

LDP Update 2: Usability Services

June 16, 2005

Teal Anderson presented to the 14 library staff members attending on the topic of LDP usability services. Throughout her talk, she referred to a web page with links to the various projects and external sites that illustrate the kind of work she is doing:

http://ldp.library.jhu.edu/services/usability/documents/ldp_update2

I. Usability Services

Teal accessed the new Library Digital Programs **Usability Services portal**, which presents a description of usability methods, such as focus groups, task-based testing and link-naming, and documents, such as presentations from conferences. She highlighted the **forum**, through which she encouraged library staff to post questions or comments.

Teal discussed the scope of **ARTstor** usability scenario-based testing which was conducted in Fall 2003 at JHU, James Madison University, Princeton University, and Williams College with faculty, students, and museum staff. She said that 30 sessions were conducted, and that some important changes had been made to the software as a result of recommendations deriving from the data gathered during the study; ARTstor determined that other changes suggested from the data would be resolved in later versions of its service.

Focus groups regarding the Engineering Program for Professionals (**EPP**) web site were conducted in Fall 2004 with faculty and student participants. Teal explained that **focus groups** are groups of 6-10 people asked to speak about desirable content for and qualities of the site, as well as what they consider the most important information and features they have used. She spoke about the benefit of focus groups being the manner in which participant feedback generates additional comments from others in the group that might not be revealed in an interview with an individual. Focus groups are conducted when organizations wish to redesign an existing resource or create a new one.

Card-sorting was another usability testing method conducted for EPP, but only with faculty and staff and not students thus far. Card-sorting is the use of cards with link names that test participants are asked to sort by category. While the results of such testing should not be considered a mandate if they interfere with logical information design practices, card-sorting gives a sense of users' organizational conceptions.

Teal then spoke about her current work on the Collaborative Digitization Program (**CDP**) with task-based testing to be conducted next week to see how users interact with the *Colorado's Historic Newspaper Collection* online.

Sayeed mentioned that both the ARTstor and CDP activities were part of an LDP usability consulting service that not only generates income, but also helps us identify and illuminate user needs and preferences from our own population.

Questions arose regarding the **ideal number of people to test using the various methods**, and Teal replied that between 5 and 30 people was ideal, with the goal of striving as best one can to achieve an appropriately diverse cohort; for example, a particular test might best be composed of faculty, undergrad and grad students from arts, sciences and engineering, novice/familiar users of the resource being tested (or whatever other demographic variables are of interest.)

Teal stressed the importance of **iterative testing**; if changes are made based on usability study data, then the changes must be tested to ensure that they have resolved the difficulties users encountered in a prior iteration.

Teal spoke about **usability data gathering for task-based testing**. A participant is asked to “think aloud” so that notetaker(s) present can record their path through a web resource; simultaneously, the pages to which a user links are also recorded by note-takers; the Libraries have not yet used screen-capturing software to record the paths users take through sites.

In terms of reporting to clients regarding **findings based on usability data**, Teal said that she either uses numbers or percentages of participants affected, or phrases such as “Some participants had trouble...” or “One participant attempted to...” within the analysis narratives.

The **time frame for planning and conducting a usability test** is generally about two months of intermittent work, taking into account time for IRB approval to be made and participants to be recruited.

Testing **off-site** has been done for EPP, while “remote” testing has been conducted using a variety of online surveys, including one sent to medieval scholars internationally. While there are ways to conduct usability testing remotely, this has not yet been done here, in part because in-person testing is still considered the best approach. Issues to consider with remote testing are that often software needs to be installed on people’s local machines and a means in which to record participant comments/actions must be provided (such as teleconferencing and/or screen capturing). However, Judy Smith in ELP has conducted chat-based focus group testing. Brenda mentioned that once better card-sorting software is secured by the Libraries, she hopes that EPP students throughout the Mid-Atlantic can participate.

II. Usability Consultation

Teal spoke about the **Institutional Review Board**, saying that clearance must be secured from the board for nearly all usability testing the Libraries conduct, despite the fact that no drugs or other testing representing high risks to participants is done.

For the Libraries, Teal conducted focus groups in conjunction with the **Metasearch Task Force** this past winter consisting of participants from APL, Homewood, Peabody, and SAIS; the groups were presented a demonstration of each of two products and then asked questions about the service and additional features or functions desired.

Over the past five years, Teal has supported the Web Steering Committee's efforts through a range of methods including focus groups, card-sorting, **link-naming** and **online surveys**. Link-naming comprises asking a user to click on a link and determine what name they would assign the page based on its content. **Online surveys** gather similar information as focus groups but are done individually from wherever a person is accessing the survey. **Horizon** was another library service tested for usability by Teal in conjunction with the Libraries; task-based testing was conducted at Peabody, SAIS, East Baltimore, and Homewood.

Teal then spoke about the **usability guidelines for the Sheridan Libraries** she is in the process of writing. The guidelines will encompass the various methods for conducting usability studies and will be made available online. Stay tuned.

III. Accessibility

Teal spoke about the **JHU Web Accessibility Committee** on which she and Cynthia, and now Mike Creech, serve. Peggy Hayeslip, the Director of Disability Services, heads the committee. The goal of the committee is to raise awareness of accessibility issues relating to web sites that JHU staff members manage.

For instance, the committee surveyed 125 JHU web pages (homepages and one subpage linking from the homepage) by running them through "Bobby" which is a service (now superseded by "WebXACT") to check site compliance against **W3C and Section 508** guidelines. The **primary problem** generally throughout the various sites surveyed is that alt text is not used to describe images, including navigation buttons, meaning that screen readers cannot effectively communicate their content.

Teal mentioned that the committee has developed an **informational Web site on accessibility for the use of JHU users (<http://webaccessibility.jhu.edu>)**, and continues to hold conferences and workshops regarding accessibility.

Sayed spoke about the importance of accessibility to the **diversity** goals of the Libraries, and said that **Teal and Cynthia**, along with two other members of the Web Accessibility Committee, had **received 2005 Diversity Recognition Awards** from the University.

IV. Wrap-Up

With the Digital Knowledge Center primarily engaged in a research and development effort, Sayeed stated that Teal's work with the DKC has ensured that usability principles both clarify a prioritization based on user interests in digital libraries and guide the development of tools such as Gamera. As the need for production services grows, Teal's work is shifting away from R&D toward usability consulting, testing and outreach. He commended Teal for her ability to diplomatically present potentially controversial usability findings to the Libraries and clients.

[Notes provided by Jacquie Gourley.]