Appointment Booking UX Study - Card Sort with Users

Summary

Rationale

The Library’s Web Working Group has been tasked with creating a single webpage that displays all of the appointment-based services that the Library offers (27 in total). The UX Team conducted facilitated card sorts with users and unmediated card sorts with library staff (via an emailed link) in October 2018 to help us determine the labelling and groupings of our services. The following is a summary of findings from the card sort with users.

Research Questions

- How do users categorize the library’s different appointment-based services?
- What do users know about library appointments? What can they infer based on how we define our services?

Methods

- Facilitated Open Card Sort
  - Participants were recruited via a Library website advertisement
  - Using Optimal Sort, participants were presented with a total of 27 cards (see Appendix A). Each card contained a different library appointment.
  - Participants were asked to group the cards into larger categories and then label those categories. If users did not understand a label, the researchers read the participant a short definition of the service provided by library staff.
  - As the participants completed the activity, they were asked to talk aloud and answer any follow up or clarification questions posed by the researchers.
  - Each session was voice and screen recorded and then transcribed for analysis.
- *See Appendix B for a visual representation of participants card pairings

Participants

- 12 students (3 graduate students, 9 undergraduate students) from various disciplines and years participated.
  - Most participants considered themselves frequent users of the library, but they did not necessarily use appointment services. The most common service mentioned was Writing Services.
  - When researchers asked participants if they had used a library service before they often spoke about going to workshops, study groups, and using group study rooms.
Results

How do users categorize library appointments?

● Participants created an average of 6 categories. The smallest number of categories was 4, and the largest was 9.

● In most sessions, participants indicated that “too many” cards in one category would be overwhelming. Although “too many” was an undefined number, participants often subdivided their larger categories into “more manageable” groups.
  ○ Participant A: “If I’m a student who is not creating charts or graphs and that’s in a main category...I might feel like I need to incorporate that into my assignment and that is really stressful.”

● Most participants found this exercise difficult, and were not completely satisfied with their final product.

● Participants associated the word “academic” with services offered by the Writing and Learning units and grouped these services into similar categories. Time Management, Writing, Studying & Exam Prep seemed to be the most straightforward cards for participants to sort.

● Most participants considered the “academic” services (as defined above) as the “core” or “foundational” skills required for completing undergraduate assignments. These core services were grouped together and then contrasted by services for more advanced research skills like Data Analysis and Data Visualization. One participant labelled this category “Deeper Understanding”.
  ○ Participant A: “What undergrad is going to conduct a research... [project]? 90% of them are not going to use the research stuff, for a regular project they’re either going to use some technical help or they’re going to use some writing help.”
  ○ Participant B: “I think Academic Support is pretty good because when I go to the library website that is where I go when I try to look for these kind of things.”
   Researcher: “You have the academic category and you have the research category, what is the difference in your mind between doing research and doing academic work?”
   Participant B: “I think because for research there is a lot of different things you need to do compared to just writing like a general paper.”

● Other participants divided the cards by perceived target audience(s) of the service. They created categories for students, graduate students and/or instructors/professors.
  ○ One participant grouped cards for “Academic & Instructor Support” into one category “… With the hope that instructors would also be interested in promoting the services under this category for their students.”
Most participants created a category that was related to the concept of sharing, publishing, communicating your results, or “getting work out there.”

Words that participants used:
- “Data”
- “Research”
- “Support”
- “Resources”
- *Not surprisingly, “Data”, “Research” and “Support” also appear frequently on the cards users were asked to sort.

Words that participants rarely used or did not use:
- “Learning” (2 participants)
- “Faculty” or “Professors”
- “Scholars” or “Scholarship”

What do users know about library appointments? What can they infer based on how we define our services?

The idea of “appointment” was lost on many of our participants. They made little distinction between appointments, which library staff tend to think of as one-on-one consultations, and workshops, SLGs, or room bookings. These are all services the library offers but not necessarily as appointments.

Undergraduate students understand research as coursework which is a different lens than graduate students.
- Undergraduates think of “research” as finding resources for their assignments.
- Several undergrads thought “data” meant articles. This makes sense when we think about our “database list” which contain mostly written articles.
- Grads had a much better grasp on the process of conducting a research project.

Most users did not understand the following cards:

- Online Exhibition was the most confusing label for students.
  - Participant A: “I don’t know what that means. What’s a digital exhibit? I don’t know.”
  - Participant B: “Is it like how they do the virtual tours on campus? Is it kind of like that?”
  - Participant C: “The only thing I can think of is like something featured like OA Week, but different themes in the library, featuring those on the website? Or something?”
  - Participant D: “Kind of like ResearchGate but different?”

- Media Studio
  - A few participants interpreted the Media Studio as a “space booking” service, similar to Group Study Rooms, rather than an appointment with a library staff.
We recognize that as a brand new service the Media Studio is not a term or space our users are familiar with yet. This most likely contributed to their lack of understanding.

- Depositing Into the Institutional Repository
  - Our undergraduate participants did not understand the term institutional repository.
  - Graduates and some of our undergraduate participants were more likely to recognize the term “The Atrium” than “Institutional Repository.”

- Collecting Data from the Web
  - Interpreted as finding articles on the internet.

- Open Educational Resources
  - Confused with OpenEd or continuing and distance education.

- Survey Support
  - Several participants thought this was about them participating in a library survey.

- Research Consultations vs. Research Project Support
  - Students could not articulate the difference between these two services.

- Majority of R&S data services
  - In general, our undergraduate participants did not have a good understanding of the research process.
    - They did not understand the nuance between all of the data-related services.
    - However, they understood that most of these services were for more advanced researchers.
  - Most participants grouped data services together simply because they contained the word “data”.

**Preliminary Recommendations**

Using the data from this card sort with users and the data collected from our staff card sort, the Web Working Group will attempt to create a single page that contains all of the library’s appointments. Below is the terminology and principles we recommend:

- Use the term Atrium
- Brief and clear definitions of our services need to be present on our webpage. Those definitions need to contain basic information like length of appointment, what will happen, what to bring, what software will be used, etc.
- Be clear in our language - if we are using Omeka, say Omeka.
- Use specific terms that people are familiar with - instead of a vague title like “Collecting Data from the Web,” use “Web Scraping.”
- Be explicit about what we mean by “research”. Undergraduates interpret this as finding articles.
- Consider merging labels for certain appointments. For example, do all data appointments need to be separated if users do not understand the difference between them?
● Define what an “appointment” entails (1-on-1 consultations, staff supervised space, etc.)
● Use terms that are relevant to undergrads when labeling appointments that are overwhelmingly used by them:
  ○ Academic
  ○ Assignments
  ○ Coursework
  ○ Exams

Appendix A - Cards

The following are the “cards”, representing all of the library’s appointments, that participants were asked to sort into larger categories. Participants were then asked to label the larger categories they created.

1. Academic Presentations
2. Accessibility Support
3. Assessing Research Impact
4. Author Rights and Publishing
5. Collecting Data from the Web
6. Data Cleaning and Preparation
7. Data Preservation and Sharing
8. Data Visualization
9. Depositing in the Institutional Repository
10. Digital Project Support
11. English Language Learning
12. Finding Data
13. Finding Geospatial Data
14. Geospatial Analysis
15. Geospatial Visualization
16. Media Studio
17. Online Exhibitions
18. Open Access Support
19. Open Educational Resources
20. Research Consultations
21. Research Data Management
22. Research Project Support
23. Statistical Analysis
24. Studying & Exam Preparation
25. Survey Support
26. Time Management
27. Writing
Appendix B - Similarity Matrix

The following similarity matrix shows the percentage of participants who grouped a pair of cards together. It displays the cards participants most often paired together in the same group. The darker the blue where two cards intersect, the more often they were paired together. For example, 100% of participants grouped Studying & Exam Preparation and Time Management into the same broader category. 33% of participants grouped Media Studio and Online Exhibitions into the same category.

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