

Do We Still Need Books? How Important Is Technology?

A Selective Bibliography

compiled by

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Introduction¹

To say that the world of librarianship is in the throes of a sea change is to be guilty of understatement. That being said, the purpose of this bibliography is to help us understand from where we have journeyed, where we might be going, what some of the problems are that we have encountered and may yet encounter along the way, how to think about, and in some few instances, how to solve those problems.

In reviewing the many thoughtful and sometimes provocative articles that ended up in this bibliography, it became clear to us that the number one issue on the minds of librarians and other information professionals is – who is minding the archives? While there is little debate that e-materials have earned their place in our law libraries, we are well-troubled by the complexities of the archival, and thus, future access issues. This concern underlies many of the debates over whether to e- or not to e-, and prevents us from coming to easy answers to the ubiquitous question – do we really need materials in both formats?

Although the topic of this bibliography is complex, the mechanics were straightforward: the time scope is limited to 1995 and after and the databases searched are those usual to library and information science.² The entries are organized alphabetically by author within each category and accompanying each entry is a brief summary of the subject matter. Although we have sought to capture the most noteworthy pieces, this bibliography is not a comprehensive listing of all pertinent sources. It is current as of December, 2003.

¹The authors wish to thank Loyola Law School Library and the University of Southern California Law School Library for their invaluable support of our work on this bibliography.

²Legal Resource Index, Index to Legal Periodicals, Information Science Abstracts, Wilson Library Literature, ERIC, WorldCat, ArticleFirst, Chronicle of Higher Education, Libraries and Information Services Stories (LexisNexis), and Combined Law Reviews and Legal Newspapers in both Westlaw and LexisNexis.

The answer to whether we still need books is – yes.³ Barry Fast, one of the authors listed below, compares reading a book in print and reading a book online and he reminds us of Lilly Tomlin’s remarks about heaven: “I’m sure you can have sex there but I doubt if you can feel it.” In the same vein, Fast says “books will last because they fulfill some basic human needs, not only in what they convey but how they convey, how they feel, and how they fit into our lives. Like the wheel [with us from prehistoric times], books carry us from here to there, and like the Internet, they carry us sometimes with awe and mystery.”

Books

Building a National Strategy for Digital Preservation: Issues in Digital Media Archiving.
Washington, DC: Council on Library and Information Resources and Library of Congress, 2002.

This study was commissioned by the National Digital Information Infrastructure and Preservation Program, whose mission is to develop a national strategy “to collect, archive, and preserve the burgeoning amounts of digital content, especially materials that are created only in digital formats, for current and future generations.” Essential reading for any institution or group grappling with digital preservation issues. Written by leaders in various areas, the study covers preserving: (a) digital periodicals; (b) e-books; (c) the World Wide Web; (d) digitally-recorded sound; (e) digital television, and concludes with a section on digital video archives and mapping through metadata.

Ekman, Richard and Richard E. Quandt, eds. *Technology and Scholarly Communication.*
Berkeley, CA: University of California Press, 1999.

Compilation of papers presented at a conference held at Emory University in 1997 under the auspices of the Andrew W. Mellon Foundation. The twenty-five essays included in this work focus on the impact of digital technology on scholarly communication, considering possible ways of facilitating this process and the costs associated with different methods. The papers deal with a number of topics, including: technological issues such as digitizing techniques; evaluation of different electronic publishing ventures; examination of how electronic journals and books are actually used; and the exploration of possible models for electronic publishing in the future.

Gorman, G. E., ed. *The Digital Factor in Library and Information Services.* Lanham, MD: Scarecrow Press, 2002.

³With apologies to Gordon Russell, annotated below.

This work of collected essays considers how digital initiatives are affecting library services. Some of the topics covered include: the positive and negative features of both digital and print formats; the economic dilemmas faced when acquiring digital resources; the future of the e-book; the impact of digitization on reference services; and the evaluation of digital collections.

Harum, Susan and Michael Twidale, eds. *Successes and Failures of Digital Libraries*. Urbana-Champaign, IL: University of Illinois, 2000.

A collection of papers presented at the 35th Annual Clinic on Library Applications of Data Processing, sponsored by the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign (UIUC) in 1998. UIUC was the site of a NSF/NASA/ARPA-funded Digital Libraries Initiative. The organizers encouraged presenters to not only talk about those aspects of their digital library projects that went well, but also to discuss problems that arose throughout development, in the belief that “if the development of better systems is to proceed optimally, it is just those problems that should be aired publicly.” Some of the projects or issues discussed include “Processing and Access Issues for Full-Text Journals,” “Semantic Issues for Digital Libraries,” “A Publisher’s Perspective: More Successes Than Failures,” “Lessons Learned from Full-Text Journals at OCLC,” and “The Future of Annotations in a Digital (Paper) World,” the last referring to the time honored practice of readers and scholars writing comments in the margins of text.

Lee, Sul H., ed. *Electronic Resources and Collection Development*. Binghamton, NY: Haworth Press, 2002.

Sul Lee, Dean of the University Libraries at the University of Oklahoma put together this volume of papers presented by national library leaders at the 2002 University of Oklahoma Libraries’ annual conference, the theme of which was electronic resources and collection development in academic libraries. As Dean Lee points out, “while diverse in content and conclusions, all of these papers share common ground in that they offer new insights on how libraries are meeting the challenges of reshaping collection development programs with electronic resources.” Some notable entries: Keven M. Guthrie, JSTOR president, presents data JSTOR has collected about who uses e-journals, how they are used and what disciplines favor e-resources, and Anne Marie Casey, Central Michigan University’s Director for off-campus services reviews the issues and challenges inherent in collection development for distance learning programs.

McGinnis, Suzan D., ed. *Electronic Collection Management*. Binghamton, NY: Haworth Press, 2002.

An interesting range of articles brought together by Suzan McGinnis, Assistant Head of Information Service for Liaison and Collection Development at Texas Tech University Libraries, Lubbock, Texas. Addresses some of the more talked about topics in electronic

collection management, such as “Information Technology and Collection Development Departments in the Academic Library: Striving to Reach a Common Understanding,” and a review of the impetus for and status of SPARC, the Scholarly Publishing and Academic Resource Coalition.

Peek, Robin P. and Gregory B. Newby, eds. *Scholarly Publishing: The Electronic Frontier*. Cambridge, MA: MIT Press, 1996.

Not intended for the reader who wants practical day-to-day information on how to choose between electronic or print resources, but rather for someone interested in the long view of what it means for those in academia to flow closer to an electronic environment. Although written in 1996, the ruminations of leaders in this area such as Clifford Lynch are always interesting.

Scheiberg, Susan L. and Shelley Neville, eds. *Transforming Serials: The Revolution Continues*. Binghamton, NY: Haworth Press, 2003.

A collection of presentations and workshops from the North American Serials Interest Group’s 2002 Annual Conference. While some of these entries are not addressed to electronic issues exclusively, enough are to make this volume a rich source of both information and anecdote. Some examples: “Everything You Always Wanted To Know About Electronic Journals But Were Afraid to Ask,” “Get Hip to E-Journals and Forget About the Print: Inciting a Faculty Revolution?”

Articles

Anderson, Iris W. *To Bind or Not to Bind: Pros and Cons of Maintaining Paper Periodicals in the Library’s Collection*. 3 *Information Outlook* 24 (November 1999).

Considers the future of paper periodicals in libraries – whether paper collections should be maintained once electronic versions become available and, if so, how to provide access to these materials. Observes that there is not yet a critical mass of electronic periodicals on the market, and therefore libraries need to continue to acquire and maintain print journals. Includes a list of some of the benefits and drawbacks of each format. Provides a summary of responses from an online discussion held on SERIALST about the pros and cons of binding paper periodicals.

Ashcroft, Linda and Stephanie McIvor. *Electronic Journals: Managing and Educating for a Changing Culture in Academic Libraries*. 25 *Online Information Review* 378 (2001).

This article examines some of the issues librarians face as they manage electronic journals. The authors conducted a literature review to identify issues related to electronic journals and then contacted librarians in North America and the United Kingdom to

ascertain how these matters were addressed. Discusses issues such as the promotion of electronic journal usage, methods of evaluating levels of usage, cost of electronic journals and consortia purchasing, the relationship between libraries and electronic journal publishers/suppliers, and the changing librarian skills required to manage electronic journals. Includes survey results detailing the different ways libraries approach these issues.

Axelroth, Joan L. *The Paperless Society? Law Libraries Move Into the 21st Century*. 56 Oregon State Bar Bulletin 9 (June 1996).

Discusses whether information in electronic form will supplant print format materials. Compares the advantages and disadvantages of print and electronic resources, discussing factors such as financial cost, ease of use, and reliability. Axelroth concludes that the ideal mix of media will depend on many factors, and that often the print medium is still the most efficient.

Bartow, Ann. *Libraries in a Digital and Aggressively Copyrighted World: Retaining Patron Access Through Changing Technologies*. 62 Ohio State Law Journal 821 (2001).

Addresses the paradox that while the electronic revolution is extolled for its expansive distribution of information, the darker side of this revolution is the threat to access to information since content owners have the ability to control and restrict access to their “informational wares” in a manner not possible with the print medium. The goal of this article is to articulate the necessity of establishing for individual library patrons minimum standards of access to electronic resources consistent with “pre-Internet” real space access. The author advocates the benefits to library patrons of creating statutorily-guaranteed rights to library use of copyrighted materials in any form.

Bast, Carol M. and Ransford C. Pyle. *Legal Research in the Computer Age: A Paradigm Shift?* 93 Law Library Journal 285 (2001).

The authors explore the effect that computer-assisted legal research (CALR) is having on legal thinking. They assert that the paradigm of legal research is changing from an approach based on the print digest to a paradigm centered on CALR. Bast and Pyle discuss the concept of a paradigm shift and examine the characteristics and use of digests. They also describe the CALR and print research process and how legal research is likely to change in the future.

Bauer, Kathleen. *Indexes as Tools for Measuring Usage of Print and Electronic Resources*. 62 College & Research Libraries 36 (2001).

Bauer explains how Yale University's Cushing/Whitney Medical Library compiles statistics on the relative usage of print and electronic resources in that library. The library has created two indexes, the Electronic Usage Index and the Print Usage Index.

The Electronic Usage Index is based on the frequency with which the library's e-textbooks and Ovid electronic journal full-text database are accessed, while the Print Usage Index data is derived from circulation and photocopier statistics. The indexes showed that usage of electronic resources increased rapidly in 1998-1999 relative to the 1997-1998 data, while print usage declined.

Beck, Karen. *The Time Has Come for Electronic Cite-Checking*. 4 AALL Spectrum 36 (April 2000).

Chronicles the results of an informal poll taken of academic law librarians' efforts to wean law review editors from exclusive reliance on print sources for cite checking to reliable electronic resources when available and appropriate. Analyzes the friction between "tradition" on law reviews and the reality of readily available, reliable, online documentation against which to check citations. Concludes that resolution may await *Bluebook* intervention.

Berteaux, Susan S. and Peter Brueggeman. *Electronic Journal Timeliness: Comparison with Print*. 41(2) The Serials Librarian 101 (2001).

Berteaux and Brueggeman discuss the results of a survey by U.C. San Diego's Scripps Institution of Oceanography Library comparing the timeliness of electronic journal issues with their print counterparts. The study was conducted over two six-week periods in 1999 and 2000 and found that electronic journal issues were usually available before the receipt of the print equivalent. In 2000 only 6% of the print issues were received prior to the availability of its online version, in comparison to 16% in 1999.

Books Versus Bytes. Law Librarians Discuss What Kind of Legal Research Is Best Done by Which Tool: Online Databases, CD-ROMs, or Old-Fashioned Books. 18 California Lawyer 51 (July 1, 1998).

The interesting part of this short article is on page 52 where Boalt Hall Librarian Kathleen Vanden Heuvel discusses by means of a useful example the perils of relying solely on print, when it makes the most sense to use online searching, and when print resources may be the way to go.

Bravy, Gary J. *The Impact of Electronic Access on Basic Library Services: One Academic Law Library's Experience*. 93 Law Library Journal 261 (2001).

Evaluates the impact of the Internet and digital products on use patterns at Georgetown University Law Library by evaluating traditional quantitative library data on photocopying, circulation check-out, and shelving from a ten-year period. Correlating fairly dramatic changes in these statistics in approximately the mid-1990s with various electronic and Internet developments, the authors suggest not only that data "strongly indicates law students at Georgetown are using electronic resources rather than printed

materials as their primary source of information,” but also that traditional collection-use measurements no longer reflect a complete picture of the quantity or *quality* of the research activity within a library collection.

Brennan, Patricia B.M., et al. *What Does Full-Text Really Mean? A Comparison of Database Vendors and What They Deliver*. 27 *Reference Services Review* 113 (1999).

Explains the process used by the Higher Education Library Information Network Consortium to select a full-text database for acquisition by its member institutions. Describes the criteria and guidelines used to compare four databases: Expanded Academic Index, Proquest Direct, EBSCOhost, and Wilson-Web2. Reports on the advantages and disadvantages of each service, including completeness of coverage relative to the print version of journals.

Brier, David J. and Vickery Kaye Lebbin. *Evaluating Title Coverage of Full-Text Periodical Databases*. 25 *Journal of Academic Librarianship* 473 (1999).

The authors propose a methodology for comparing and evaluating the title coverage of full-text periodical databases and explain how this approach has been used at the University of Hawaii at Manoa. This methodology considers the quantity and quality of titles available through different databases, and the relative merit of different databases when considered in relation to a library's print journal collection and the information seeking habits of undergraduate students.

Butler, M. A. *Issues and Challenges of Archiving and Storing Digital Information: Preserving the Past for Future Scholars*. 24(4) *Journal of Library Administration* 61 (1997).

While new electronic technologies and networks offer scholars enormous opportunities, they also make the research library's role of preserving recorded knowledge for future generations of scholars more complex and costly. This article discusses the unique issues raised by the digital format, new ways to think about digital preservation, and the various groups working on national preservation models for preserving our digital cultural heritage.

Canick, Simon. *Availability of Works Cited in Recent Law Review Articles on LEXIS, Westlaw, the Internet, and Other Databases*. 21(2/3) *Legal Reference Services Quarterly* 55 (2002).

Assesses the scope of coverage of various online databases by examining a group of law review articles to determine the proportion of cited resources that are easily located online. Searches were conducted in LexisNexis, Westlaw, the Internet, and several other databases for the full-text version of each source cited in seven randomly selected articles. Canick divides the citations into thirteen categories, such as “Legal Periodicals 1990-present,” “Books,” “Federal Cases,” and “Foreign/International Law,” and provides

the relative availability of each. Of the 1,984 citations searched, 77% were available online. Canick concludes by discussing several reasons why this percentage is likely to increase in the future.

Chen, Frances L., et al. *Electronic Journal Access: How Does It Affect the Print Subscription Price?* 89 Bulletin of the Medical Library Association 363 (2001).

The impetus for this study stemmed from diminishing hopes that publishing in electronic form would be less expensive and that journal prices would actually decrease after converting from print to online. Contemplating the fact that there is no escape from “the relentless upward march of journal subscriptions prices,” the authors devised this study to examine whether print journal price increases varied according to the type of electronic access available. The author’s findings reveal, *inter alia*, that price increases for print journals were higher if a type of electronic access was offered. Additionally, aggregated collections currently represent the electronic option whose percentage price increase for print was lowest. The authors recommend continued research in this area.

Chen, Xiaotian. *Embargo, Tasini, and “Opted Out”*: How Many Journal Articles Are Missing from Full-Text Databases? 7(4) Internet Reference Services Quarterly 23 (2002).

Chen explores the completeness of several full-text databases from various perspectives. The article critiques the content available through five database aggregators – EBSCO, Gale, H. W. Wilson, LexisNexis, and ProQuest. It examines the number of embargoed (intentionally delayed) titles on these aggregators and how these services handle the embargo issue, the number of articles deleted because of the U.S. Supreme Court's *Tasini* decision,⁴ and identifies some important titles that are not available in any aggregator database. She concludes that the quality of aggregators' full-text databases seems to have decreased, and that librarians should be cautious before canceling print subscriptions in favor of these resources.

Chepesiuk, Ron. *JSTOR and Electronic Archiving*. 31 American Libraries 46 (December 2000).

An interesting review of the history of JSTOR, launched in 1995 by William G. Bowen as a pilot project with funding from the Andrew W. Mellon Foundation, and the actual process undergone to get those reproduced pages on your computer screen.

Chiorazzi, Michael. *Books, Bytes, Bricks and Bodies: Thinking About Collection Use in Academic Law Libraries*. 21(2/3) Legal Reference Services Quarterly 1 (2002).

The author builds on Hazelton’s article “*How Much of Your Print Collection Is Really on WESTLAW or LEXIS-NEXIS?*” While Hazelton examines the question from the

⁴*New York Times Co. v. Tasini*, 533 U.S. 483 (2001).

perspective of space occupied, Chiorazzi is concerned with collection use. He argues that “over 80% of the use of all legal materials is accounted for by the 20% of all legal materials that are available online.” Examines the implications this may have when doing cost-benefit analyses in connection with library budgetary decisions.

Cox, John. *Value for Money in Electronic Journals: A Survey of the Early Evidence and Some Preliminary Conclusions*. 29(2) *Serials Review* 83 (2003).

Cox investigates the proposition that electronic journals provide enhanced value for their costs when compared to their print counterparts. He reviews the pricing policies of two different journal publishers (Emerald and the Institute of Physics Publishing) at the journal, article, and use levels. Based on his findings and a literature review, Cox concludes that electronic journals offer greater value relative to traditional print journals.

Danner, Richard A. *Electronic Publication of Legal Scholarship: New Issues and New Models*. 52 *Journal of Legal Education* 347 (2002).

The author queries what effect a particular discipline’s discourse habits have on its ability to not only adapt but also to thrive in an electronic environment? Discusses the development of the Web-based Legal Scholarship Network, as well as open archiving alternatives for law scholarship such as LEDA (Legal Education Document Archive), and concludes by asking whether initiatives such as LEDA “resolve some of the long-standing shortcomings of the law review system, while preserving the institutional benefits of traditionally school-based publication?”

Dilevko, Juris and Lisa Gottlieb. *Print Sources in an Electronic Age: A Vital Part of the Research Process for Undergraduate Students*. 28 *Journal of Academic Librarianship* 381 (2002).

This article contends that based on the results of a study done at the University of Toronto, although undergraduates typically begin assignments and essays using online sources, they still value books and print journals because of the print sources completeness, accuracy, and in-depth nature. The authors argue that perhaps present trends to cast academic libraries in a format that competes with Barnes & Noble and Starbucks miss the point that the really unique thing the library has to offer is print resources that can contribute to academic success.

Drewes, Jeanne and Gloria Guzi. *To Bind or Not to Bind: Managing Electronic and Paper Serials in a Sea of Change*. 40(3) *The Serials Librarian* 409 (2001).

Evaluates the pros and cons of binding print journals or archiving e-journals with an eye to the ultimate decision of whether to cancel print subscriptions. Also makes the point that with an e-version we may have more access, but will we have continued access?

Duff, Wendy M. and Joan M. Cherry. *Use of Historical Documents in a Digital World: Comparisons with Original Materials and Microfiche*. 6 Information Research (No.1) (October 2000). Available at <http://informationr.net/ir/6-1/paper86.html>.

Provides the results of a user study comparing Early Canadiana Online, a digital collection of pre-1900 Canadiana material available through the Internet, with the same material in its paper and microfiche formats. The study, which included a survey, focus group sessions, and server log analysis, evaluated use and user satisfaction across all three formats. While many people liked the paper format best, over half of the respondents that had used all three formats felt the Web-based version would be most useful in their work.

Easton, Christa. *Doubly Bold: Replacing Print Journals with Electronic Versions*. 27(3) Serials Review 97 (2001).

Easton reviews several instances where institutions did in-depth studies before implementing programs to discontinue print subscriptions in favor of electronic. See, for example, Henebry, below, and Sprague and Chambers, below. One of the overarching conclusions from these studies is that “libraries need to be educated consumers of full-text databases, particularly if they consider replacing print subscriptions with database content,” especially in the post-*Tasini* environment.

Edmonds, Edmund P. and Margaret Maes Axtmann. *A Law Library in the New Century: The Creation of the University of St. Thomas Law Library*. 21(2/3) Legal Reference Services Quarterly 177 (2002).

Edmonds and Axtmann explain the decision making process used during the creation of a new law library at the University of St. Thomas School of Law. Among the topics explored was their approach to balancing print and microform resources with electronic access. They also provide a general discussion on how they chose the appropriate format when initially developing their collection.

Faerber, Charles N. *Book Versus Byte: The Prospects and Desirability of a Paperless Society*. 17 John Marshall Journal of Computer and Information Law 797 (1999).

Faerber argues that the print medium has many advantages relative to digital materials, and that movement towards a paperless society is fraught with problems. He discusses the benefits of paper, observing that paper is surprising durable and has a reassuring physical immediacy not found with electronic documents. Faerber points out that digital hardware and software are more fragile than paper, and that they rapidly become obsolete due to technological changes, often resulting in data becoming inaccessible after a comparatively short time.

Fast, Barry. *Books in the Digital World*. 23 Library Collections, Acquisitions, & Technical Services 163 (1999).

Mr. Fast, Senior Vice President at the Academic Book Center, presented this graceful paper at a conference in Crimea in 1998, but its musing are as fresh today as then. He notes that “as the information universe expands, books, good old-fashioned paper books, will become more important, not less. Just because a technology is old does not mean it is less valuable. Buggy whips disappeared because motors replaced horses, but our auto-buggies still use the ancient technology known as wheels.”

Flecker, Dale. *Preserving Scholarly E-Journals*. 7 D-Lib Magazine (No. 9) (September 2001). Available at <http://www.dlib.org/dlib/september01/flecker/09flecker.html>.

Fascinating article based on the author’s premise that for “research libraries, the long-term preservation of digital collections may well be *the* most important issue . . . keeping digital resources accessible for use by future generations will require conscious effort and continual investment.” The article discusses one such conscious effort, an initiative spearheaded by the Council on Library and Information Resources, funded by the Andrew W. Mellon Foundation, to collaboratively formulate underlying assumptions for e-journal archiving guidelines (i.e. time frames, licensing, and redundancy issues). Also covers some of the difficult issues this project has thus far raised (“dark” archives, access triggering events, content choices).

Gandhi, Subash. *E-Books – The Future of Reading and Ultimate Book Publishing*. 29 Journal of Educational Technology Systems 49 (2000-2001).

Provides an introduction to electronic books. Explains the basic characteristics of e-books, describes four models of e-book readers, and discusses the advantages and disadvantages of electronic books compared to their print counterparts. Also reviews a number of e-book publishing ventures and concludes by speculating about the future of the electronic book.

Germain, Claire M. *Digital Legal Information: Ensuring Access to the “Official” Word of the Law*.” 26 Cornell Law Forum 11 (July 1999).

Discusses concerns related to the increasing availability and reliance on digital versions of legal documents. Observes that while there are advantages to the use of electronic materials, there are also problems arising with digital legal information, including: rapid obsolescence due to changes in hardware and software technology; text authenticity issues inherent to the electronic medium; and the lack of a plan to archive digital legal information to ensure its long-term accessibility. Germain examines these issues and considers some potential solutions.

Germain, Claire M. *Web Mirror Sites: Creating the Research Library of the Future, and More...* 21(2/3) Legal Reference Services Quarterly 87 (2002).

Germain examines a possible role for libraries in ensuring the preservation of primary legal information available through the Internet. She discusses some of the difficulties faced when trying to maintain long-term access to digital legal information, with particular focus on the risk of content being lost due to changing or disappearing Web sites. Germain offers a possible solution to this problem: the creation of Web mirror sites. Through partnerships with the issuing governments and organizations, databases of official information currently on the Web can be loaded and maintained on local servers, ensuring their accessibility and preservation far into the future. She describes Cornell Law Library's experience maintaining two mirror sites – those of the International Court of Justice and the International Labor Organization. Germain proposes that law libraries collaborate in the establishment of mirror sites, with each participating library responsible for archiving and making publicly available a portion of the official primary legal information on the Internet.

Granger, Stewart. *Emulation as a Digital Preservation Strategy*. 6 D-Lib Magazine (No. 10) (October 2000). Available at <http://www.dlib.org/dlib/september01/flecker/09flecker.html>.

The author discusses “emulation” as a preservation strategy. Emulation is defined as the ability to access or run original data/software on a new/current platform by running software on the new/current platform that “emulates” the original platform. Emulation as a strategy preserves the objects look and feel, which some believe should be an essential goal of any digital preservation project. The author reviews at length the theory on emulation posited by Jeff Rothenberg, its staunchest proponent, taking into consideration some of emulations’ strongest critics as well.

Guthrie, Kevin M. *Challenges and Opportunities Presented by Archiving in the Electronic Era*. 1 Portal 121 (2001).

Explores the challenges associated with electronic archiving and identifies principles that must be addressed in order to maintain reliable long-term access to electronic content. Guthrie, the president of JSTOR, discusses JSTOR's archiving experience and some of the lessons that were learned. He observes that decisions must be made in five broad areas when establishing an archive: technology, backup and preservation, relationships with content owners, relationships with content users, and economic stability. He also argues that the discussion about archiving should focus less on the method used and more on having the proper organizations take on the responsibility.

Haigh, Richard. *What Shall I Wear to the Computer Revolution? Some Thoughts on Electronic Researching in Law*. 89 Law Library Journal 245 (1997).

Haigh contends that shortcomings inherent to the computer limit the degree to which technology can improve the quality of legal work. He compares electronic research with the use of print resources using scenes from Umberto Eco's *The Name of the Rose* as catalysts for his analysis. Haigh concludes that in many instances print resources may be preferable.

Hawbaker, A. Craig and Cynthia K. Wagner. *Periodical Ownership Versus Fulltext Online Access: A Cost-Benefit Analysis*. 22 *Journal of Academic Librarianship* 105 (1996).

This article describes a study conducted by the University of the Pacific in 1995 comparing the relative cost of their print periodical subscriptions to titles provided in full-text through IAC's Business ASAP. The study found that purchasing access to Business ASAP while simultaneously canceling those print subscriptions contained in the database would result in access to more than twice the number of titles for only a 15% increase in expenditures. Hawbaker and Wagner also discuss the increased demand for full-text electronic resources and the potential savings and risks associated with relying on electronic materials as an alternative to print subscriptions.

Hazelton, Penny A. *How Much of Your Print Collection Is Really on WESTLAW or LEXIS-NEXIS?* 18(1) *Legal Reference Services Quarterly* 3 (1999).

Hazelton's well-known study, done to answer her Law School Planning Committee's question – do we really need to dedicate all that space to the Law Library? – concluded that 13% of the University of Washington's Law Library's volumes were on Westlaw and LexisNexis. Analyzes such questions as – how fast will your print collection grow in the future? What role do microforms play in the future of law libraries? If Westlaw and LexisNexis services were available to all library users (including the public), would the Law Library need any print resources? Should be read in conjunction with Gordon Russell's article, below.

Henebry, Carolyn, et al. *Before You Cancel the Paper, Beware: All Electronic Journals in 2001 Are NOT Created Equal*. 42(3/4) *The Serials Librarian* 267 (2002).

As a prelude to eliminating duplicate formats in its journal collection, the University of Texas at Dallas did a title-by-title comparison of approximately 300 to 400 journals. The authors found many electronic journals differ significantly from their print counterparts. Discrepancies included timeliness, color and graphics, content, and service issues. Despite these discrepancies, this evaluation permitted the library to cancel approximately 70 print subscriptions. The methodology for conducting this type of an evaluation is described.

Hoeflich, M.H. *Lawyers, Books & Papers*. 5 *Green Bag 2d* 163 (Winter 2002).

Hoeflich argues that there is an iconographic convention of associating lawyers with books. He examines the role books have played in the portrayal of lawyers from the early Middle Ages to the twentieth century.

Howell, Alan. *Perfect One Day – Digital the Next: Challenges in Preserving Digital Information*. 31 *Australian Academic & Research Libraries* 121 (December 2000).

This article represents a second perspective, written by another Australian (compare Colin Webb's "*Towards a Preserved National Collection of Selected Australian Digital Publications*," below) who warns that failure to devise effective digital preservation strategies runs the risk of losing essential aspects of our collective past. A clear recitation of the differences between preserving paper as opposed to digital forms, and the specific issues faced in the effort to preserve digital matter. Includes twelve recommendations for preserving digital information.

Jaguszewski, Janice M. and Laura K. Probst. *The Impact of Electronic Resources on Serial Cancellations and Remote Storage Decisions in Academic Research Libraries*. 48 *Library Trends* 799 (2000).

The authors' explore the impact that electronic resources have on two issues: serial cancellation and the placement of print materials in remote storage. They identify suggested criteria for these decisions and discuss the unique issues that arise due to the complex nature of electronic resources.

Kalyan, Sulekha. *Non-Renewal of Print Journal Subscriptions That Duplicate Titles in Selected Electronic Databases: A Case Study*. 26 *Library Collections, Acquisitions, & Technical Services* 409 (2002).

This article makes an interesting companion to the Carolyn Henebry article, above. It describes Seton Hall University Library's approach to the examination of overlap between its print and electronic subscriptions. The article addresses the fact that the challenge facing librarians is to develop strategies that provide guidance in the transition from print to "information resources in newer formats." Kalyan considers whether the switch to e-journals saves money and if so, how much. Good review of recent contributions to this area of inquiry.

Kim, Hak Joon. *The Transition from Paper to Electronic Journals: Key Factors That Affect Scholars' Acceptance of Electronic Journals*. 41(1) *The Serials Librarian* 31 (2001).

Investigates the factors that affect scholars' acceptance of journals published solely in electronic form. Examines the feasibility of scholarly electronic journals in terms of their economic, sociological, technological and cognitive aspects. Kim concludes that while most factors support a successful transition from print to electronic journals, their lack of credibility is a major stumbling block that currently limits acceptance.

King, Donald W., et al. *Library Economic Metrics: Examples of the Comparison of Electronic and Print Journal Collections and Collection Services*. 51 *Library Trends* 376 (2003).

Explains an economic model that librarians can use to analyze questions faced everyday concerning print and electronic resource choices, such as, reliance on one or the other format, single article demand for certain journals, and whether one should deal with intermediaries or directly with publishers. "These complex decisions require a sound economic underpinning as well as good judgment in applying economic information metrics," and this article provides such an underpinning.

Klinefelter, Anne. *Copyright and Electronic Library Resources: An Overview of How the Law Is Affecting Traditional Library Services*. 19(3/4) *Legal Reference Services Quarterly* 175 (2001).

Explores how the law governing electronic resources is affecting traditional library services. Provides an overview of copyright, licensing and other information laws applying to digital resources and explains their impact on the following areas of library operations: acquisitions and collection development; gifts, exchanges, and sales; archiving and preservation; circulation; interlibrary loan and document delivery; reserve services; and research, reference, and instructional services.

Kranch, Douglas A. *Beyond Migration: Preserving Electronic Documents with Digital Tablets*. 17 *Information Technology and Libraries* 138 (September 1998).

Kranch discusses different approaches to the preservation of digital documents and their shortcomings, particularly focusing on the currently favored technique of migration, which is used to prevent data loss from technological obsolescence. He proposes an alternative approach to the preservation of electronic documents – the use of digital preservation tablets. Digital tablets would include not only the documents themselves but also the hardware and software necessary to ensure that the documents continue to be accessible. Kranch explains how this might be accomplished and calls for increased research efforts in this area.

LeFurgy, William. *Levels of Service for Digital Depositories*. 8 *D-Lib Magazine* (No. 5) (May 2002). Available at <http://www.dlib.org/dlib/may02/lefurgy/05lefurgy.html>.

The premise of this article is that not all digital materials have equal potential for preservation due to variations in their construction and organization, and consequently digital repositories should be designed with this in mind. Materials lacking the characteristics for optimal preservation can still be included in digital collections, but accessibility will be more limited. LeFurgy discusses the conditions governing the persistence of digital materials and suggests that digital repositories should adopt a

strategy of providing different levels of service for different parts of their collections based on a document's characteristics.

Liew, Chern Li, et al. *A Study of Graduate Student End-Users' Use and Perception of Electronic Journals*. 24 *Online Information Review* 302 (2000).

This article considers the future of electronic journals by examining graduate students' expectations and perceptions of e-journals relative to their print counterparts. Presents the results of a questionnaire administered to eighty-three graduate students inquiring about their usage of print and online journals, their preferred medium, and their expectations and concerns with regard to the future of electronic journals. The data showed a strong acceptance of electronic journals, although there were some reservations.

Littman, Justin. *A Preliminary Comparison of Electronic Book and Print Book Usage in Colorado*. 28 *Colorado Libraries* 39 (Fall 2002).

Provides the results of a study comparing print and electronic book usage in Colorado academic libraries. The study examines data from nine academic institutions using statistics reported in Colorado's Academic Library Survey and information furnished by netLibrary. The results show that print and electronic book usage was comparable on a per volume basis in six of these institutions, although total circulation levels per student were much higher for print resources.

Lombardo, Shawn V. and Cynthia E. Miree. *Caught in the Web: The Impact of Library Instruction on Business Students: Perceptions and Use of Print and Online Resources*. 64 *College & Research Libraries* 6 (2003).

Study measuring the impact of library instruction on business students' perceptions and use of three formats for research: the Web, online bibliographic and full-text databases, and print materials. The participants were ninety undergraduate students enrolled in a business course who were provided instruction on the benefits and problems of each format and on the importance of using a variety of resources when engaging in research. Using questionnaires to assess the impact of the research instruction, the study found that it resulted in greater acceptance and use of print resources.

Luther, Judy. *White Paper on Electronic Journal Usage Statistics*. 41(2) *The Serials Librarian* 119 (2001).

Reflects on the conundrum that librarians rely on usage statistics to make all kinds of acquisition-related decisions, but that with e-journals, there is "no agreement on how to produce data that can be compared and analyzed." In a study commissioned by the Council on Library and Information Resources, the author reviews how and what statistics are currently collected and identifies the issues that must be resolved before

librarians and publishers feel comfortable with e-journal usage data and confident about using it.

Marcum, Deanna and Amy Friedlander. *Keepers of the Crumbling Culture: What Digital Preservation Can Learn from Library History*. 9 D-Lib Magazine (No. 5) (May 2003). Available at <http://www.dlib.org/dlib/may03/friedlander/05friedlander.html>.

The authors write that part of the problem we face now about preserving electronic information is our uncertainty regarding who is supposed to do it. While our Library of Congress serves as a national library in some respects it has no “universal preservation charge for the nation.” “There is not now, nor has there ever been, a national library ... that takes responsibility for the preservation of American publications overall.” While not particularly useful in terms of offering solutions, the article has an interesting narrative on the history of libraries’ preservation efforts throughout the nineteenth and twentieth centuries.

Montgomery, Carol Hansen. *Measuring the Impact of an Electronic Journal Collection on Library Costs: A Framework and Preliminary Observations*. 6 D-Lib Magazine (No. 10) (October 2000). Available at <http://www.dlib.org/dlib/october00/montgomery/10montgomery.html>.

In 1998 the Hagerty Library at Drexel University made migration from print to electronic journals a key component of its strategic plan, and by 2000 the periodical collection consisted of 800 print subscriptions and 5000 electronic journals. This article describes the changes in the library’s operational costs as a result of this shift. Issues examined include costs associated with shifts in staffing, resources, materials, space and equipment.

Montgomery, Carol Hansen. *Print to Electronic: Measuring the Operational and Economic Implications of an Electronic Journal Collection*. 15 Learned Publishing 129 (2002).

This paper reports the results of a study conducted at Drexel University designed to examine one of the basic assumptions that preceded the University’s transition to an e-journal oriented collection; that is, that “maintaining the print journal collection takes significant resources that can be better used elsewhere – to provide more access, for example.” The preliminary conclusions found that electronic journals are used more heavily than print journals and the initial results of measuring staff time indicated information services and systems operation departments constitute the majority of personnel costs for electronic journals.

Montgomery, Carol Hansen and Donald W. King. *Comparing Library and User Related Costs of Print and Electronic Journal Collections*. 8 D-Lib Magazine (No. 10) (October 2002). Available at <http://www.dlib.org/dlib/october02/montgomery/10montgomery.html>.

Reports on the outcome of a study exploring the impact on staff and costs resulting from a shift from print to electronic journals by Drexel University's Hagerty Library. The study, which was funded by the U.S. Institute for Museum and Library Services, was designed to capture all costs associated with the shift. The article provides a summary of the various costs for each format broken down into categories such as space, systems, supplies and services, and staff. The results suggest that electronic journals are more cost effective than print on a per use basis. A readership survey was also conducted which indicated that there was broad user acceptance of electronic journals.

Morse, David H. and William A. Clintworth. *Comparing Patterns of Print and Electronic Journal Use in an Academic Health Science Library*. *Issues in Science & Technology Librarianship* (No. 28) (Fall 2000). Available at <http://www.istl.org/00-fall/refereed.html>.

The authors conducted a study in an academic biomedical library setting, having in mind that "while libraries struggle to balance competition between print and electronic journal collections, librarians have a pressing need to know how these collections are used in order to maximize their investments in acquisitions funds and staff time." The study sought to answer the questions – how fast is the transition to electronic journals occurring and to what extent do patterns of use of journals in electronic form duplicate the patterns of use of their print counterparts? In addition to answering these questions, the authors found there was an "overwhelming preference ... for electronic access when it is available ... especially when [the user] can link directly from databases to the full-text of the articles indexed."

Most, Marguerite. *Electronic Journals in the Academic Law Library*. 21(4) *Legal Reference Services Quarterly* 189 (2002).

A seminal article that gracefully serves as "an introduction to electronic journals in the academic law library and to the questions librarians face and must respond to as they provide timely access to legal scholarship in an increasingly electronic environment." Issues such as licensing, use statistics, the hidden costs of e-journals, how do you count these journals, reference linking, user education and the preservation of digital formats are covered. The author also peers into the future to consider whether the "serials crisis," and "scholarly communication crisis," experienced in other libraries, like medicine and the social sciences, has any implication for the academic law library environment. One of the most worthwhile articles to read from this list.

Murray, Jennifer S. *Print Citor Instruction: What to Do?* 95 *Law Library Journal* 139 (2003).

Considers whether print citator instruction is still necessary due to the ascendancy of the online citator. Discusses the University of Southern California Law School's decision to continue to provide print citator training in its first-year legal research program and how it reached that conclusion. Provides a summary of the responses to a query posted by

Murray to the AALL Academic Law Libraries Special Interest Section electronic discussion list, in which she inquired as to the status of print citator instruction in other schools.

Neacsu, E. Dana. *Legal Scholarship and Digital Publishing: Has Anything Changed in the Way We Do Legal Research?* 21(2/3) Legal References Services Quarterly 105 (2002).

“Legal scholarship depends on the existence and reliability of accessible materials to verify the accuracy and validity of the ideas advanced in the source.” The growth of digital publishing threatens “the established reliability of source materials.” The authors’ examination “of 20 law review articles, all containing at least four citations to the Internet, found that 12 of the 20 contained an online source which could no longer be accessed *within a year of the online source’s publication*” (emphasis added).

Neri, Martha. *Putting the Cart Before the Horse: Understanding the Pros and Cons of Digital Preservation.* 17(2) Library & Archival Security 59 (2001).

Offers an overview of the digital preservation process and the dilemmas posed by the various possible methods. Briefly explains some of the problems resulting from different technical strategies, including refreshing, migration and emulation. Includes a list of the steps involved in digital preservation.

Okerson, Ann. *Are We There Yet? Online E-Resources Ten Years After.* 48 Library Trends 671 (2000).

An interesting review of past trends in publishing on the Internet – “Internet History” – designed to keep librarians, as well as others, from losing their bearings. Concludes with predictions in these areas through 2005.

Potter, Theodore A. *A New Twist on an Old Plot: Legal Research Is a Strategy, Not a Format.* 92 Law Library Journal 287 (2000).

Potter argues that legal research training methods should be adapted to reflect the reality that most students will default to using computers whenever possible. He contends that research skills will improve by providing computer database instruction first, with print-based techniques taught later when appropriate. Potter offers suggestions on how to teach legal research, and emphasizes that the focus should not be on format, but on good research strategy.

Preston, Laurie A., et al. *“Full-Text” Access Evaluation: Are We Getting the Real Thing?* 34(3/4) The Serials Librarian 301 (1998).

This article presents the highlights of a workshop that examined the differences between selected print journals and their full-text electronic equivalent. Seventy-five journals

from several disciplines were compared to the online version available through Information Access Corporation's Expanded Academic Index ASAP. The study found that most of the electronic titles were missing some content available in the print versions. A model for assessing the value of full-text electronic subscriptions was also provided.

Quandt, Richard E. *Scholarly Materials: Paper or Digital*. 51 *Library Trends* 349 (2003).

The author takes aim at the prediction that the “entire editorial process, particularly for scholarly journals, will be re-engineered, so that journals will become available on the World Wide Web for a fraction of the cost of paper journals or even for free.” Noting that this is nowhere near realization, the bulk of the article explores the reasons for this lagging, and concludes that the prediction of the paper journals demise is vastly exaggerated. Nor does the author believe that the “increasing dominance of electronic publications will ease the economic plight of libraries in the short run.”

Quint, Barbara. *Tasini Damage-Reporting Decisions*. 19 *Information Today* 8 (April 1, 2002).

This article focuses on the reactions of vendors to customer inquiries about the impact of the *Tasini* decision on the content of their full-text databases. The author criticizes the vendors for a lack of responsiveness to these questions, and proposes steps that they should take in dealing with the *Tasini* challenge. Includes a brief summary of how several different newspaper database providers – such as LexisNexis, Dialog, and Gale Group – have responded to the situation.

Randolph, Susan E. *Are E-Books in Your Future? Electronic Books in Libraries*. 5 *Information Outlook* 22 (February 1, 2001).

Randolph explores the benefits and possible uses of electronic books and considers whether they have a future in libraries. She observes that e-book technology provides the reader with greater information access capabilities than is possible with print books. The article also examines the various types of e-book technology and the different vendors in this area. It also includes discussion about the experiences of several public libraries with assorted forms of e-books.

Reach, Catherine Sanders, et al. *Feasibility and Viability of the Digital Library in a Private Law Firm*. 95 *Law Library Journal* 369 (2003).

Defining a digital library as “a virtual library, where all services rendered by staff are electronic, not only the collection,” the authors conducted a survey in 2002 to study the feasibility and viability of a digital library in the private law firm. In their definition, the information professionals “may or may not be physically located in one place or even be employees of the business served by the virtual library.” Results indicate that the day of the virtual library in private firms is not yet here, and for some surprising reasons.

Reich, Victoria A. *Lots of Copies Keep Stuff Safe as a Cooperative Archiving Solution for E-Journals*. *Issues in Science & Technology Librarianship* (No. 36) (Fall 2002). Available at <http://www.istl.org/02-fall/article1.html>.

Describes the LOCKSS Program (Lots of Copies Keeps Stuff Safe), whose mission is to “build tools and provide support to research libraries so they can easily and affordably create, preserve, and archive local electronic collections.” This program is based on the premise that it is in society’s best interest for libraries to own rather than lease electronic information, and thus libraries would retain their traditional custodial role for scholarly information. The LOCKSS Program also provides support to publishers so they can, without risk to their business model, distribute e-journals to libraries and relinquish responsibility to provide perpetual access. Test pilot participants include Stanford, Harvard, Columbia and the University of Tennessee and development is supported by the Andrew W. Mellon Foundation. The program is soliciting library and publisher participation.

Rowse, Mark. *The Hybrid Environment: Electronic-Only Versus Print Retention – What is the Feasibility of Sustaining Duplicate Print and Electronic Collections?* 15 *Against the Grain* 24 (April 2003).

Offers an overview of the various factors that have a direct impact on the ratio of print to electronic resources in libraries. Among the topics explored: the effect of financial pressures and changing purchasing models on acquisitions; the role of collaborative networked environments in resource sharing and its impact on the library as a physical space; new publishing models and the increase in born-digital information; and the changing expectations and preferences of library users.

Rupp-Serrano, Karen, et al. *Canceling Print Serials in Favor of Electronic: Criteria for Decision Making*. 26 *Library Collections, Acquisitions, & Technical Services* 369 (2002).

Many libraries have incorporated electronic serials into their collections while continuing to subscribe to their print counterparts. The authors observe that this practice may not be financially sustainable, and as a consequence libraries may have to reconsider what they are receiving and in what format. This article proposes potential criteria that may be used by libraries when developing policies to guide their format cancellation decisions.

Russell, Gordon. *Re-Engineering the Law Library Resources Today for Tomorrow’s Users: A Response to “How Much of Your Print Collection Is Really on WESTLAW or LEXIS-NEXIS?”* 21(2/3) *Legal Reference Services Quarterly* 29 (2002).

Responds to Hazelton’s article, annotated above, and seeks to rebut her rationale for the present-day space needs of one particular mortar and brick law school library. Russell

addresses each of five areas to which he reduces Hazelton's position, pressing his point that "today's librarians must be prepared to serve users who believe that if everything they need is not on the Web it should at least be available online We have quickly arrived at the point where the library can and must be re-engineered." Readers will have to judge for themselves who presents the most persuasive arguments, but both articles raise questions that must be addressed by anyone facing library renovation or construction-related decisions in the near future.

Sathe, Nila A., et al. *Print Versus Electronic Journals: A Preliminary Investigation Into the Effect of Journal Format on Research Processes*. 90 *Journal of the Medical Library Association* 235 (2002).

The authors investigated the impact of electronic journals on research processes by conducting a pilot journal-use study to test the hypothesis that medical library patrons use print and electronic journals differently. The findings have several uses. They (1) provide an introductory step in examining how e-journals affect the research process; (2) inform collection development decisions; and (3) may surprise publishers and educators. The study concludes that current electronic formats do not facilitate all types of uses and may be changing learning/research patterns.

Sheaves, Edward. *The Acquisitions Culture Wars; Electronic and Printed Library Resources*. 48 *Library Trends* 877 (2000).

Sheaves observes that there is an ongoing conflict on college and university campuses over the appropriate role of print and electronic resources in the library of the future. These "acquisitions culture wars" revolve around the proper place of digital technology in libraries, with some faculty arguing that libraries' investment in technology comes at the expense of the book and is a betrayal of the fundamental mission of the library. He examines a range of views that characterize this debate, and argues that librarians have played insufficient attention to the political and rhetorical dimensions of this conflict and need to communicate more effectively with all sectors of the academic community.

Silipigni Connaway, Lynn and Stephen R. Lawrence. *Comparing Library Resource Allocations for the Paper and the Digital Library: An Exploratory Study*. 9 *D-Lib Magazine* (No. 12) (December 2003). Available at <http://dlib.org/dlib/december03/connaway/12connaway.html>.

A preliminary attempt to fill the gap in the literature of any material that explains how to examine and compare the costs associated with providing library resources and services in the print book and electronic book formats. This study evaluates systematically the costs of both types of libraries in terms of labor, space, material, equipment allocation, cataloguing, maintenance, circulation, warehousing and storage, and de-selection of print books and e-books.

Slagell, Jeff. *The Good, the Bad, and the Ugly: Evaluating Electronic Journals*. 5 Computers in Libraries 34 (May 1, 2001).

This article explores a variety of aspects of the evolving electronic journal format that one should consider “before traveling too far down the electronic subscription trail,” specifically addressing pricing issues, access, archiving, and future developments based on the author’s experience at the W. B. Roberts Library at Delta State University in Cleveland, Mississippi. Also contains several helpful suggestions for where to go for more information, for example, for licensing issues.

Sprague, Nancy and Mary Beth Chambers. *Full-Text Databases and the Journal Cancellation Process: A Case Study*. 26(3) Serials Review 19 (2000).

Provides the results of a study that investigates the implications of replacing print journal subscriptions with their electronic full-text counterparts. The study compares seventy-nine print journals and their full-text versions available through five databases: ABI/Inform, Periodical Abstracts and WilsonSelect through OCLC's FirstSearch, and Expanded Academic Index ASAP and General BusinessFile ASAP from Gale Group. It examines the following topics – currency, coverage, graphics and stability – and finds that the electronic versions have many deficiencies in these areas.

Summerfield, Mary, et al. *The Potential for Scholarly Online Books: Views from the Columbia University Online Books Evaluation Project*. 16 Publishing Research Quarterly 39 (Fall 2000).

Summarizes the key findings of Columbia University’s Online Books Evaluation Project, a study examining scholars’ reactions to online books and their costs relative to print materials. The study tracked usage of an online book collection that, as of June 1999, contained 168 texts. It found that the online books appeared to be used more heavily than their paper counterparts, although users often sought a print copy for extended reading. The life-cycle cost to libraries from online books was found to be lower than their print equivalent.

Terry, Ana Arias. *Digital Archiving: A Work in Progress*. 13 Against the Grain 28 (June 2001).

The author’s intention in this article is to highlight the series of issues we face with regard to digital archiving – the who, what, where, how and when? She believes that we are faced with a lot of work to do on what is probably one of the biggest collaborative efforts in the information community to date.

Warner, Dorothy. *‘Why Do We Need to Keep This in Print? It’s on the Web...’: A Review of Electronic Archiving Issues and Problems*. 19/20 Progressive Librarian 47 (Spring 2002).

Although this article addresses preservation issues largely in the context of government electronic resources, the author notes that concerns about electronic government information certainly relate to other forms of digital information. “Although there are groups working at the state, national and global levels to determine the best practices for digital archiving, the problems are complex and the stakeholders are many. Understanding the issue of digital archiving is important for librarians at all levels as local collection development and preservation decisions are being made.” Useful overview of existing governmental and non-governmental digital archive collaborations.

Webb, Colin. *Towards a Preserved National Collection of Selected Australian Digital Publications*. 6 *New Review of Academic Librarianship* 179 (2000).

This article discusses Australia’s National Library’s (NL) efforts to devise a national approach to building an archive of online publications and developing a national model for digital archiving. The NL of Australia, charged by statute “to retain in perpetuity a copy of all material published in Australia,” is also committed to preserving and making accessible a national collection of Australian digital publications. The article describes the NL’s progressive efforts to assess and to devise strategies to deal with the unique issues associated with digital artifacts (inadequate identification, technological obsolescence, unidentified diskettes containing potentially important information in unknown formats). Further discusses some of the controversial principles upon which its digital archive objectives are based; such as, selectivity rather than comprehensiveness, and a focus on selecting titles available in online format only.

Webster, Peter. *Implications of Expanded Library Electronic Reference Collections: From My Vantage Point, the Movement from Paper Library Reference Works to Electronic Products Is Picking Up Speed*. 27 *Online* 24 (September 1, 2003).

Webster considers the consequences of converting from print to electronic reference tools. He examines the advantages of adopting electronic reference sources and the difficult new challenges that they sometimes create. The article also explores some of the factors that are causing the pace of conversion to quicken, such as evolving publisher priorities and changing user demands.

Weiner, Robert J., Jr. *Evaluating Electronic Resources: Criteria Used by Librarians*. 52 *Syracuse Law Review* 1207 (2002).

The subject of this article is an evaluation of licensed, fee-based or subscription electronic resources, by means of presenting sample criteria used by libraries for these types of resources. The criteria focuses on content, access, technology issues, and include sources for more evaluation help.

Younger, Jennifer A. *From the Inside Out: An Organizational View of Electronic Resources and Collection Development*. 36(3) *Journal of Library Administration* 19 (2002).

This article is based on a presentation made at the Conference on Electronic Resources and Collection Development, held at the University of Oklahoma, Oklahoma City, in 2002. In it Younger discusses the impact of electronic resources on libraries and how it is changing access to information. She asserts that electronic resources have overtaken print materials in their importance to library collections. Younger also explores the question of how e-resources will be archived and their effect on collection development.

Zeidberg, David S. *The Archival View of Technology: Resources for the Scholar of the Future*. 47 *Library Trends* 796 (1999).

Makes the point that “where early manuscripts and printed books have survived because they are made of durable materials, electronic records are vulnerable to alteration and data loss.” This, of course, has enormous impact on scholarly research since so much information about the past is conveyed not only by the actual information transferred, but also by the mode of transmittal. At a minimum, questions of authenticity often are resolved by examining “originals.” The author makes the interesting observation that “we are witnessing difficulties with electronic texts not unlike those faced by the first European printers in the latter half of the fifteenth century” – that is, questions of corruption of text, authenticity, etc. All this by way of saying that in order to preserve electronic records in an environment safe from tampering and other storage pitfalls, archivists need to apply traditional principles of records management to electronic documents, if these records are to survive for use by future scholars.

Newspapers

Carlson, Scott. *Once-Trustworthy Newspaper Databases Have Become Unreliable and Frustrating*. *Chronicle of Higher Education*, January 25, 2002, at A29.

Explores the aftermath of the U.S. Supreme Court's decision in *Tasini*, which ruled that publishers did not have the right to republish freelance articles into online databases without the authors' permission. As a consequence, many publishers removed these articles from their databases. Interviews scholars and librarians for their views on how this decision impacts scholarly research, and notes that it is unclear how many articles have been removed.

Carlson, Scott. *Do Libraries Really Need Books?* *Chronicle of Higher Education*, July 12, 2002, at A31.

The author reviews several libraries undergoing remodeling and chronicles the various struggles and philosophies governing the decision about how much space to devote to the print collection and how much to devote to new media and other objects to make the

library setting more “current.” Interesting article to read in conjunction with the Dilevko and Gottlieb article, above.

Carlson, Scott. *Students and Faculty Members Turn First to Online Library Materials, Study Finds*. Chronicle of Higher Education, October 18, 2002, at A37.

A brief article summarizing the results of a study on the information gathering habits of students and professors. The study, which was conducted for the Digital Library Federation, included interviews with more than 3,200 faculty members, undergraduate and graduate students. Among its findings – almost 90 percent of researchers went to online sources first, although most found print sources to be more trustworthy.

Foster, Andrea L. *Second Thoughts on ‘Bundled’ E-Journals: Librarians’ Skepticism Grows on Colleges’ Agreements with Elsevier*. Chronicle of Higher Education, September 20, 2002, at A31.

As the publishing world contracts, e-journal prices increase, and library budgets decrease, librarians increasingly resent “being asked to provide our patrons with things that we don’t want.” This article reviews some of the recent publication consolidations, price increases and pricing programs, and criticisms of e-journal bundling requirements. The implicit tie-in between the profitability of a unit such as ScienceDirect to the bottom line of its parent corporation, Reed Elsevier, is made explicit.

Marke, Julius J. *Problems with Electronic Legal Information*. New York Law Journal, November 17, 1998, at 5.

Examines concerns regarding the dependability of digital information, especially in connection to authenticity and preservation issues. Observes that electronic documents have authenticity problems not found with print materials, because digital documents are not inextricably bound to a physical medium and are more subject to decay and alteration. Also discusses archiving issues related to digital publications.

Students Find Web Inadequate as a Research Tool, Survey Shows. Chronicle of Higher Education, August 9, 2002, at A32.

This short article describes the findings of an OCLC survey of 1,050 college students. The report, entitled “OCLC White Paper on the Information Habits of College Students,” found that most students begin their research on commercial search engines, with almost 80 percent using Internet search engines for “every” or “most” assignments. However, half of the surveyed students also said that the information on the Web was not sufficient for their assignments. The report is available on the Internet at <http://www.oclc.org/research/announcements/2002-06-24.htm>.

Technology of E-Books Needs Work Before Students Will Accept Them, Study Finds. Chronicle of Higher Education, September 13, 2002, at A33.

A study conducted by Ball State University and supported by a \$20 million four-year grant from the Eli Lilly Foundation found that e-book technology needs improvement before students will be willing to use them instead of textbooks.

Watson, Holly E. *Forget About Going Paperless: The Internet Will Never Replace All Books – And Some Lawyers Won't Give Them Up.* Legal Times, July 17, 2000, at 31.

Watson addresses the contention that the proliferation of electronic research resources makes law firm libraries unnecessary and will result in their elimination. She argues that firm libraries and their staffs are necessary – that it is frequently more efficient to leave online research to librarians rather than attorneys, and that print resources often have advantages over their electronic counterparts. As a consequence, firm libraries will continue to exist.

Internet Resources

Council on Library and Information Resources

<http://www.clir.org>

CLIR works to expand access to information, however recorded and preserved, as a public good. The projects and activities of CLIR are aimed at ensuring that information resources needed by scholars, students, and the general public are available for future generations. The CLIR Board of Directors has identified six interrelated themes – all focused on the long-term accessibility of scholarly resources – that deserve immediate attention. Those themes are discussed at this Web site, where the viewer will also find information about available reports, tutorials, newsletters, and other potentially useful information. It is also the administrative home of the Digital Library Federation.

Digital Library Federation

<http://www.diglib.org/preserve/criteria.htm>

The Digital Library Federation, operating under the administration of the Council of Library and Information Resources, is a consortium of libraries and related agencies that are pioneering in the use of electronic-information technology to extend their collections and services. Find out about various preservation projects and initiatives at this site.

Digital Preservation Commons (DPC)

<http://www.oclc.org/digitalpreservation>

OCLC and RLG have developed this Commons to promote discussion about digital preservation and archiving issues. The goal of the DPC is to identify best practices for preserving digital objects.

Library of Congress, National Digital Information Infrastructure and Preservation Program
<http://www.digitalpreservation.gov>

This is the Web site for the Library of Congress' National Digital Information Infrastructure and Preservation Program (NDIIPP), funded by the United States Congress. Descriptions of NDIIPP's programs, reports, and grants available for research projects in three identified areas may be found at this site.

University of California, Office of the President, Collection Management Initiative
<http://www.ucop.edu/cmi>

This is an interesting initiative spearheaded by the UC system: funded by the Andrew W. Mellon Foundation, from October 2001 through September 2002, selected print journals in UC libraries for which electronic access was available through the California Digital Library were temporarily removed from the shelf. During the study, researchers relied primarily on the electronic version of these journals. If a researcher needed to consult the print version, the volume was temporarily brought back for use or a photocopy was provided. Usage data has been gathered, and researcher experiences and preferences are being assessed. After evaluating the study results, the University will use what has been learned to develop strategies, policies and programs for the future management of library collections consisting of both digital and print formats. The methodology is described at this site, and it also has some useful "related activities" links.

Video Cassettes

Books and Bytes: Balancing Formats in Today's Libraries. Chicago, IL: American Association of Law Libraries, 2000.

A recording of a teleconference on collection development held on April 13, 2000. Sponsored by AALL and West Group, the conference had two goals: "to help develop a framework for collecting and organizing the data required to make collection development decisions," and to aid librarians in making decisions "in the context of an ongoing collection development plan." The presentation particularly focuses on the influence of new technologies on the collection development process.

AALL Annual Meeting Audio Cassettes⁵

Barnum, George and Cathy Hartman. *Electronic Archives and Partnerships: Preserving Government Information for Tomorrow*. (American Association of Law Libraries, 96th Annual Meeting, Seattle, WA (D-3)). Valencia, CA: Mobiltape, 2003.

Discusses partnership programs created between the Government Printing Office and other institutions as part of an effort to archive and provide permanent public access to digital government documents. Using the partnership between the GPO and the University of North Texas as a case study, it also analyzes the benefits and costs to libraries from engaging in such an endeavor.

Baum, Marsha and Michelle M. Wu. *Connecting Digitization and Reorganization: Restructuring the Documents Department to Accommodate Electronic Digitization/Preservation Projects*. (American Association of Law Libraries, 95th Annual Meeting, Orlando, FL (H-4)). Valencia, CA: Mobiltape, 2002.

Examines ways of achieving a successful digitization/preservation project. The program focuses on the importance of conducting a feasibility study before beginning a project and on how to restructure a documents department to accommodate the project.

Evans, T.C., et al. *Preserving Government Electronic Information: Whose Job is It?* (American Association of Law Libraries, 94^h Annual Meeting, Minneapolis, MN (C-7)). Valencia, CA: Mobiltape, 2001.

Representatives from the Government Printing Office, National Archives, Congressional Information Service, Inc., and an academic library consider which institution is best suited to preserve government electronic information based on technical and budgetary considerations and their respective missions.

Friedland, Lee Ellen and Melody Busse Lembke. *Preservation at the Crossroads: A Debate Between the Traditional World of Print and the Brave New World of Digital*. (American Association of Law Libraries, 92nd Annual Meeting, Washington, DC (D-7)). Valencia, CA: Mobiltape, 1999.

⁵The annotations within this section are adapted from the program descriptions provided in the following two sources: Houdek, Frank G. and Susan D. Goldner. *AALL Annual Meetings: An Annotated Index of the Recordings*. Littleton, CO: Fred B. Rothman, 1989-; *Maximize Today, Envision Tomorrow: American Association of Law Libraries 96th Annual Meeting and Conference; Final Program*. Chicago, IL: American Association of Law Libraries, 2003.

Participants debate how the preservation of library materials should be prioritized, focusing on whether print collections should be preserved in their original format or digitally.

Germain, Claire M., et al. *Here Today, Gone Tomorrow? The Archivability of Electronic Records*. (American Association of Law Libraries, 91st Annual Meeting, Anaheim, CA (A-8)). Valencia, CA: Mobiltape, 1998.

Examines different strategies aimed at ensuring the preservation of digital documents. Reports on the Law Library of Congress' approach to preservation and considers a proposal for libraries to create a consortia to serve as digital archives.

Hannon, Michael J., et al. *At the Crossroads in the Age of Electronic Publishing: The Potential Impact of Electronic Publishing on Law Libraries, Legal Education, and Legal Scholarship*. (American Association of Law Libraries, 92nd Annual Meeting, Washington, DC (A-2)). Valencia, CA: Mobiltape, 1999.

This program explores a wide variety of issues related to electronic publishing. It addresses topics such as the use of e-publishing in scholarly communication, archiving, permanency, security, and impact on library budgets.

Hoffman, Marci, et al. *Blazing New Paths with Technology: Electronic Publishing Initiatives*. (American Association of Law Libraries, 93rd Annual Meeting, Philadelphia, PA (I-6)). Valencia, CA: Mobiltape, 2000.

Describes ways of digitizing, storing, and publishing legal information in an electronic format. Reviews standards for digital publishing and how to plan and finance electronic publishing initiatives.

Johnson, Troy C. and Daniel Munyon. *Electronic Book Readers: Law Libraries Need a New Role*. (American Association of Law Libraries, 93rd Annual Meeting, Philadelphia, PA (C-3)). Valencia, CA: Mobiltape, 2000.

Offers an overview of the major electronic book readers, their various features and capabilities, and information access issues related to these devices.

Johnson, Troy C. and Terry S. Dick. *The New Reality of Integrating and Acquiring Electronic Book Readers Into the Legal Information World*. (American Association of Law Libraries, 94^h Annual Meeting, Minneapolis, MN (B-3)). Valencia, CA: Mobiltape, 2001.

Examines the reasons why law libraries should purchase electronic book readers and how to approach this decision. Reviews the types of legal content that is available on electronic book readers and user reactions to this format.

Neacsu, E. Dana, et al. *A New Battle of the Bulge? The Impact of Digitization on Legal Scholarship and How Law Libraries are Trying to Avoid a Potential Disaster*. (American Association of Law Libraries, 95th Annual Meeting, Orlando, FL (H-5)). Valencia, CA: Mobiltape, 2002.

Explores methods used by law libraries to address the potential threat posed by digitization to legal scholarship. Discusses issues such as authorship, accessibility and reliability.

Seo, Hilary T., et al. *Maximize Preservation Efforts Today, Envision Continued Access to Legal Information Tomorrow: A National Agenda for Preserving Legal Information*. (American Association of Law Libraries, 96th Annual Meeting, Seattle, WA (G-6)). Valencia, CA: Mobiltape, 2003.

Addresses the current state of preservation of print and digital legal information and assesses a draft national plan for preserving legal materials developed in the conference, "Preserving Legal Information for the 21st Century," held in Washington DC, March 6-8, 2003.

Sherden, Molly and Sarah Wiant. *Electronic Licensing Agreements*. (American Association of Law Libraries, 93rd Annual Meeting, Philadelphia, PA (W-2)). Valencia, CA: Mobiltape, 2000.

Considers the legal framework of electronic licensing agreements and how to assess the key issues of an institution's needs. Discusses how to develop relevant negotiating skills.

Snyder Anderson, Janice and Kristina Kuhlmann. *Acquisition and Control of Electronic Legal Resources in the 21st Century*. (American Association of Law Libraries, 93rd Annual Meeting, Philadelphia, PA (L-4)). Valencia, CA: Mobiltape, 2000.

Addresses issues that arise from libraries shifting from print to digital serials. Explores topics such as acquisitions, license management, control of electronic serials, and how to maintain the holding statement for serials that are not physically owned by the library.