

# User Centered Design

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# User-Centered Design

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## Challenges

- Skills
- Many → One
- Ad-hoc process → Participatory design
- Change



## Strategy and Change

- Linear
- Adaptive
- Interpretive



## Strategy and Change

- Linear
- Adaptive
  - Understand the environment
  - Understand capabilities
  - Make connections (adapt)
- Interpretive




## Strategy and Change

- Linear
- Adaptive
- Interpretive
  - Authentic communications
  - Guide participants through shared symbols and concepts




## User Centered Design Initiatives

1. User Centered Design (department)
2. Process
3. Tools
4. Participatory Design (projects)

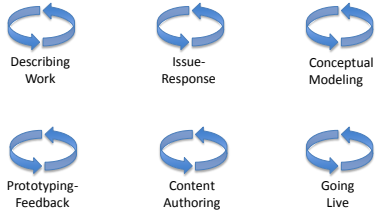


## 1. User Centered Design (department)

- Roles and Responsibilities
  - Design
  - Development
  - Usability Testing
  - Project Management
  - Communication
  - Process




## 2. Process Loops




The diagram illustrates six iterative process loops, each represented by a circular arrow icon:

- Describing Work
- Issue-Response
- Conceptual Modeling
- Prototyping-Feedback
- Content Authoring
- Going Live




## 3. Tools

- Issue management
  - Track issues to closure
  - Manage work across the organization
- Document management
  - Web-based, collaborative, versioning, metadata, search, permissions
  - Iterative work products



## 4. Participatory Design (projects)

- Process includes:
  - Observation
  - Group analysis and brainstorming
- Purpose:
  - Uncover unmet needs
  - Diverse collaboration to conceptualize new offerings



# Usability Testing

Kelley Martin

Library Specialist – University Libraries  
Usability Testing Coordinator and  
Sound Archivist in the Marr Sound  
Archives



## What is Usability?

- Useful
- Efficient
- Effective
- Learnable
- Satisfying
- Accessible

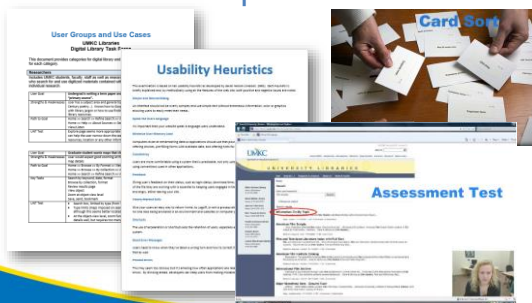


## Why should you test?

- For your patrons
  - Satisfy needs
- Library staff
  - Focus on other issues
- Benefactors
  - Using resources wisely



## Scope of work



## Education

- Demonstrate the importance of testing
  - Make work process open
  - Hosting brown bag or open houses
  - Contributing to the larger library community
- Create a new atmosphere
  - User needs are primary



## Building a team

- Read a lot
- Wrote a charge
- Looked at our staff directory
- Picked my "dream team"
  - Choose from different departments
  - Talked to managers
  - Talked to potential members



## Start the training

- Create a training schedule
  - Use your best guess
- Pick a main text
- Don't get too attached to the schedule
  - It will change
  - It will change again



## Reading Material



Rubin, J., & Chisnell, D. (2008). Handbook of usability testing: How to plan, design, and conduct effective tests Wiley.

Krug, S., (2006). Don't make me think: A common sense approach to web usability. Berkeley, Calif: New Riders.

Krug, S. (2009). Rocket surgery made easy: The do-it-yourself guide to finding and fixing usability. Berkeley, Calif: New Riders.


Nielsen, J. 1. (1999). Designing web usability: The practice of simplicity. Old Tappan: New Riders Publishing.

Nielsen, J. (1994). Usability engineering. San Diego: Morgan Kaufmann.


## Participatory Design with the UMKC Conservatory

Nara Newcomer  
Head, Music/Media Library  
UMKC University Libraries



## Today's outline

- Background: Downtown Campus for the Arts
- Preliminary work: plan your ideal library
- Photo elicitation study



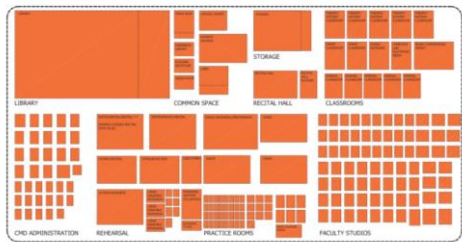

## BACKGROUND: Downtown Campus for the Arts





- 2011: "Big 5" idea for a Greater Kansas City
- 2012: Feasibility study
- 2013: \$20 million challenge grant from Muriel McBrien Kauffman Foundation
- 2014: Donors pledge real estate for site



### CONSERVATORY OF MUSIC AND DANCE



University of Missouri, Kansas City Downtown Arts Campus Programming and Planning Study



## User-Centered Design

- To plan for Downtown Campus
- To improve current spaces

“Envision a library space that meets the needs and dreams of Conservatory students and faculty.”



## PRELIMINARY WORK: Plan your ideal library



## Preliminary work (Nov. 2013)

- 10 Conservatory students (8 grad; 2 undergrad)
- Written prompt:  
**You're planning the ideal library for YOU. Describe it. What is it like? What does it have?**
- 106 ideas!



## (selected) Major Themes

- Spaces
- Collections
- Technology



## Spaces: individual, group, and soundproof

- “A “jukebox” ...to be played where students are just hanging out”
- “Study rooms ...closed off and semi-sound proof. Some can be fitted with listening stations for AV.”



## Collections...

- “Expanded Score Library: Even more important than new, nifty gadgets, our library should direct more resources towards the acquisition of new scores.”



## Technology...

- Macs and PCs
- Specialized music software, MIDI keyboards
- Lab assistants
- Large screens, printing, and scanners, for creating and studying music scores



## PHOTO ELICITATION STUDY



## Photo Elicitation Study

- 6 subjects
- 20 specified photographs of places, items, or situations in their daily life
- Follow-up, video recorded interview
- Interviews transcribed, coded, co-viewed



## IRB (Institutional Review Board)

- Expedited/Full Board Application
- 37 pages + 5 attachments
- Approval delay meant study postponed to Fall 2014



## Recruiting Subjects

- Flyers
- Email
- Social media
- Word of mouth



## Gathering data

- Subjects take 20 photos based on prompts
- Follow-up interview with researcher



Transcription, co-viewing, coding



UMKC

## Questions?

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