Website Usability Testing with Custom Tools in a Community College Environment

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BACKGROUND

- How to modify the library’s webpage according to users needs?
- What type of information is needed to support updates?
- Why this is not a systematic effort?
- Challenges:
  - Librarians have to step up and lead this effort
  - Funding is needed
Definition

- Usability Test is a way to evaluate a service with your target-market customers. Focusing on user experience (UX) testing: measuring library users’ (faculty and students) interactions with the library webpage.

- Usability testing involves actual target users and matches real-world experiences (Prototypes).
Process

- Requested a PSC-CUNY Grant and it was approved on September 2016.
- Redistributed the funds according to a plan and establish an incentive to recruit participants.
- Training course for investigators involved in Social/Behavioral Research with human subjects.
- An exemption granted by the University Integrated Institutional Review Board during Fall/2016. Two reasons:
  - To be able to work with Faculty and students
  - To be able to publish our results
Process (cont.)

- It is an iterative approach in which the prototypes are redesigned constantly.
- A decision made to move all our webpages to CMS-LibGuides.
- Establishing the different recruitment approaches.
Setting up the tasks

- Review our website
- Made a list of the different library services and collections available
- Listed the main areas we wanted to test
- Elaborated the questions base on the prototypes designed
Data gathering at scale

▶ Sample size: 225 students
▶ Automate the testing
▶ We put a lot of effort into building our own tools
LibGuides CMS

Pros
- Groups
- Group-level JavaScript and CSS
- Ease of building prototypes

Cons
- After a while, all LibGuides start to look the same
Welcome to our usability test!

- Click on the buttons below to try the activities.
- In the left-hand window, you will be given instructions to complete your task.
- In the right-hand window you can attempt to complete your activity.
- Stop when you reach the page that says "Activity Completed", or when you feel that you have completed the task.
- Close the exercise window to move on to the next exercise.

Activity #1  Try it now!
Activity #2  Try it now!
Activity #3  Try it now!
Activity #4  Try it now!
Activity #5  Try it now!
Congratulations! Activity complete!
Close this tab to move on to the next one.
This heatmap is based on a sample of your total visitors. [Learn more.]
• http://kbcc.cuny.libguides.com/prototype1?cohort=2
• http://kbcc.cuny.libguides.com/prototype1?cohort=3
• http://kbcc.cuny.libguides.com/prototype1?cohort=4
Fail!
What we learned

- Test more rigorously
- Keep it simple
- Rely less on others’ code
How will we track the data now?
Congratulations! Activity complete! Close this tab to move on to the next one.
http://usability.b7jl.org/?prototype=9&element=menu_periodicals
http://usability.b7jl.org/?prototype=10&element=widget_catalog
http://usability.b7jl.org/?prototype=12&element=box_calendar_hours
Flask
web development,
one drop at a time
API?
Web application?
Microservice!
Data quality
Reliability
Hotjar visuals
$12
Existing approaches and tools did not meet our needs

We built our own tools to fill the gap
github.com/MarkEEaton/usability-python
github.com/MarkEEaton/usability-testing-interface
Menus are easier for users to navigate in a website.
Users have a tendency to prefer the use of box type when given the option.
Check to see if the book The Goldfinch is available to borrow for a four week period (15)

Find articles that are for or against wind energy (8)

Open a new interlibrary loan account (12)

Request a book from another CUNY campus (12)

PROTOTYPE No. 12 - User Strategy

Check to see if the book The Goldfinch is available to borrow for a four week period (15)

Find articles that are for or against wind energy (8)

Open a new interlibrary loan account (12)

Request a book from another CUNY campus (12)

PROTOTYPE No. 12 - Answers

Widgets are an important point of access to information resources
Conclusions

- Usability testing should be an institutionalized and ongoing process.
- Testing is a basic support for website design
- Trouble finding tools for UX that meet our needs
- Difficulty communicating with IT Department and selling the idea.
- Time consuming process.
THANK YOU

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