**Research and Statistics on Libraries and Librarianship in 2009**

*Denise M. Davis*
*Director, Office for Research and Statistics, ALA*

Each year I identify a few research areas that were unusual or prominent. This year I am drawing on longitudinal research of libraries (somewhat more traditional) and some new research employing quantitative and observational methods. The following article highlights library statistics for the year, including the latest ALA Association of School Librarians (AASL) study, *School Libraries Count!*, and two issues briefs from the Public Library Funding and Technology Access Study. The research topic is Web 2.0 and social networking research, and four research projects focused in these areas published in 2009 are noted.

Winners of research awards and grants conferred by the American Library Association and its divisions, Beta Phi Mu, the American Society for Information Science and Technology, the Association for Library and Information Science Education, and the Medical Library Association also are highlighted.

*Facts and Figures about Libraries*

*Public Libraries*
The Institute of Museum and Library Services made a useful addition to its annual summary of public library statistics – *Public Libraries in the United States: Fiscal Year 2007* - by including Fiscal Year 1998-2007 trend graphs and maps to the Findings section of the report (http://harvester.census.gov/imls/pubs/pls/pub_detail.asp?id=122#). These graphics are easy to read and provide helpful information to library staff and advocates in understanding change over time. For instance, *Figure 5: Percentage of Operating Revenue from Local Sources, FY1998-FY2007 (Data Labels are Revenue in Billions, Constant 2007 Dollars)* presents very clearly the increase in local revenue support from about 77.5 percent of total operating revenue in FY1998 to slightly more than 84 percent in FY2007, while Figure 6 presents the decline in state support to public libraries – a useful juxtaposition.

Two issues briefs released by the American Library Association in 2009, and compiled from the 2008-2009 report *Libraries Connect Communities 3: Public Library Funding & Technology Access Study*, are "U.S. Public Libraries and E-Government Services" and "Supporting Learners in Public Libraries."

*U.S. Public Libraries and E-Government Services*, published in June 2009 by ALA, describes the role of libraries in connecting people with essential government resources – including unemployment benefits, federal and state emergency assistance, tax filing and more (http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/IssuesBrief-Egov.pdf). Detailed in the issues brief is the increased use of online government information and services, the critical role of public libraries in helping provide access and assistance using these resources

and the challenges that must be addressed to improve e-government at the local, state and federal level.

*Supporting Learners in Public Libraries*, published March 2009 and updated in October 2009, describes the role of public libraries as a key agency in supporting the educational and learning needs of every person in the community (http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/SupportingLearnersRev2009-NewR.pdf). Detailed in the issues brief are data supporting libraries as providers of vital resources for early literacy development, homework help, home school families, continuing education and lifelong avocations.

*Academic Libraries*
High marks go to the National Center for Education Statistics (NCES) for timeliness of the release of the biennial report of academic libraries - *Academic Libraries: 2008 First Look* (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010348) – within nine months of closing the survey. By all standards from prior survey release timelines, the NCES achievement is monumental. One change to the report was a disaggregation of the FTE enrollment ranges from three to six – less than 1,000; 1,000 to 2,999; 3,000 to 4,999; 5,000 to 9,999; 10,000 to 19,999; and, 20,000 or more. There also is a new table, *Information resources expenditures and total expenditures per FTE enrollment, librarians and other professional staff* (Table 20) in the supplemental document. For those who want to compare expenditures per full-time enrollment (FTE) ($468.50) or student FTE to librarians (419.57:1), this table provides those calculations.

Some highlights of the 2008 Academic libraries report:
- Visits are up, but circulation and service transactions (reference, etc.) are down compared with FY2006. Academic libraries reported that in a typical week they had more than 20.3 million visits, answered more than 1.1 million reference questions, and made more than 498,000 informational services to groups attended by more than 8.9 million students and faculty. Visits to academic libraries increased about 1.5 million from FY2006, as did services to groups by about 27,000.

- Expenditures for electronic books, serial back files and other materials increased from $93.8 million in FY2006 to $133.6 million in FY2008 and expenditures for electronic current serial subscriptions rose from $691.6 million in FY2006 to $1 billion in FY2008.

- Circulation transactions from academic library general collections were 138.1 million in 2008, an overall decline of 6 million from FY2006. Three-point-three million of that decline, about half, can be attributed to institutions at the Doctor's level. Institutions at the Less than 4-year level also saw a decrease in FY2008 circulation of more than 62,000.

*School Libraries*

*School Libraries Count!,* an annual longitudinal study from the ALA Association of School Librarians (AASL) details "changes in the field to gain understanding of the state of school library media programs nationally." The AASL research is a voluntary survey of public and private K-12 schools, the national estimates published annually are compiled from a stratified random sample of all responding libraries (http://www.ala.org/ala/mgrps/divs/aasl/researchandstatistics/slcsurvey/slcsurvey.cfm).

The 2008 report presents data from 6,998 responses and summarizes findings, as well as presents responses as percentiles. Further, "… the results by school level and enrollment, and more detailed results, when statistically significant relationships between the results and selected other factors were found.  These other factors include:  region, a school's poverty status, locale (metropolitan versus non-metropolitan), and whether a school is public or private." (*School Libraries Count!: The **Second** National Survey of School Library Media Programs.* 2008. p.2). The 2009 survey has closed and it is anticipated the summary report will be issued early in 2010.

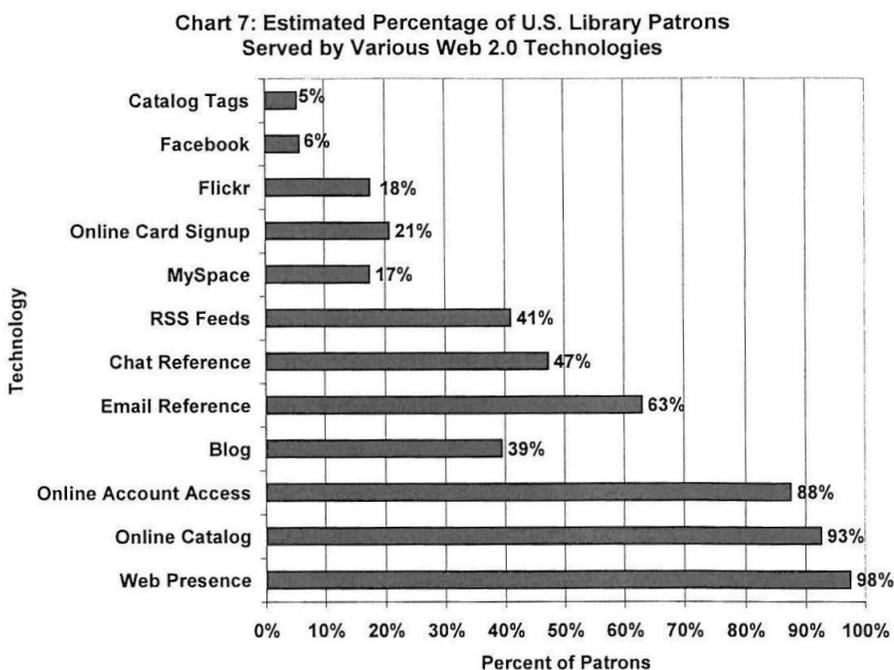### *Technology in Libraries - the case for Web 2.0 and social networking*

This past year seemed to have more research on social networking, at least in the journals that crossed my desk. In fact, a literature search showed that since 1993 fewer than 200 articles have appeared in peer reviewed journals and of those, about 27 percent were published prior to 2004 and nearly 35 percent between 2008-2009. And, the growth of key terms was evident in the more current citations. Terms like "microblogging" are new, and branded terms like Twitter and Flickr also are indexed.

Zeth Lietzau at the Colorado State Library, Library Research Service has been studying web technologies available on public library websites – what he loosely refers to as "Web 2.0" (http://www.lrs.org/public/webtech/). What is special about Lietzau's work is he identifies characteristics of early adopters of web technologies. The results of his 2009 research will be available in early 2010, but results from the spring 2008 research are reported in *A Closer Look: U.S. Public Libraries and the Use of Web Technologies* (October 2009). Generally slow technology adopters, only about one-third of public libraries offered a blog, e-mail reference, or chat reference (Lietzau, p. iii). Lietzau determined that early adopters out-paced their peers in almost every statistical input and output measure – they had more funding, more staff, higher visit counts and circulation, etc. Collection count was the only metric not exceeded by early adopters versus their peers.

Lietzau developed a 29-point scale to determine the significance of adoption of Web 2.0 technologies. The average score was 14 and the highest score was 18, achieved by Hennepin County Library. It is important to note that because of the predominance of urban libraries

offering Web 2.0 technologies, a substantial proportion of library users had access to these services than appears to be the case if one looked only at the numbers of libraries providing such services (Lietzau, Chart 7, p.16). For the purposes of his study, Lietzau identified the top 20 percent (80th percentile) of libraries scored as "early adopters." His study provides detailed comparison of early adopters and non-adopters for revenue, staffing, collections and services. The following chart is excerpted from his report and presents the estimates of public library patrons served by 12 Web 2.0 technologies.

U.S. Public Libraries and the Use of Web Technologies



Chart 7: Estimated Percentage of U.S. Library Patrons Served by Various Web 2.0 Technologies

| Technology | Percent of Patrons |
|---|---|
| Catalog Tags | 5% |
| Facebook | 6% |
| Flickr | 18% |
| Online Card Signup | 21% |
| MySpace | 17% |
| RSS Feeds | 41% |
| Chat Reference | 47% |
| Email Reference | 63% |
| Blog | 39% |
| Online Account Access | 88% |
| Online Catalog | 93% |
| Web Presence | 98% |

*Lietzau, Zeth. A Closer Look: U.S. Public Libraries and the Use of Web Technologies. (October 2009). Chart 7: Estimated Percentage of U.S. Library Patrons Served by Various Web 2.0 Technologies* http://www.lrs.org/public/webtech/

Lietzau provides detail on the study methodology and includes the survey instrument as an appendix to the 2009 report.

Lorri Mon and Berahim Randeree (Florida State University) in their article "On the Boundaries of Reference Services: Questioning and Library 2.0" (Journal of Education for Library and Information Science. 50(3):164-175. Summer 2009) responds to criticism of LIS education's failure to prepare students in Web 2.0 technology training. Mon and Randeree contacted a sample of over 800 public libraries in 2008 and received about 240 responses (about 30 percent of the sample) to a series of questions to reveal what Web 2.0 skills demand there was in the public library workforce. Earlier, in 2007, Mon and Randeree surveyed LIS graduate students about their experiences with and perceptions of Web 2.0 technologies. What they found from public libraries was that blogging, social networking, RSS feeds and Wikis were the most highly reported Web 2.0 technologies. The researchers also provide demographic detail of student (undergraduate and graduate) respondents.

Loosely comparing results from the Lietzau and Mon/Randeree research, it was curious that Lietzau identified about 30 percent of libraries with a Web 2.0 presence, and about 30 percent of libraries surveyed by Mon and Randeree responded with detail of its Web 2.0 adoption. About twice as many libraries in the Mon/Randeree study identified blogging than were observed by Lietzau. It is recommended that you consider these two studies together to get a fuller picture of the public library Web 2.0 landscape, at least as it was in 2008-2009.

Two user behavior studies worth reviewing are by I-Ping Chiang, Chun-Yao Huang and Chien-Wen Huang ("Characterizing Web Users' Degree of Web 2.0-ness." Journal of the American Society of Information Science & Technology. 60(7): 1349-1357. (July 2009).), and by Pietro Panzarasa, Tore Opsahl, and Kathleen M. Carley ("Patterns and Dynamics of Users' Behavior and Interaction: Network analysis of an online community." Journal of the American Society of Information Science & Technology. 60(5): 911-932. (May 2009).

The Chiang, Huang and Huang research utilized a panel of respondents and focused on Web 2.0 user attributes and the degree of Web 2.0-ness of a website based on click streams ("…quantifiable metrics such as behavioral volume, behavioral speed, and behavioral concentration.") (Chiang, etal., p. 1352). The research team found that the stronger skills were held by those who viewed more pages and did so more rapidly than others. Gender and age also were determinants of Web 2.0-ness. The references provided in this article are particularly valuable to anyone interested in exploring this topic further.

The Panzarasa, Opsahl and Carley research utilized online community network data (longitudinal) to understand user behavior and level of interaction, and the extent to which longevity of participation influences overall interaction within the network and how the "hub-dominated structure" of the network influences the longevity of the social network. The researchers note that early research of social networking was lacking in two areas: "… "informant inaccuracy": whenever data collection relies on asking people for information, findings become highly sensitive to subjective bias (BBernard, Kilworth, Kronenfeld, & Sailer, 1984). " (Pazarasa, etal., p.911). "A second problem associated with past research on networks is concerned with the size of the dataset. Survey instruments and direct observation methods are typically labor-intensive and onerous to administer, and therefore most of the networks studied were of fairly limited size, …" (Pazarasa, etal., p.912). This is an important consideration when considering the results of the previously mentioned research.


**Awards and Grants that Honor and Support Excellent Research**

The professional library associations offer many awards and grants to recognize and encourage research. The 2009 awards and grants here are listed under the name of the sponsoring association, and in the case of ALA by the awarding division, in alphabetical order. More-

detailed information about the prizes and prizewinners can be found at the association Web sites.

**American Association of School Librarians (AASL)**
http://www.ala.org/aasl

### AASL/Highsmith Research Grant
*Winner*: No Winner (Award Discontinued)

**American Library Association**
http://www.ala.org

### Carroll Preston Baber Research Grant
*Winner*: No award

### Jesse H. Shera Award for Excellence in Published Research
*Winners*:  Lynn Westbrook, for "Understanding Crisis Information Needs in Context: The Case on Intimate Partner Violence Survivor," *Library Quarterly* 78 (3): 237-261.

### Jesse H. Shera Award for Support of Dissertation Research
*Winner:* No award

**American Society for Information Science and Technology**
http://www.asis.org/

### ASIS&T Best Information Science Book Award
*Winner*: James Boyle
*The Public Domain*

### John Wiley Best JASIST Paper Award
*Winner*: Ofer Bergman, Ruth Beyth-Marom, Rafi Nachmias
"The User-Subjective Approach to Personal Information Management Systems Design: Evidence and Implementations"

### ProQuest Doctoral Dissertation Award
*Winner*: Luanne Freund, "Exploiting Task-Document Relations in Support of Information Retrieval in the Workplace"

### Research in Information Science Award (formerly ASIS&T Research Award)
*Winner*: No winner

**Thomson ISI Citation Analysis Research Grant (formerly ISI/ASIS&T Citation Analysis Research Grant)**
*Winners*: Cassidy Sugimoto, "Measuring Interdisciplinarity: An Exploration of a Novel Metric Applid to ILS Dissertations"

**Thomson ISI Doctoral Dissertation Proposal Scholarship (formerly ASIS&T/ISI Doctoral Dissertation Proposal Scholarship)**
*Winner*: Heather Piwowar, "Foundational Studies for Measuring the Impact, Prevalence, and Patterns of Publicly Shared Biomedical Research Data"

([http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11333](http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11333))

**Association of College and Research Libraries (ACRL)**
[http://www.ala.org/acrl](http://www.ala.org/acrl)

**Coutts Nijhoff International West European Specialist Study Grant**
*Winner*: Gordon Bruce Anderson, University of Minnesota, for his proposal to work toward the completion of a long-standing project, the Svenskamerikanska Bibliografi [Swedish American Bibliography]

**Doctoral Dissertation Fellowship**
*Winner*: Krystyna K. Matusiak, University of Wisconsin-Milwaukee Libraries, for her proposal, "Use of Digital Resources in an Academic Environment: A Qualitative Study of Students' Perceptions, Experiences, and Digital Literacy Skills."

**Ilene F. Rockman Instruction Publication of the Year Award (formerly the IS Publication Award)**
*Winner*: Carolyn Radcliff, Mary Lee Jensen, Joseph A. Salem, Jr., Kenneth J. Burhanna, and Julie A. Gedeon, Kent State University, for their book, "A Practical Guide to Information Literacy Assessment for Academic Librarians"

**Samuel Lazerow Fellowship for Research in Collections and Technical Services in Academic and Research Libraries**
*Winner*: Sara Marcus, Queensborough Community College, for her research project on the change of terms and terminology over several editions of the Sears List of Subject Headings

**Association for Library and Information Science Education**
[http://www.alise.org](http://www.alise.org)

**ALISE/The Eugene Garfield Doctoral Dissertation Competition (formerly Eugene Garfield/ALISE Doctoral Dissertation Award)**
*Winner*:  Xiaojun Yuan (Rutgers University): *"Supporting multiple information-seeking strategies in a single system framework"*

**ALISE Research Grant Competition (formerly Research Grant Award)**
*Winner*: No winner


**Beta Phi Mu**
http://www.beta-phi-mu.org

**Mary Jo Lynch Distinguished Lecture Award**
*Winner:* Award Discontinued


**Library and Information Technology Association/OCLC**
http://www.lita.org

**Frederick G. Kilgour Award for Research in Library and Information Technology**
*Winner*: William H. Mischo, head of the Grainger Engineering Library and Information Center at the University of Illinois, Urbana-Champaign, Library


**Medical Library Association (MLA)**
http://www.mlanet.org

**Donald A. B. Lindberg Research Fellowship**
*Winner*: Sujin Kim, School of Library and Information Science, University of Kentucky-Lexington

**Ida and George Eliot Prize**
*Winners*: Daniel E. Banks, Department of Medicine; Runhua Shi, Department of Medicine; Donna F. Timm, AHIP, Medical Library; Kerri Ann Christopher, AHIP, Medical Library; David Charles Duggar, AHIP, Medical Library; Marianne Comegys, Medical Library; and Jerry McLarty, Department of Medicine and Feist-Weiller Cancer Center; Louisiana State University School of Medicine-Shreveport, for "Decreased Hospital Length of Stay Associated with Presentation of Cases at Morning Report with Librarian Support

**Janet Doe Lectureship for 2009**

*Winner*: Ana D. Cleveland, College of Information, Library Science, and Technologies, University of North Texas-Denton

**President's Award**

*Winners*: Clinton (Marty) Thompson Jr., AHIP, Robert M. Bird Health Sciences Library, University of Oklahoma Health Sciences Center-Oklahoma City