There Are No Right or Wrong Answers: Improving the User Experience One Usability Test at a Time

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There are No Right or Wrong Answers: Improving the User Experience One Usability Test at a Time

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Overview

- Introductions
- Defining user experience
- Task based usability
- Planning the Tests
- Conducting the Tests
- Assessing the Results
What would you like to know about the way your users interact with the library?
“User experience (UX) focuses on having a deep understanding of users, what they need, what they value, their abilities, and also their limitations.”

• **Useful**: Content should be original and fulfill a need
• **Usable**: Site must be easy to use
• **Desirable**: Image, identity, brand, and other design elements are used to evoke emotion and appreciation
• **Findable**: Content needs to be navigable and locatable
• **Accessible**: Content needs to be accessible to people with disabilities
• **Credible**: Users must trust and believe what you tell them

Task-based usability

- Used to identify how a user can accomplish their goals (tasks) on a website, for example:
  - Find an article
  - Print a chapter of an ebook
  - Locate the hours for a library branch
- Task based usability tells us about:
  - What content people expect and where they expect to find it
  - If the organization/structure makes sense to the user
- 5 users find 80% of problems

What do librarians like about their favorite academic ebook platform?
But what do your users think of your library’s ebooks?
Search
Planning Usability Testing

- Good planning = good data!
- What questions are you trying to answer?
- Quick or systematic?
- Who is the target audience for this product or service?
  - How will you recruit participants?
  - What incentives can you offer?
- Design a test that includes tasks that are realistic to your users
- Script it
- Walkthrough and pilot test
  - Practice with a colleague to test the tools, ensure the instructions for each task are clear, and estimate the time needed for each test
Project Plan Template

- Recruit participants
- Plan test
- Schedule and train observers
- Gather materials
- Setup test environment
- Walkthrough and pilot test
- Usability tests
- Data analysis

2. Get access to ebooks
   a. Publisher search in OASIS< limited to 2016, ebooks, filter in library holdings for ebooks,
   b. RANDBETWEEN formula in Excel once list available
   c. Trials
      i. Starting Feb 20
   d. Buy ebooks?
3. Where to test
   a. Software--Zoom
   b. Room - empty office near Acquisitions
   c. Scheduling testing - use LibCal
      i. http://colorado.libcal.com/calendar/ebooks/
      ii. Need to decide on testing times - at least one of us present
4. Get Amazon gift cards for incentives
   a. Need to fill out a procurement form, but need to go thru IRB first
   b. Submitted form to [redacted] 2/8; follow up 2/15
5. Prep tests
   a. Keywords for searching,
6. Prep spreadsheets for collecting data?
   a. Use Documents and folders? Any benefits to using spreadsheets?
7. Set up buffbulletins - contact [redacted]
Planning: eBook Testing at CU Boulder

● Research Questions:
  ○ Which ebook features/functionality do students prefer?
  ○ What expectations do users have about ebooks?

● Recruitment:
  ○ IRB review (human subjects require approval)
  ○ Students (grad and undergrad) from a variety of disciplines
  ○ Posted study in online campus newsletter and social media
  ○ $10 Amazon gift card incentive

● Platforms:
  ○ Ebook Central, EBSCO eBooks, publisher platforms
  ○ Setup trials or purchased content
We are studying ebooks to understand how students use them and what they like or dislike about them. We are going to show you three versions of one book. We’re going to ask you to complete a few tasks using these books. This isn’t a test of your knowledge, and there are no right or wrong answers. You can choose to stop at any time. We’re going to ask you to think aloud while you’re completing the tasks, and one of us will be taking notes and we will be recording the audio and computer screen. Do you have any questions?
Design Realistic Task-based Scenarios

- You need to cite this book for your paper. How would you use this page to do that?
- Your professor told you to start reading at chapter 2. It starts on page 17. Starting from this page, how would you do that?
- As you’re reading, you want to take notes for your class. Would you do that here in the ebook? If so, how?
Conducting the Tests

- **Testing environment**
  - Dedicated computer, quiet room
  - Test equipment, gather materials (incentives, forms)

- **Recording audio and screen**
  - Test microphone

- **Taking notes**
  - paper/online form
  - transcription/highlights
  - during/after test

- **Leading and following the user**
  - Practice active listening
  - Stick to the script
  - Think-aloud method--remind users to keep talking
  - Estimate time needed to complete each task and guide accordingly
Conducting Example: eBook Testing at CU Boulder

- Tools
  - Google Sheets and LibCal for scheduling
  - Zoom for screen and audio recording
  - Google Drive for collaboration and file sharing
  - Google Forms for consistent tracking of notes and quotes.
- Consent forms and incentives
- Task-based activities
  - Navigate, search, print, download, save, cite
  - Think-aloud-method
- Rank platforms by preference
  - Users sorted screenshots of each platform into order based on preference
What are Subjects & Categories?
<table>
<thead>
<tr>
<th>Q</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>U</th>
<th>V</th>
<th>X</th>
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<tbody>
<tr>
<td>You need to cite this publisher, like: \text{&quot;this guy right here&quot;} (\text{mean})</td>
<td>click on this \text{tab}</td>
<td>TOC, click on chapter 2, the different s TOC</td>
<td>looking for \text{&quot;search with citation tool&quot;}</td>
<td>If I were to go to chapter 3, I'd likely use the TOC, because...</td>
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<td>I don't know what they are.</td>
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Assessing Your Results

- Were tasks successfully completed?
  - What problems did users experience?
  - Include positive findings and usability issues
- What can be generalized?
  - Group results by broad categories: Most (>50%) - Some (50%-25%) - Few (25%+)
- How can you solve the problems?
- What needs further testing?
Assessing Example: eBook Testing at CU Boulder

- Task completion
  - Were students able to find various features and tools, such as printing, downloading, and citation generation?
  - How did students complete the tasks? What pathways did they take?

- Looked for themes and trends
  - Few, Some and Most
“You need to find information on __ ...”

<table>
<thead>
<tr>
<th>Most Students</th>
<th>Some Students</th>
<th>Few Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Tried Ctrl+f first</td>
<td>● Started with the index or table of contents rather than searching</td>
<td>● Looked in other parts of the book (Chapter titles, preface, etc) first</td>
</tr>
<tr>
<td>● Were able to differentiate between search ebook and search the whole site</td>
<td>● Did not notice tools for searching within the eBook (i.e., search within, find)</td>
<td></td>
</tr>
<tr>
<td>● Would probably benefit from autocorrect or “did you mean...?”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Outcomes: eBook Testing at CU Boulder

- Created a list of features that students like/want/need
- Created a list of frequently encountered usability issues
- Learned about other tools that students use to cite/find full-text
- Gained insight into student search behavior (use of TOC, index)
- Sent thank you notes to vendors who provided trial access
- Shared positive feedback and recommendations for improvement with many vendors
- Identified areas for further testing
  - Revised test with students
  - Faculty
How can librarians use task-based usability testing?

- Evaluate new or trial resources
- Inform renewal decisions
- Evaluate new tools such as an ILS, link resolver, proxy server, etc.
- Identify pain points with e-resources and create instructional materials to address confusion/improve user success
- Selecting a platform when a product is offered by multiple vendors
- Evaluate how users interact with your physical library and collections
Test, evaluate, test again

- Testing is an iterative process
  - Platforms and websites change
  - Users change
- Focus on what you can change
Want to learn more?

- Usability.gov
- Reporting Usability Test Results - https://www.usability.gov/how-to-and-tools/methods/reporting-usability-test-results.html
Questions? Thank you!

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