### User Experience Strategies for Every Library:

Yes, Even Yours!

Jennifer DeJonghe, Tony Hirt, Amy Luedtke & Lacey Mamak

Library Technology Conference 2017

http://bit.ly/UXLTC

#### **Hennepin County** Library

HCL is a public library system serving the city of Minneapolis and surrounding communities:

- forty-one libraries
- online resources
- outreach service.

of a diverse population of 1.2 million of 611 square miles.

Our patrons and users are comprised Hennepin County residents in an area



www.hclib.org

# Metropolitan State University

- 11,505 total students
- 6,220 full-year equivalent (2015–2016)
- 90% undergraduate students
- 43% students of color
- 2% international students
- 32 = average age of students
- 15–83 = age range of students
- 9 librarians + 2 lib administrators



#### Normandale Community College

14,632 credit students

6,837 student full-year equivalents

58% part-time students

38% students of color

74% age 24 or younger

6 librarians (5.6 full-time equivalents)



# User Experience (UX)

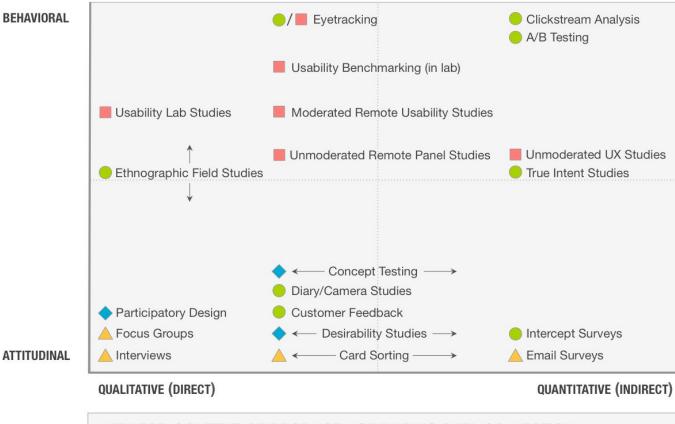
HCL	Metro	Normandale
Usability testing Google analytics User diaries	Usability testing A/B testing Card Sorting User Journey Mapping Google analytics Surveys Focus Groups	Usability testing Google analytics Surveys

Qualitative and Quantitative, often inform each other

### Our UX Work

- ""User experience" encompasses all aspects of the end-user's interaction with the company, its services, and its products."
  - Don Norman and Jakob Nielsen Nielsen Norman Group
- "Most of our users' experience of the library occurs online and through software regardless of whether the user is physically present in the library."
  - Libraries are Software by Cody Hanson

#### A LANDSCAPE OF USER RESEARCH METHODS



 KEY FOR CONTEXT OF PRODUCT USE DURING DATA COLLECTION
 Natural use of product
 □ 2014 Christian Rohrer
 □ Scripted (often lab-based) use of product
 □ Combination / hybrid

## And You?

# **Usability Testing**

- One of a variety of tools and measures to evaluate your website (including analytics)
- Methods vary but at the core is observing users as they use your website
- Tests yield a mix of qualitative and quantitative data

## Why Do Usability Testing?

Test new features or areas in development

 Increase awareness of issues or possible areas of development, as well as to help prioritize known issues or features

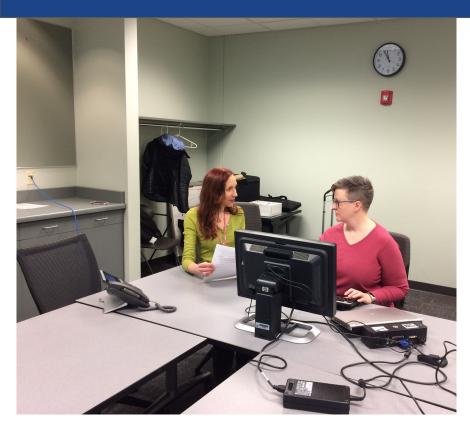
 Understand your website from the perspective of the user

### Monthly (mostly) Testing at HCL

Since May 2015 we have conducted 61 individual tests (3 tests per testing day)

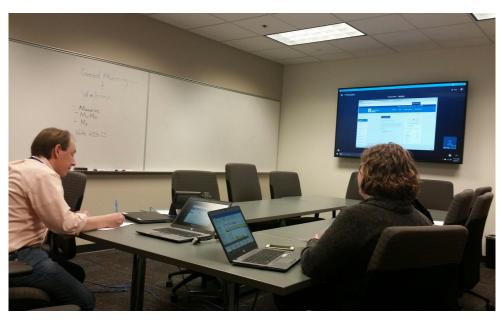
Tests usually last 30-45 minutes and we ask participants to complete 4-5 tasks

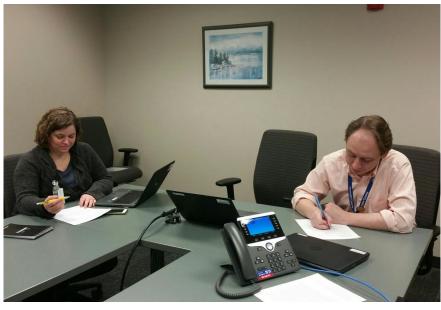
## Usability Testing Room at HCL





### Observation Room at HCL



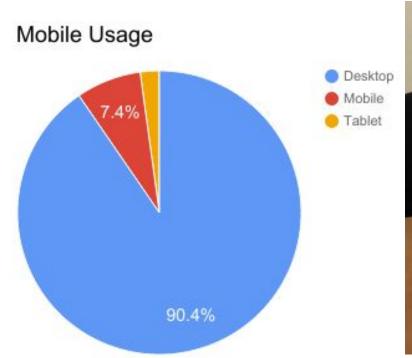


### Communicating Results at HCL

After each round of HCL testing the testing team submits a report that is posted on the staff web. Report includes:

- Participants' perceived task success
- Participants' actual task success
- Participants feedback and comments
- Issues identified by observers
- Recommendations to address usability issues

## Testing for Mobile at Metro





### Flash Usability Testing at Normandale



### Fast and Cheap Usability Testing

#### What We Did

3-5 minute tests1 task per test5-6 user tests per task

High foot-traffic times = 6-7 tests/hour

#### Resources Needed

- 2 people (one to run and observe test, one to recruit)
- Laptop
- Task cards
- Clipboard, pen, and paper
- Large sign and candy

### **Usability Testing Limitations**

#### It's important to keep in mind:

- Usability testing is not indicative of how all users behave, only the particular users that participate
- Usability testing is one important source of user experience data that also includes website analytics, patron comments and questions received through multiple channels, and general usability research and best practices
- Usability testing hows you what is not working, but figuring out how to fix it is another matter

#### User Personas & User Journey Mapping at Metro

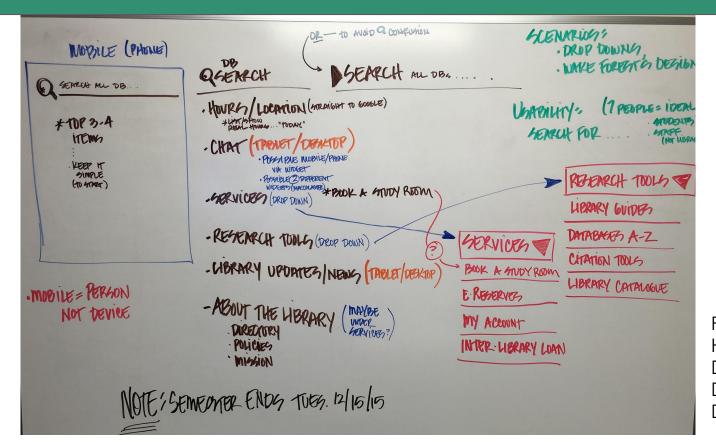
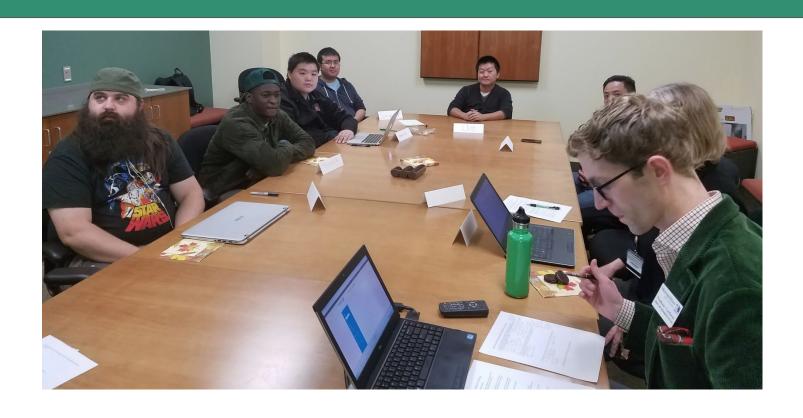


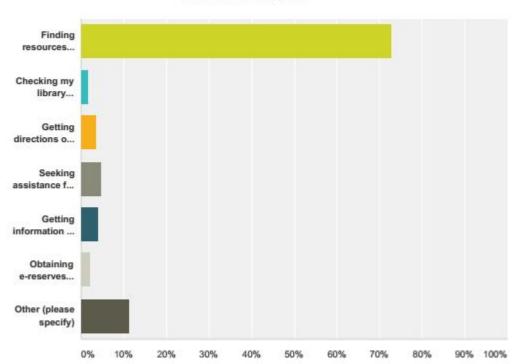
Photo by Rich Harrison Drawing by Diane DeRosier

### Focus Groups and Surveys at Metro



#### Q4 What is the most common reason you use the Library website?

Answered: 250 Skipped: 7



#### Link to survey results

### Card Sorting at Metro



LIBRARY STAFF DIRECTORY FAQ (Frequently Asked Questions) COURSE RESERVES TEENS KNOW BEST Community BOOK CLUB INFORMATION FOR COMMUNITY MEMBERS U OF MN BORROWING CARD HANDOUTS / HELP GUIDES

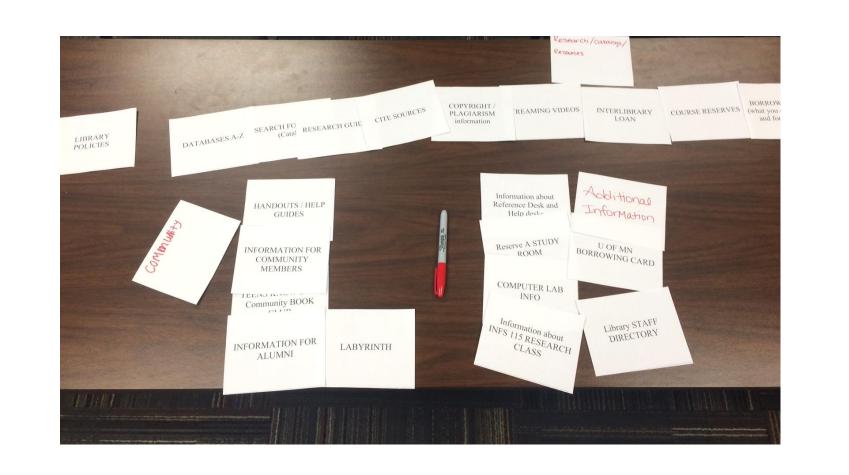


Research

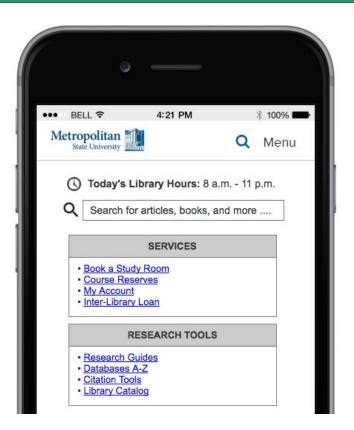
CITE SOURCES

Results link

Participant link



### A/B Testing Wireframes at Metro





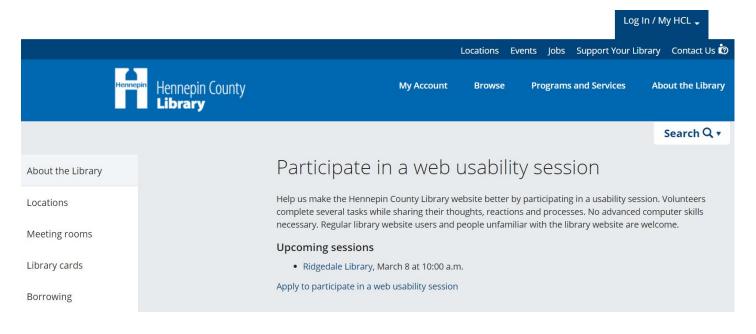
#### Recruitment & Incentives





### Recruitment & Incentives at HCL

HCL recruits volunteers from friends and family, regular volunteers and Library Friends' members, and through public website. Try to have staff backup.



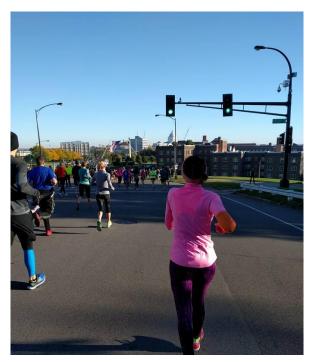
### Implementation Considerations

We don't run right back to our desks to start making

changes after UX work.

Team assesses findings from all participants and other data and changes are—

- discussed
- prioritized
- implemented



### Implementation Considerations

Ability to immediately enact changes may be limited

#### Factors include:

- Resources (staff time, money)
- Technical considerations and limitations
- Governance
- Impact on other library services

### Sharing, Collaborating & Getting Support



### Institutional Involvement

Invite staff to observe usability tests

And remember, IT staff can be your friends



### **Our Core Principles**

Some user testing is better than none.

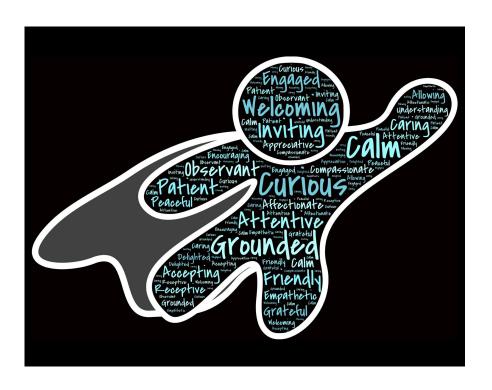
- Commit to small, frequent, iterative changes
- You will learn from every test and get better and better

Our users are **not** broken.



#### "We need to exercise a disciplined empathy."

Sumana Harihareswara "User Experience is a Social Justice Issue" The Code4Lib Journal Issue 28



Feminist authors in particular have often called for changes in the way in which the social and human impact of technology is evaluated. They have stressed the need to base such evaluation on the experience of those who are at the receiving end of the technology.

- Ursula Franklin, The Real World of Technology

## Tools and Resources

Axure (free educational licenses)

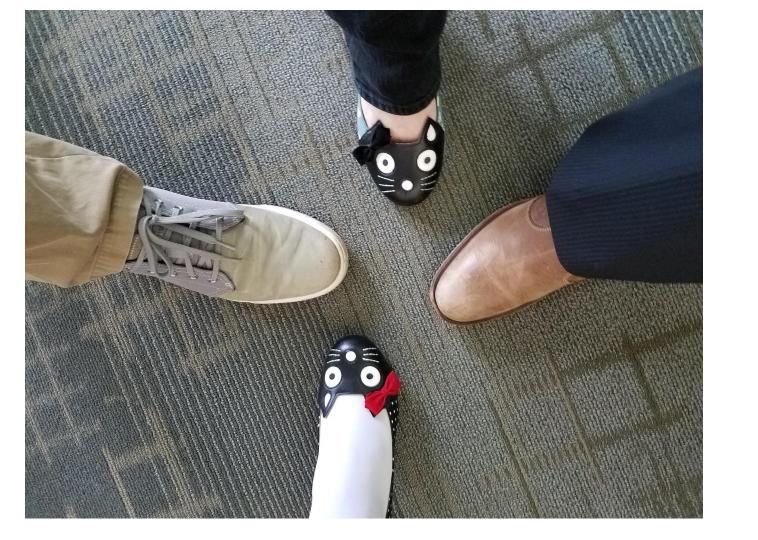
Optimal Workshop

SurveyMonkey

**UXPA MN** (monthly trainings)

IAI (Information Architecture Institute)

LibUX



# Bibliography

- Covert, A. (2014). How to make sense of any mess. CreateSpace.
- Franklin, U. M. (2011). The real world of technology. New York: House of Anansi Press.
- Hanson, C. (2015). Libraries are software. Retrieved from
  - http://codyhanson.com/writing/software.html
- Harihareswara, S. (2015). User experience is a social justice issue. *The Code4Lib Journal*, (28). Retrieved from <a href="http://journal.code4lib.org/articles/10482">http://journal.code4lib.org/articles/10482</a>
- Krug, S. (2010). Rocket surgery made easy: The do-it-yourself guide to finding and fixing usability problems. New Riders.
- Rohrer, C. (2014, October 12). When to use which user-experience research methods. *Nielsen Norman Group*. Retrieved from <a href="https://www.nngroup.com/articles/which-ux-research-methods/">https://www.nngroup.com/articles/which-ux-research-methods/</a>

# Image attributions

Post-It wall: <a href="https://www.flickr.com/photos/dolske/9029594967">https://www.flickr.com/photos/dolske/9029594967</a>

Donuts: <a href="https://pixabay.com/p-1988584/">https://pixabay.com/p-1988584/</a>

Square peg round hole:

https://www.flickr.com/photos/epublicist/3546059144

Hero figure: <a href="https://pixabay.com/en/superhero-human-being-power-alive-450419/">https://pixabay.com/en/superhero-human-being-power-alive-450419/</a>

## Contact us!

Jennifer DeJonghe jennifer.dejonghe@metrostate.edu

Amy Luedtke <u>aluedtke@hclib.org</u>

Tony Hirt <a href="mailto:thirt@hclib.org">thirt@hclib.org</a>

Lacey Mamak <u>lacey.mamak@normandale.edu</u>

We are happy to share scripts, tips, and pool our resources. Access some here: http://bit.ly/UXLTC