Library Research and Statistics

Research and Statistics on Libraries and Librarianship in 2007

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This year I thought I would take a slightly different approach to presenting research and statistics about libraries and librarianship. Recognizing that there is far more research being done than can be summarized here, I thought identifying some key topics and supporting research would be a more effective approach. Rather than presenting research by type of library, the research is presented topically. Five key topics emerged: funding, social networking and privacy, young adult services, effectiveness of school libraries, and general research methods used by the profession.

Topping the list in 2007 were problems with library funding—referendum failures, property tax revolts, reductions in funding to higher education, and continued erosion in school library support. While some libraries are experiencing funding growth, many are not. A study of this issue by the American Library Association (ALA), scheduled to be released in 2008, was still being completed when this report was prepared. It was difficult to find any published research in these areas except for a few tangential instances, primarily in the areas of assessment, evaluation, and secondary data analysis. Although these may certainly be used to articulate the need for adequate library funding, they do not evaluate funding per se. This is a call to researchers to begin looking at this issue more seriously.

Next was the use of social-networking utilities. An ever-growing concern regarding user privacy surfaced in the general literature and a few research articles are noted. Use of libraries and library services by young adults has been underrepresented in library research. Articles about services and trends exist in general library literature, but it was difficult to find a strong research study in this area. Therefore, a household survey done for ALA is noted to draw attention to this issue (another call to the research community).

Effectiveness of school libraries, always an area of interest, is highlighted through a doctoral dissertation that investigated school library programs in California.

Finally, this article will spotlight a few studies that looked more generally at research methods in librarianship.

Funding

Three research studies provide broad consideration of library funding concerns, especially in public libraries.

An interesting article on public library funding was published by Ignace Glorieux, Toon Kuppens, and Dieter Vanderboeck of the Vrije Universiteit Brussel—"Mind the Gap: Societal Limits to Public Library Effectiveness" (*Library & Information Science Research* 29(2) (June 2007), pp. 188–208 and online at http://www.sciencedirect.com). The authors assessed the impact and effectiveness of state-mandated public libraries in Belgium, and go so far as to define an effective library: "An effective library is defined here as a library that, given the context in which it operates, performs well in conditions on which it has no influence." The authors used standard output measures to assess effectiveness, as well as measures unique to Belgian libraries (e.g., membership fees), and used Belgian census demographic data to contextualize the findings. The study discovered findings in usage similar to patterns in U.S. public libraries, such as lower usage by males and higher educational attainment being an indicator of higher usage. Dissimilar to patterns in the United States, the study found that the number of registered users decreased in municipalities with higher levels of low-income residents. Using regression analysis, the authors found interesting borrowing and library use patterns by males, which were especially affected by the hours a library was open. Men were heavier users of nonprint collections such as DVDs and CDs. The authors raise interesting questions about attracting users to the library and the consequences of such activity as meeting demands for specific formats of materials. Descriptive statistics of the study findings are included in the article.

Technology Report Broadened

For the first time, the long-standing research by John Carlo Bertot and Charles McClure around Internet connectivity and services in public libraries introduced detailed technology-related expenditure questions to the 2007 ALA survey on library funding and technology. Led by ALA's Office for Research and Statistics, the 2007 study asked libraries about funding of public-access computing services. The final report, *Libraries Connect Communities: Public Library Funding and Technology Access Study 2006–2007 Report* (http://www.ala.org/ala/ors/0607report/0607report.htm) presents the findings of this research.

Building upon research conducted by ALA in 2006 regarding overall public library funding, the technology study solicited information on services funded by state agencies on public libraries' behalf, as well as library expenditures on technology-related staff and services and on the sources from which the funding was derived (local, state, federal, fines/fees, grants, and so forth). This level of finance detail does not exist in other national library data collection initiatives, and it represents the most current fiscal year actual and projected figures available on a national basis.

Responses became most interesting when analyzed by metropolitan status and by source of revenue. They aligned closely with the total distributions by

expenditure categories (e.g., staff, collection, and other expenditures) as reported to the National Center for Education Statistics (NCES) in the E.D. Tabs publication *Public Libraries in the United States: Fiscal Year 2004* (http://www.nces.ed. gov/pubs2006/2006349.pdf). However, what is now known through the fiscal detail of the technology access study is that libraries reported applying fines/fees and donations to "other" expenditures by nearly a two-to-one ratio. It is in the "other" expenditure category that many technology expenditures occur. If this projection holds true, it suggests that libraries may not be in a position to rely on local tax support to fund technology, but are relying disproportionately on fines, fees, and fund raising to provide what have become basic library services.

Other concerns about funding libraries and technology-related services centered on basic building infrastructure, supporting online job searching and e-education, e-government services accessible through public libraries, and just keeping staff trained in using the technologies patrons demand.

Networks' Funding Role

"Library Networks, Cooperatives, and Consortia: A Definitional Study and Survey" investigated what organizations are helping libraries make the limited funding go further. Study findings and a searchable database of organization records is available on the project Web site (http://www.ala.org/ala/ors/lncc). Funded by the Institute of Museum and Library Services and ALA, the study confirmed a decline in the number of formally organized entities supporting libraries since the last such study (1996). Three key findings emerged from this project: Networks, cooperatives, and consortia primarily serve multiple types of libraries (e.g., public, academic, school, and special) rather than one particular type, and are regionally based; the longer the network or cooperative has been established, the more diverse its services to its member libraries; services to be provided over the coming two to three years varied dramatically depending upon the size of the membership of the network or cooperative.

More than 200 library networks, cooperatives, and consortia reported on current and future services, funding, and staffing. Services provided to members by more than 75 percent of responding networks and cooperatives included

- Communication among member libraries (directories, e-mail lists, newsletters, other publications)
- Resource sharing (reciprocal borrowing, cooperative collection development, union catalog, union list of serials, requesting mechanisms)
- General professional development, continuing education, or staff training
- General consulting/technical assistance
- Cooperative purchasing or group discounts

The highest priorities for the next two to three years for library networks and cooperative organizations included automation, networking, and other technology; courier document delivery; resource sharing; and general professional development/continuing education.

Social Networking and Privacy

Although primarily an article about the relationship between laws—specifically the Children's Online Privacy Protection Act (COPPA)—and Internet use, a study by Tracy Mitrano looks at how social networking utilities bump into individual privacy and federal laws ("A Wider World: Youth, Privacy, and Social Networking Technologies," *Educause Review,* November-December 2006, pp. 16–28). Mitrano, director of IT Policy and of the Computer Policy and Law program at Cornell, raises interesting questions regarding limits of privacy, regulatory requirements placed on technology developers of open space and social networking virtual environments, and privacy concerns from the user's perspective. Examples pepper the article, many coming from individuals themselves. What is adequate privacy? Is privacy contextual? Have we learned anything from earlier technology deployment? (The last is rhetorical, because Mitrano makes a reasoned argument that we are repeating old mistakes with new online utilities.) Perhaps the most revealing statement Mitrano makes relates to her not having an online presence in environments like Facebook; "I don't want someone else to own my or Cornell's intellectual property," she says, "or to collect, hold, or sell my personally identifiable information, nor do I want to be beholden to someone else's commercial interest."

Taking a slightly more scientific approach to understanding online privacy, Mike Z. Yao, Ronald E. Rice, and Kier Wallis conducted a survey of more than 400 undergraduates at a U.S. university ("Predicting User Concerns About Online Privacy," *Journal of the American Society for Information Science and Technology* 58(8), pp. 710–722). Drawing on previous research in the areas of privacy, efficacy, and Internet use, the authors formed a hypothesis path model and conducted their study to validate that online privacy concern path model.

Students taking part in the study were presented with a range of value scale statement sets to determine their perspectives on privacy. The assessment areas were need for privacy, generalized self-efficacy, beliefs in privacy rights, Internet use fluency, Internet use diversity, and concerns about online privacy (organizational privacy and general online privacy). Each scale utilized different response options, some were yes/no and others used Likert scales. A total of 83 questions were asked from the various scales, and one question was asked about perception of gender differences in concern over online privacy. A series of path models were developed depicting predictability of online privacy concerns. Comparing the hypothesis path model against the model formed from the study revealed some interesting findings. Interestingly, gender is irrelevant in an individual's perception of online privacy. Rather, the researchers concluded that "individuals' beliefs in privacy rights and the dispositional desire for privacy in general are the main factors determining concerns about privacy issues in the specific context of the Internet." (p. 719) A few limiting factors were identified by the researchers and should be considered when interpreting these study findings. One was the real-versus-perceived knowledge and fluency in using the Internet by study participants. Another was the study group—college students. Additional research in this area is needed, but this study certainly presents interesting findings to consider as we try to understand online privacy issues.

Young Adults

ALA initiated a household study regarding young adult use of public and school libraries. Conducted by Harris Interactive for ALA, "Youth Use of Public and School Libraries" (http://www.ala.org/ala/yalsa/HarrisYouthPoll.pdf) indicated that 56 percent had visited a public library and/or library Web site in the previous month, and 78 percent had visited a school library and/or Web site. Although borrowing books for personal or school assignments was the most highly ranked use of both public and school libraries, users were more likely to use the school library Web site for information and research and to study than the public library. About 25 percent of young adults indicated they would use school library computers more if the information they needed weren't blocked, and 32 percent if more-interesting books and activities or events were offered. About 38 percent indicated they would use the public library more if it were closer to where they live, and 26 percent would use it more if there were a space restricted to teenagers.

Effectiveness of School Libraries

Two noteworthy studies on the topic of school library effectiveness were a doctoral dissertation coauthored by Stacy Sinclair-Tarr and William Tarr, Jr. ("Using Large-Scale Assessments to Evaluate the Effectiveness of School Library Programs in California," OCLC record number 70262077, summary results published in *Phi Delta Kappan* 88(9), pp. 710–711), and a study by Barbara Immroth and W. Bernard Lukenbill ("Teacher-School Library Media Specialists Collaboration Through Social Marketing Strategies," *School Library Media Research* 10, 2007). The Immroth-Lukenbill article provides a valuable bibliography of references cited.

Research Methods for the Profession

Three research methods articles were particularly interesting.

The first is "U.S. Public Library Data: A Unified Field Theory" by Bob Molyneux (*Public Library Quarterly* 24(3), 3–19). This should be mandatory reading for LIS students or for anyone new to public library data. The overview of public library data reporting systems, including an OPAC vendor-developed utility (the SirsiDynix Normative Data Project), is very well done. It isn't that the author demystifies the data sets, but the data are put into meaningful context.

The second is "Inferential Statistics and Librarianship" by Juris Dilevko (*Library and Information Science Research* 29: 209–229), which is valuable for anyone interested in the predominant patterns in research methodology used by the library and information industry. In particular, the author analyzed the incidence of inferential statistics as a research method for articles published between 2001 and 2005. A purpose of the analysis was to determine whether librarians need skills—either passive or active knowledge—in inferential statistics to interpret research using this method. It was determined that about 14.5 percent of articles published in five LIS journals included inferential statistics or techniques.

Detailed analysis by journal title and type of descriptive or inferential statistics is provided and suggests that the shift toward more assessment-based performance measurement by libraries requires greater knowledge of inferential statistics.

The third article is Elizabeth C. Hamilton's "The Impact of Survey Data: Measuring Success" (*Journal of the American Society for Information Science and Technology* 58(2): 190–199). Focusing on the Canadian National Population Health Survey, Hamilton conducted citation analysis to investigate the impact and value of national social surveys and use of the data in further research or secondary analysis. This research is particularly pertinent to U.S. researchers as the government moves away from a detailed decennial census to annual sample social surveys administered through the American Community Survey (ACS). A strong bibliography accompanies the article.

Articles and Reports of Note

Building Effective, Sustainable, Practical Assessment, the proceedings of the Library Assessment Conference sponsored by the Association of Research Libraries in September 2006 in Charlottesville, Virginia, can be ordered as a print volume or downloaded as a pdf from the ARL Web site at http://libraryassessment.org/archive/index.shtml.

Some other articles and reports worthy of mention are:

- "Challenge of Rural People to Reduce Digital Divide in the Globalized World: Theory and Practice" by Hasan Akca, Murat Sayili, and Kemal Esengun, *Government Information Quarterly* 24(2), pp. 404–413, 2007
- "A Comparative Evaluation of Search Techniques for Query-by-Humming Using the MUSART Testbed" by Roger B. Tannenberg, William P. Birmingham, Bryan Pardo, Ning Hu, Colin Meek, and George Tzanetakis, *Journal of the American Society for Information Science and Technology* 58(5), pp. 687–701, 2007
- "Defining a Session on Web Search Engines" by Bernard J. Jansen, Amanda Spink, Chris Blakely, and Sherry Koshman, *Journal of the American Society for Information Science and Technology* 58(6), pp. 862–871, 2007
- "Social Capital and Public Libraries: The Need for research" by Andreas Varheim, *Library & Science Research* 29, pp. 416–428, 2007

Awards and Grants that Honor and Support Excellent Research

The professional library associations offer many awards and grants to recognize and encourage research. The 2007 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.

An award to honor the contributions of Mary Jo Lynch, former director of the ALA Office for Research and Statistics, was established by Beta Phi Mu's

Distinguished Lecture Program in 2005 and named the Mary Jo Lynch Distinguished Research Award. In 2007 the award, a funded lectureship, was presented to Beta Phi Mu's Beta Beta Epsilon Chapter at University of Wisconsin–Madison and to its Gamma Chapter at Florida State University.

More information about the award is available at http://www.beta-phi-mu.org/distinguished_lectures.html.

American Library Association

http://www.ala.org

Jesse H. Shera Award for Excellence in Published Research
Winners: Gary Marchionini, Paul Solomon, Cheryl Davis, and Terrell Russell.

Association of College and Research Libraries (ACRL)

http://www.ala.org/acrl

Doctoral Dissertation Fellowship
Winner: Jihyun Kim for "Faculty Self-Archiving Behavior: Methods and Factors Affecting the Decision to Self-Archive."

Coutts Nijhoff International West European Specialist Study Grant
Winner: Thea Lindquist for her proposal "From the Ashes: Identifying, Documenting, and Rebuilding the Herzogin Anna Amalia Bibliothek's Fruchtbringende Gesellschaft (Fruitbearing Society) Collections."

Ilene F. Rockman Instruction Publication of the Year Award
Winners: James K. Elmborg and Sheril Hook for "Centers for Learning: Writing Centers and Libraries in Collaboration" in *ACRL Publications in Librarianship* 58.

Library and Information Technology Association/OCLC

http://www.ala.org/lita

Frederick G. Kilgour Award for Research in Library and Information Technology
Winner: Richard Pearce-Moses.

American Society for Information Science and Technology

http://www.asis.org

Research in Information Science Award (formerly the ASIS&T Research Award)
Winner: Ophir Frieder.

ProQuest Doctoral Dissertation Award
Winner: W. John MacMullen for "Contextual Analysis of Variation and Quality in Human-Curated Gene Ontology Annotations."

Thomson ISI Citation Analysis Research Grant (formerly the ISI/ASIS&T Citation Analysis Research Grant)
Winner: Philip M. Davis for his proposal "Does Free Access to Scholarly Articles Increase Readership and Citation Impact?"

Thomson ISI Doctoral Dissertation Proposal Scholarship (formerly the ASIS&T/ISI Doctoral Dissertation Proposal Scholarship)
Winner: Philip Edwards for "Mapping Scholars' Decision Processes and Factors that Influence How They Publish and Distribute Their Work."

John Wiley Best JASIST Paper Award
Winners: Catherine Blake and Wanda Pratt for "Collaborative Information Synthesis, Part 1" and "Collaborative Information Synthesis, Part 2: Recommendations for Information Systems to Support Synthesis."

Association for Library and Information Science Education

http://www.alise.org

ALISE/Eugene Garfield Doctoral Dissertation Competition
Winner: Kate Williams for "Social Networks, Social Capital, and the Use of Information and Communications Technology in Socially Excluded Communities: A Study of Community Groups in Manchester, England."

ALISE Research Grant Competition
Winners: Eileen Abels, Denise Agosto, and Lorri Mon for "Remote Reference in Practice and the Classroom."

Medical Library Association
http://www.mlanet.org

Janet Doe Lectureship for 2008
Winner: Thomas G. Basler, Medical University of South Carolina–Charleston

Donald A. B. Lindberg Research Fellowship
Winner: Michele R. Tennant, AHIP, Health Science Center Libraries and Genetics Institute, University of Florida–Gainesville.

President's Award
Winner: Beth M. Wescott, National Network of Libraries of Medicine, Baltimore.