Berlin ; New York : Springer, 2009
   Online access
Help Users Formulate Their Queries

- Search for ebooks, journals, movies...
  - Example: Freakonomics

- Search the library website
  - Example: Borrow a Laptop
Autocomplete: Completes a Known Entity
Autosuggest: Ideas the User Hasn’t Thought of Yet
Contextual Help: Exposing Resources

**Arizona & Southwest Materials in Special Collections**

Archival materials documenting the region's culture and history, including accounts of Native Americans, the impact of Spanish and Mexican settlement, and the influx of other groups into the region from the 19th century onwards.

**Arizona: Sunday magazine**

by Arizona Sunday magazine

Arizona, 1979

Journal:

Special Collections (Oversize). P9791.A75 D27. LIB USE ONLY (+27 more)

---

Constituent state of the United States of America. Arizona is the sixth largest state in the country in terms of area. Its population has always been predominantly urban, particularly since the mid-20th century, when urban and suburban areas began growing rapidly at the expense of the countryside. Some scholars believe that the state's name comes from a Basque phrase meaning "place of oaks," while others attribute it to a Tohono O'odham (Papago) Indian phrase meaning "place of the young (or little) spring." Arizona achieved statehood on Feb. 14, 1912, the last of the 48 coterminous United States to be admitted... Read more
Contextual Help: Search Tips

Looking for peer reviewed articles?
Under REFINE YOUR SEARCH, select Scholarly (Peer Reviewed) and under CONTENT TYPE, select Journal Article. Your results will be updated to only include peer reviewed journal articles.

Looking for ebooks?
Contextual Help: Related Content

Worried about plagiarism?
See our avoiding plagiarism guide.

When is the library open?
The Main Library is open 24 hours/day during the regular school week. See all library hours.

Articles

sea turtles and climate change

Why should I also try databases and journals?

There is no single website or search box in the world that can search every article ever published on the web, even the search on this page or Google Scholar (although both are great places to start). Sometimes, to find enough articles for your paper, you'll have to search multiple databases and/or journals. Additionally, databases and journals provide a subject-specific search experience, which can be to your advantage.
Users Want Results Quickly
What Details Does the User Want to See in the Results?

**Content Strategy for the Web, 2nd Edition**
by Kristina Halvorson and Melissa Rach

Paperback
$25.23 $34.99  ✓Prime
Get it by **Monday, Feb 2**
More Buying Choices
$16.99 used & new (101 offers)

Kindle Edition
$15.39
Auto-delivered wirelessly

**Managing Enterprise Content: A Unified Content Strategy (2nd Edition) (Voices That Matter)**
by Ann Rockley and Charles Cooper

Paperback
$32.49 $44.99  ✓Prime
Only 15 left in stock - order soon.
More Buying Choices
$22.85 used & new (54 offers)

Kindle Edition
$19.79
Auto-delivered wirelessly
Sub-decadal turbidite frequency during the early Holocene; Eel Fan, offshore Northern California

2014, Geology (Boulder), volume 42, issue 10, starting on page 855, English

A different ocean acidification hazard; the Kolumbo submarine volcano example

2013, Geology (Boulder), volume 41, issue 9, starting on page 1039, English

Seababy
A little otter returns home

Easy-to-access Previews of Items in the Results List
Continuous Scroll: An Ongoing Debate
Continuous Scroll: An Ongoing Debate

- Reduces cognitive load.
- Can be frustrating, especially if users want to go back up to something.
- Do users usually want to go back to something when researching?
Expand the Most Common Facets and Collapse the Rest

**DISCIPLINE**
- Any
  - business: 78,996
  - history & archaeology: 76,591
  - economics: 75,240
  - engineering: 68,281
  - languages & literature: 55,545
  - More...

**LIBRARY LOCATION**

**Show only**
- Books and Media (3,944)
- Peer-reviewed (123,323)
- Full Text Online (213,653)

**Publication Date**
- From 1900 to 2015

**Material Type**
- +

**Subject**
- +

**Library**
- +

**Author/Creator**
- +

**Genre**
- +

**Journal Title**
- +

**Language**
- +
Allow Users to Easily Control Filters

- Give the ability for the user to remove certain filters.
- Give the option to keep the same facets (“search within”) as well as start over (“clear all”).
Users Shouldn’t Get Lost

- Make it clear to the user where they are (horizontal breadcrumbs, vertical bread box, or “your selection”).
- Users should be able to look at the page and understand what was searched.
Evaluating the User Experience
Methods

- Heuristic evaluation
- User interviews & focus groups
- Usability testing (my personal fave)
- Also…
- A/B testing
- Card sorting
- Information architecture validation testing
- Web analytics
- And more!
Today let’s focus

Usability testing:

Observing real users and how they behave when given a particular scenario.
What is Cheyenne trying to do?

Tasks for Usability Testing

• Find a scholarly article on a topic
• Find a textbook based on a title
• Find an article based on a citation
Tasks vs. Scenarios

• **Task:** What you want the user to do
  • (for your eyes only)

• **Scenario:** What you tell them to do
  • (for participant)
Test What You Can Fix (First)
Translate Tasks into Scenarios (What You Will Tell the User to Do)

<table>
<thead>
<tr>
<th>Task</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find an article</td>
<td>You need to find a scholarly article about legalizing marijuana. See if you can find a useful article use this search tool.</td>
</tr>
<tr>
<td>Request a book through interlibrary loan</td>
<td>You need to get this book, <em>Designing the Search Experience</em>. How would you go about getting the book?</td>
</tr>
</tbody>
</table>
## Controlled vs. Broad Tasks

<table>
<thead>
<tr>
<th>Controlled</th>
<th>Broad</th>
</tr>
</thead>
<tbody>
<tr>
<td>You want to find books on Philosophy.</td>
<td>You want to find books on a topic related to your major.</td>
</tr>
<tr>
<td>You have an assignment to find 2 scholarly articles.</td>
<td>Find articles that would help you complete a current assignment.</td>
</tr>
</tbody>
</table>
### Known Item vs. Open Ended Tasks

<table>
<thead>
<tr>
<th>Known item</th>
<th>Open ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find Kristina Halverson’s book: <em>Content Strategy for the Web</em></td>
<td>Find books on content strategy.</td>
</tr>
<tr>
<td>Find the article, “Developing a Content Strategy for an Academic Library Website”</td>
<td>Find articles on content strategy.</td>
</tr>
</tbody>
</table>
### Other Types of Tasks

<table>
<thead>
<tr>
<th>Type of task</th>
<th>Description of task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explorative search</td>
<td>Search for topic ‘de bello gallico’</td>
</tr>
<tr>
<td>Refinement of search</td>
<td>Narrowing down to content type ‘books’</td>
</tr>
<tr>
<td>Other functions</td>
<td>Sorting according to ‘year of publication’</td>
</tr>
<tr>
<td>Other functions</td>
<td>Printing of list of results</td>
</tr>
<tr>
<td>Targeted search</td>
<td>Search for specific book</td>
</tr>
<tr>
<td>Other functions</td>
<td>Saving of result</td>
</tr>
<tr>
<td>Targeted search</td>
<td>Search for specific eBook</td>
</tr>
<tr>
<td>Targeted search</td>
<td>Search for specific ISBN</td>
</tr>
<tr>
<td>Other functions</td>
<td>Selection of a citation format and email dispatch</td>
</tr>
<tr>
<td>Explorative search</td>
<td>Narrowing down to ‘academic publications’</td>
</tr>
<tr>
<td>Refinement of search</td>
<td>Narrowing down to topic ‘history’</td>
</tr>
<tr>
<td>Refinement of search</td>
<td>Narrowing to year of publication ‘from 2010’</td>
</tr>
<tr>
<td>Other functions</td>
<td>Use of preview function</td>
</tr>
<tr>
<td>Other functions</td>
<td>Preservation of search criteria</td>
</tr>
<tr>
<td>Other functions</td>
<td>Use of RSS feed</td>
</tr>
<tr>
<td>Refinement of search</td>
<td>Narrowing to material type ‘film’</td>
</tr>
</tbody>
</table>
Define Success

<table>
<thead>
<tr>
<th>Task</th>
<th>Success is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find Kristina Halverson’s book: <em>Content Strategy for the Web</em></td>
<td>Participant identifies the call number and location of this book.</td>
</tr>
<tr>
<td>Find the article, “Developing a Content Strategy for an Academic Library Website”</td>
<td>Participant accesses the full text of this article.</td>
</tr>
</tbody>
</table>
Gather Incentives
Pick a Device
Talk Aloud Method

- Participants explain what they are doing and why.
- Retrospective review is an alternate method.
Identify Other Technology & Software (Maybe)
Manage Their Emotions. Keep Them Happy.

I'm feeling lost…

Oh, crap…

This is very helpful.

I’m feeling lost…
Taking Useful Notes

- Tasks/scenarios
- Navigation paths
- Number of attempts
- Ultimate success/failure
- Time on task (maybe)
- User comments
- Your own insights
Time for a Break
Bibliography

• Steve Krug, Don’t Make me Think
• Steve Krug, Rocket Surgery Made Easy
• Tyler Tate, Designing the Search Experience
• Rebecca Blakiston, Usability Testing: A Practical Guide for Librarians
• Abby Covert, How to Make Sense of Any Mess
• Kim Goodwin, The Power of Principles
Let’s do this: Exercise #2: Create a usability testing plan
Let’s discuss

What are the challenges of usability testing?
Using Your Usability Study

Turning Results into Improvements
Easy Fix: Changing a Label

Web analytics strategies for information professionals : a LITA guide / Tabatha Farney and Nina McHa
Farney, Tabatha.

Request this Item

<table>
<thead>
<tr>
<th>STATUS</th>
<th>Call Number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUE 03-18-15</td>
<td>Z674.75.W67 F37 2013</td>
<td>Main Library</td>
</tr>
</tbody>
</table>
Harder Fix: Metadata Problems

Google Scholar Metrics for Publications
by Jácso, Péter
Online Information Review, 08/2012, Volume 36, Issue 4
Purpose - The purpose of this paper is to review the software and content features of the Google Scholar Metrics (GSM...

Journal Article: Full Text Online

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by Péter Jácso
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Journal Article: Full Text Online
Decoding Recorded Tasks

Table 1: Table of Task Results

<table>
<thead>
<tr>
<th>User #</th>
<th>Time</th>
<th># of Errors</th>
<th># of Clicks</th>
<th>Seeks help</th>
<th>Facial expressions, gestures</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5:32</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>relaxed</td>
<td>Impressed w/ site databases</td>
</tr>
<tr>
<td>2</td>
<td>5:03</td>
<td>na</td>
<td>na</td>
<td>shy</td>
<td>Site overwhelming</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2:34</td>
<td>na</td>
<td>na</td>
<td>relaxed</td>
<td>Went to Ask a Librarian</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1:40</td>
<td>0</td>
<td>5</td>
<td>No</td>
<td>smiling</td>
<td>Looks at facilitator often</td>
</tr>
<tr>
<td>Task 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3:85</td>
<td>3</td>
<td>9</td>
<td>No</td>
<td>relaxed</td>
<td>Slow download time</td>
</tr>
<tr>
<td>2</td>
<td>2:43</td>
<td>2</td>
<td>6</td>
<td>No</td>
<td>intense</td>
<td>Doesn’t change search criteria</td>
</tr>
<tr>
<td>3</td>
<td>1:40</td>
<td>0</td>
<td>5</td>
<td>No</td>
<td>smiling</td>
<td>Looks at facilitator often</td>
</tr>
<tr>
<td>Task 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1:42</td>
<td>2</td>
<td>4</td>
<td>No</td>
<td>hesitant</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4:03</td>
<td>5</td>
<td>9</td>
<td>No</td>
<td>lost</td>
<td>Takes a while to get to first click</td>
</tr>
<tr>
<td>3</td>
<td>2:03</td>
<td>1</td>
<td>5</td>
<td>No</td>
<td>hesitant</td>
<td>Index search, back to homepage, tries to find once</td>
</tr>
</tbody>
</table>
Reports and Recommendations

Our Recommendations

Based on user responses to difficulties during testing, Group One offers the following recommendations:

1. use language consisted with users’ expectations
2. provide indexical cues to draw users’ attentions to important links, and
3. incorporate appropriate images to support textual links

We believe that most of the problems encountered during testing were related to these three issues, which directly impede the site’s effectiveness as a research tool for new users. While our testing sample is only three users, we cannot say conclusively that these users are representative of the much larger new-user population. However, we do offer that the experiences of these three participants can reveal much about the site’s usability. Below are more detailed explanations of our recommendations.
Mocking Up Changes

- My account (sign on goes to redesigned landing page for all services)

  Article Quicksearch
  Books – catalog search
  • eJournals – journal title starts with
  • Videos
  • Our Website

  • Hours
  • Calendar widget - events
  • Study rooms & PCs
  • Other Locations Link

  • News, general info, events, etc.

  • Links to lots of additional library content (still TBD)
  • Site map/index - additional ways to find content, not just a list of headings

Update the UCF Libraries brand

Consistent on internal and external sites

Meaningful use of icons
Figuring Out What to Change

- What needs to change and where?
  - Terminology ([Library Terms that Users Understand](#))
  - Branding
  - Order/layout
  - Representation on library site
  - Representation on other sites
  - More substantial changes

- Who can make the changes
  - WSD admin
  - Web editor
  - Vendor
  - External Web Editor
Final discussion
Final Discussion

• What changes have you already made to improve the user experience with your discovery system?
• What remains our biggest UX challenge when it comes to discovery?
• How does the discovery vendor you have affect the changes you can make?
• What is the future of discovery; what is next?
Exercise 3: Planning Changes

What changes would you make based on your own experience? What type of changes do you anticipate wanting to make in the future?

1. Brainstorm what tests to use.
2. Come up with 3 prioritized ideas of what to change.
3. Outline who would be involved in the change.
4. Sketch a mock up of changes.
How's Academic Life?
I love to write about nature and our environment. I'm taking a nonfiction writing workshop and craft seminar – both intensive writing classes! I'm also taking an elective course through the Journalism Department on science writing. I am a teaching assistant for two sections of ENGL 101 this semester and will be teaching ENGL 102 in the fall. Most of my time is focused on writing and prepping for my classes.

About me:
- I worked as a nature guide for the past two years
- I have a Samsung netbook, but it breaks a lot
- I share a house with two other grad students about a mile north of campus

What's your Research Process?
A lot of my research and writing is experiential. I draw from my time spent in nature, but I am also constantly looking for books and articles to use for background information and inspiration. For my MFA thesis I am writing a series of essays about the ecology of the Sonoran Desert. If I know the book I want, I look for it directly in the library catalog. I find the main library search confusing and usually avoid it – there's so much stuff in there. When I am exploring a topic, I usually go to Amazon to find good books and then enter those into the library catalog to find it or request it through interlibrary loan. I use JSTOR to look for articles. When I can't find what I'm looking for I go to Ask a Librarian. I read a lot online, but I prefer print whenever I can get it. My eyes get tired pretty easily.

My challenges:
- The main library search engine seems massive and hard to narrow down to what I'm looking for
Brandon Green
PhD student, geosciences, 31 years old

How's Academic Life?
My research looks at frost rings found within pine trees and their links to atmospheric circulation. I’ve finished most of my classes, so I’m only taking one course related to my PhD minor in global change. But I’m studying around the clock for my comp exams. I’ll also defend my dissertation proposal soon, and I’m currently working on my lit review. I hope to be done with my PhD in two years and then find a tenure-track academic position.

About me:
- I’m a research assistant, so I spend hours processing tree-ring samples in a lab
- I got my BS and MS in geology from the UMass, Amherst
- My wife and I just had a baby girl 2 months ago, I’ve barely slept in 2 months!
- I work on a PC desktop at home and in the lab and recently splurged on an iPad

What's your Research Process?
Right now I am gathering sources that I need to read for my comps or use in my dissertation proposal. I have an overwhelming stack of stuff to get through, but I still worry that I’m missing important resources – especially since my field is so interdisciplinary. I start by looking at the bibliographies from articles my committee members gave me or from my classes. I’ll then search for these citations from the library website. That sometimes works. And my advisor showed me how to use Web of Science to find a key article and look to see what it cited and what articles have subsequently cited it. I find that pretty useful, but I have to sort through a lot of stuff.

My challenges:
- Getting to articles off campus can be a pain
- Sometimes I find articles the library doesn’t have, but I really need for my research
How's Academic Life?
I am an assistant professor in Teaching, Learning and Sociocultural Studies. My research focuses on equity and social justice issues in mathematics education. I’m crazy busy, but I love my work! I teach an undergraduate course on teaching mathematics to children and a graduate-level research methods course. This summer, I’m piloting an outreach program for elementary school teachers on teaching math through percussive dance. If it goes well, I’m hoping to find a grant or other funding to make it an ongoing program.

About me:
- I have a PhD in Curriculum, Teaching, and Educational Policy with an emphasis on elementary math education
- I studied classical ballet up through college and love all forms of dance
- I do most of my work on my Dell laptop and have a Samsung Galaxy phone

What's your Research Process?
A lot of the time I’m looking for articles for either my own research or to share with my students. Sometimes I know what I’m looking for, but often I’m just trying to keep up with my field or looking for everything by a particular author. I’d love to use the library as my primary search tool, but I don’t find it intuitive enough and it often is missing key resources. I usually find articles in Google Scholar, and I like that I can easily track citations (even my own!) and save things to “my library.”

My challenges:
- I want to use library search tools, but am not confident that they have all the seminal articles in my field
Scenarios

1. Find an image to use in the presentation.
2. Find maps of the region involved in the conflict.
3. Find a primary source relating to the reasons for the war.
4. Find a scholarly article about the war.
5. Find an ebook with at least a chapter on the conflict.
6. Find a dissertation about the war.
7. Find a short chronology of the conflict.
8. Find a government document related to the conflict.
10. Find a summary of the conflict, giving important locations, dates, governments, and persons involved.
Focus on the Problems Easiest to Fix

What’s the *smallest* change we can make *right now* to smooth over this problem for *most* people?
# Normalizing Data

<table>
<thead>
<tr>
<th>Online Research</th>
<th>Participants who used this Category</th>
<th>Total Cards In This Category</th>
<th>Unique cards</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find Articles</td>
<td>22</td>
<td>199</td>
<td>38</td>
<td>0.24</td>
</tr>
<tr>
<td>Databases</td>
<td>21</td>
<td>189</td>
<td>40</td>
<td>0.23</td>
</tr>
<tr>
<td>OneSearch</td>
<td>19</td>
<td>150</td>
<td>37</td>
<td>0.21</td>
</tr>
<tr>
<td>Online Journals</td>
<td>18</td>
<td>142</td>
<td>37</td>
<td>0.21</td>
</tr>
<tr>
<td>Research Assistance</td>
<td>17</td>
<td>142</td>
<td>24</td>
<td>0.35</td>
</tr>
<tr>
<td>Research Guides</td>
<td>16</td>
<td>129</td>
<td>26</td>
<td>0.31</td>
</tr>
<tr>
<td>General</td>
<td>12</td>
<td>114</td>
<td>39</td>
<td>0.24</td>
</tr>
<tr>
<td>Account</td>
<td>12</td>
<td>31</td>
<td>11</td>
<td>0.23</td>
</tr>
</tbody>
</table>
Analyzing and Visualizing: Similarity Matrix
Agreement Dendogram