Usability of the digital library: An evaluation model

Judy Jeng
San Jose State University, jeng.judy@gmail.com

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ALA providing opportunities to volunteer at Annual Conference in New Orleans

Librarians and library staff attending the ALA Annual Conference in New Orleans this June will have the opportunity to participate in daylong community service efforts to help rebuild the city. As part of ALA's ongoing efforts to help the libraries and communities in the Gulf Coast, conference attendees will be able to volunteer for a full-day community service project on Friday, June 23 or Tuesday, June 27. Conference goers will be able to choose from activities to help the New Orleans Public Library, Orleans Parish School District, or other community rebuilding efforts.

Those wishing to volunteer should register at www.ala.org/annual (listed in the “Special Registration Section” of the registration form). The registration fee is $10, which includes transportation to and from the community project, lunch, and a “Libraries Build Communities” t-shirt.

PALINET celebrates 70 years

PALINET, the member-owned and governed regional library network serving the Mid-Atlantic region, celebrated its 70th birthday on January 11, 2006. The organization was established in 1936 out of a need for local and, later, statewide union cataloging. Today PALINET represents more than 600 libraries, information centers, museums, and archives and continues to promote library cooperation and resource sharing. Coinciding with this milestone is the culmination of an ongoing branding project to update PALINET’s appearance, including a new, more contemporary logo.

Northeastern offers e-learning tool on new media

Librarians, students, and communication and journalism professors at Northeastern University have collaborated to create “Public/Private Intersections in New Media,” an e-learning tool focused on new media. The project, which is online at www.lib.neu.edu/newmedia, is intended to introduce students to key concepts in new media and to address a host of new media issues, such as the collapse of distinctions between media forms and the societal effects of new technologies (for example, blogs, chat rooms, and TiVo). The Web site includes a presentation on key concepts in new media, essays by contributing scholars, and suggestions for further reading.

NYU hosts Franklin exhibition

In honor of the 300th anniversary of the birth of Benjamin Franklin, New York University’s (NYU) College of Arts and Sciences, in conjunction with its Division of Libraries, is hosting an exhibition entitled, “Images of Benjamin Franklin: As Seen by Himself and Others.” The exhibit, which opened February 2, will be on display in the Mamdouha S. Bobst Gallery in NYU’s Bobst Library through December 2006. It features more than 150 items from the collection of Stuart Karu and uses documents, books, engravings, artifacts, and fine art pieces to tell the story of Franklin, as citizen, politician, founding father, diplomat, and media mogul. A conference coinciding with the launch of the exhibit was held February 2 and 3.

ProQuest analysis of dissertations and theses shows business research on top

The top ten dissertations purchased in 2004 from ProQuest Dissertations and Theses (PQDT) databases, which contain more than 1.8 million titles, were related to business. The best-selling dissertation of 2004 was “Customer service leadership skills and customer relationship management,” by Vincent James DeFazio.

PQDT’s dissertation database includes bibliographic citations for materials ranging from the first U.S. dissertation accepted in 1861 to those accepted as recently as last semester. The full text of more than 1 million titles is also available in paper and microform formats; the Library of Congress has designated the PQDT digital collection as the nation’s official off-site repository for digital dissertations and theses. ProQuest
also makes portions of the PQDT database available for purchase through Amazon.com.

**ACRL announces Student Paper Awards for Baltimore conference**

ACRL is offering Student Paper Awards for its 13th National Conference, “Sailing into the Future—Charting Our Destiny,” to be held in Baltimore, March 29–April 1, 2007. Two Student Paper Awards of complimentary conference registration and a $500 stipend are available. Student Paper Awards will be awarded for research papers authored by library school students. Papers may report the results of completed research, describe research in progress, or present a position on a compelling problem or issue in one or more of the conference tracks. Papers should be 1,800 to 2,500 words and should be scholarly, well organized, clearly written, and rigorously argued. Accepted papers will be published on the Web and as part of the print conference proceedings, and will be presented during the Baltimore conference.

Full text of the Call for Participation is available online at www.acrl.org/baltimore (click “Proposals”). Proposals must be submitted by May 10, 2006, via the online proposal form (www.eshow2000.com/acrl/2007/program_proposal_submission.cfm). Questions should be directed to msutton@ala.org, (312) 280-2522.

**Swets to distribute ScholarlyStats**

Swets Information Services has been appointed as the first Global Channel Partner for MPS Technologies’ ScholarlyStats. ScholarlyStats is a new service that enables libraries to outsource the administration of their usage statistics. As a distributor of this service, SwetsWise usage statistics are now included in the ScholarlyStats service, and further integration between the two services are being explored. MPS developed ScholarlyStats with the help of more than 50 libraries during the beta phase in 2005. The service officially launched in January.

**Blackwell adds 59 journal titles**

Blackwell Book Publishing has added 59 new journal titles to its list in 2006 and formed 39 new partnerships. The company now partners with 665 societies and will publish 805 medical, academic, scientific, and professional journal titles. Blackwell delivers comprehensive services to societies, including online publication, marketing and public relations, library sales and support, customer service and distribution, and membership management.

**NCSU unveils Endeca online catalog**

North Carolina State University (NCSU) is the first library to deploy a new online catalog, Endeca ProFind. Through its advanced search and guided navigation capabilities, the new platform provides the speed and flexibility of popular online search engines, while capitalizing on existing catalog records. After submitting a search, users are presented with a list of matching results ranked by relevance and are offered several navigation refinement options based on characteristics of the materials in the results set. Navigation options include topic, author, genre, language, material type, format, and availability. Catalog users can also browse the entire collection by subject without entering a search. The new catalog allows users to browse their results along predefined facets with context-specific values automatically generated from the results set itself. The catalog is available for searching at http://www.lib.ncsu.edu/catalog/.

**UNC Web site focuses on southern Jewish history**

The University of North Carolina-Chapel Hill (UNC-CH) has created the Web site, “A Portion of the People: Three Hundred Years of Jewish Life,” which chronicles the story of southern Jewish settlers and their descendants from the late 1600s through the 21st century. The site feature portraits, maps, historical documents, ritual books, and objects from the early period through the present. Visitors can listen to interviews featuring voices from the past and read transcripts. “A Portion of the People” offers material from a recent traveling exhibit undertaken by the McKissick Museum at the University of South Carolina. The site is a result of a collaboration among representatives from UNC’s Davis Library, the Carolina Center for Jewish Studies, the McKis-
Summary report from the 2004 ACRL Doctoral Dissertation Fellowship recipient

Ed. note: Each year ACRL awards the Doctoral Dissertation Fellowship. Recipients are awarded $1,500 cash and a citation donated by Thomson Scientific. Below is a synopsis of the completed dissertation of Judy Jeng, the 2004 fellowship winner.

Usability of the Digital Library: An Evaluation Model (dissertation, Rutgers University)

The main research goal of this dissertation is to develop a model and a suite of instruments to evaluate the usability of academic digital libraries. Empirical research in usability of digital libraries is lean. Blandford and Buchanan1 call for further work on methods for analyzing usability, including an understanding of how to balance rigor, appropriateness of techniques, and practical limitations.

Usability in this study was examined from the perspectives of effectiveness, efficiency, satisfaction, and learnability. It is unique in that it combines those four criteria in one model and considers both quantifying elements and affect measure. This study operationalizes those criteria and provides strategy to measure. Effectiveness in this study was measured by accuracy rate. Efficiency was measured by the speed and the number of steps needed to complete tasks. Satisfaction is a multifaceted criterion and was examined in the areas of ease of use, organization of information, labeling and terminology, visual appearance, content, and error correction. Learnability was measured by asking subjects to search a new site and then measure how soon the subjects can begin their first task, the accuracy rate, and the speed.

The study applied several techniques, including formal usability testing, questionnaire, interview, think aloud, and log analysis. In order to confirm findings, there were two stages of experiments. The total number of subjects was 41 students. It was a cross-institutional usability study. The test sites were Rutgers University Libraries Web site and Queens College Web site.

The study found interlocking relationships among effectiveness, efficiency, and satisfaction. The longer it took for a subject to perform a task, the greater the...
number of steps involved. The greater the number of steps involved in completing a task, the lower the satisfaction. The more time spent on completing a task, the lower the satisfaction. Further, incorrect answers entailed more steps and more time, while correct answers entailed fewer steps and less time.

This means that when the subject knew how to locate the answer, it took fewer steps and required less time. The present study found the effect sizes of the relationships range from medium to strong. Although there are interlocking relationships, effectiveness, efficiency, and satisfaction are three distinct criteria and should be measured separately. One cannot replace the other.

The study results indicate that demographic factors, including gender, age, status, academic major, ethnic background, years at the institution, and frequency of using the library’s Web site, do not have any statistically significant effect on performance. However, it appears that ethnic background may affect satisfaction ratings. Cross-cultural usability is an interesting topic for further research.

The study also examines the issues of user-lostness and click cost. It further uncovers users criteria on ease of use, organization of information, terminology, visual attractiveness, and mistake recovery. These were reported in the author’s doctoral dissertation and in the author’s recent publication.2

The model and the instruments proposed in this research should be applicable to other academic digital libraries or information systems, although the specific tasks need to be tailored to each specific system.

Notes

Enhanced ScienceDirect improves access to Elsevier content
Access to Elsevier’s full-text, peer-reviewed journal and book content on its Web platform, ScienceDirect, will be enhanced with new features beginning in February 2006. ScienceDirect is introducing a new type of Article in Press, referred to as Accepted Manuscripts. These are manuscripts which have been peer-reviewed and selected for publication by the journal editor but have yet to be edited by Elsevier’s production staff. Accepted Manuscripts will be available for approximately 200 journals initially, with further titles to be added throughout the year. New manuscripts will be available on average five days after acceptance, which is four to six weeks earlier than is currently the case. The articles will be citable using DOI (Digital Object Identifier) and searchable by title, author name, and full text. ScienceDirect will also extend its various export options and enable the transfer of bibliographic data to RefWorks, the Web-based reference management tool from Cambridge Scientific Abstracts. Users will be able to export selected data directly to RefWorks, which opens a Web browser interface immediately on clicking the “export” link, allowing users to move seamlessly between the two Web-based systems. 

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