Indiana Library Federation

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INDIANA LIBRARY FEDERATION
941 E. 86th Street, Suite 260
Indianapolis, Indiana 46240
Phone: (317) 257-2040 ext. 104
Fax: (317) 257-1389
Email: askus@ilfonline.org
Web: www.ilfonline.org

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Indiana Library Federation
941 E. 86th Street, Suite 260
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Email: askus@ilfonline.org

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From the Guest Editor's Desk:

By Alberta Davis Comer

Welcome to this special issue of Indiana Libraries. In this issue you will hear from movers and shakers across the state, librarians who have spent their careers helping to shape and define academic libraries not only in Indiana but nationally. I would like to thank each of them for taking the time from their very busy schedules to write about their visions, their dreams, and, yes, their concerns. Although their topics vary, their passion is apparent—passion for our libraries and our constituents.

While this issue's focus is on current issues facing academic libraries, these same concerns are universal in many libraries including public and special libraries. Our first author, Julie J. McGowan, served as the Director of the Ruth Lilly Medical Library from 1999-2011. Her article looks at what is happening in academic health sciences libraries and new models that are evolving. J. Douglas Archer, Reference and Peace Studies Librarian at the University of Notre Dame and past chair of ALA's Intellectual Freedom Committee, provides us with an overview of new challenges in intellectual freedom including a question that many of us have grappled with—what happens when libraries lease e-books and no longer control the access to content and preservation.

James L. Mullins, Dean of Libraries at Purdue University, offers us a thought provoking article on the changing needs of library clientele. What does this change mean for the future of collection development growth and services in research libraries? Brenda L. Johnson, Dean of University Libraries at Indiana University - Bloomington, talks about engaging teaching faculty in a conversation about the future of libraries; their discussion is both surprising and profound. Cheryl B. Truesdell, Dean of the Indiana University-Purdue University Fort Wayne Library, uses a red balloon project to re-imagine the academic library and its role in undergraduate education.

Linda K. Fariss, Director of the Law Library at the Indiana University School of Law, examines concerns facing academic law libraries including budgetary challenges and loss of space, two issues that many libraries face. Dan Bowell, University Librarian at Taylor University and the current President of Academic Libraries of Indiana (ALI), gives us food for thought in his article on library consortia and ALI's role in future cooperative sharing.

Susan Clark, Director of Ivy Tech Community College's East Central Libraries, talks about an information literacy project that actively involved Indiana librarians. Marcia Smith-Woodard, Indiana State Library's Special Services Consultant, also discusses an in-state project, Indiana's Librarians Leading in Diversity (I-LLID); this project involved finding ways to recruit a more diverse workforce for Indiana libraries.

David W. Lewis, Dean of the Indiana University-Purdue University Indianapolis University Library, offers a provocative piece on what librarians can learn from academic Clay Shirky's essay on newspapers. Diane Parr Walker, University Librarian at the University of Notre Dame, discusses the HathiTrust, formed to preserve securely the digitized content of the printed holdings of research libraries, and how it may transform the library landscape of the future.

We round out this issue with a somewhat tongue-in-cheek article from Rick Provine, Director of Libraries at DePauw University, entitled "Waiting for the Future," a name which describes what, in essence, this issue encapsulates.

As we "wait" for the future, we may find that aspects of what we once thought of as futuristic are already here. These articles can help us manage changes more successfully and help us prepare our libraries for whatever today, and tomorrow, may bring.

Bio

Alberta Davis Comer is Dean of Library Services at Indiana State University. She received her MLS from Indiana University-Bloomington. She has published articles in *Structure Magazine*, *Indiana Libraries*, *Against the Grain*, *Journal of Access Services*, *Computers in Libraries*, and in several conference proceedings. She served as editor for *Indiana Libraries* 2005-2008 and as editor of *Cognotes* in 2005. She is an avid runner and reader.

Agony and Ecstasy: The Transformation of the Academic Health Sciences Library

By Julie J. McGowan, Ph.D., FACMI, FMLA

The health care environment is under increasing pressure to deliver better quality of care while simultaneously reducing costs. From a global perspective this might not appear directly related to academic health sciences libraries. However, it is at the foundation of the angst permeating the profession. As a concrete indicator of the impact of this pressure on libraries over the past five years, academic health sciences libraries have witnessed substantive budget reductions and loss of personnel across the nation (Association of Academic Health Sciences Libraries, 2007; Association of Academic Health Sciences Libraries, 2011).

Other factors have led to this current state, including the perceptions that knowledge is becoming more freely available over the Web, librarians are no longer needed as expert searchers, and the academic health care environment has more need for specialized knowledge managers in research and clinical decision support than the generalists currently being trained in library schools. This has resulted in many institutions questioning whether or not the money put into the library cost center might better be directed towards more specialty trained knowledge managers.

High quality information continues to be in demand. Considering that medicine is one of the most information intensive professions, health care depends on having the right information at the right time, whether that information is critical knowledge about the patient or the evidence necessary to make an informed decision relative to the patient's condition. However, as health care becomes more specialized and the body of medical knowledge grows, it is impossible for the health care provider to know what is important at any given time and it is impossible for the medical librarian to hope to assist the individual provider without the breadth of understanding of the patient's condition and how that relates to the evidence base.

Computers in medical practice are becoming more ubiquitous, particularly as the HITECH Act has moved forward with the demand for meaningful use of electronic health records (EHRs) (Blumenthal, 2010). Decision support utilities are central to meaningful use, and these are not created easily. Use of IBM's supercomputer, Watson, has recently been purchased by WellPoint, Inc. as a trial to improve health care in a variety of different venues by linking patient data to information contained in journal articles, texts, and high quality decision support utilities (Mathews, 2011).

The idea of coupling patient data with evidence is not new and is seeing a resurgence because of the need to reduce medical errors and health care costs (Weed & Weed, 2011). So where does this leave academic health sciences libraries, the traditional source for high quality health information? The obvious answer would be in a precarious position. However, in exploring the ways that library skills impact the utilities that support quality health care decision making, the future becomes brighter. Following is an analysis of the direction that academic health sciences libraries need to take when considering the full spectrum of academic medicine and the tools librarians will need to achieve their potential in this brave new world of high tech medicine.

New Models for Academic Health Sciences Libraries

There have been several seminal papers written over the past decade about the future of health sciences librarianship. The first of these was a paper by Davidoff and Florence (2000) introducing a new profession of Clinical Informationist to mitigate the problems with knowledge management happening during the patient care encounter. This professional would possess both the core information management skills of the librarian and also a deep understanding of the medical profession. Persons ideally suited to this would be clinicians who sought library degrees or librarians who became certified in one of the health professions.

Two years later the Medical Library Association convened an Informationist conference with the National Library of Medicine and added the concept of Research Informationist as a second new type of professional, mixing library skills with a detailed knowledge of one or more of the research disciplines (Shipman, Cunningham, Holst, & Watson, 2002). Both of these articles called for additional credentialing and/or degrees for librarians as a precursor to clinical or research collegiality, particularly in academic medicine where the doctorate is sacrosanct.

Lindberg and Humphreys (2005) took this concept one step further in a 2005 *New England Journal of Medicine* article in which they posited that the academic health sciences library of the future would be electronic and, although there was need for a physical presence for gathering, it would not have books or journals nor would it provide reference services in the most traditional sense. The new Informationists would be embedded in their respective departments to serve as part of clinical or research teams while high level paraprofessionals would manage the collections and other library services.

Many academic health sciences libraries today have begun this evolution. In a recent survey of directors of academic health sciences libraries in the U.S. and Canada, of the 58% who responded, 100% stated that they purchased electronic journal access although only about half provided backfile access in that venue and only 26% purchased e-book access. There has also been a notable trend in moving away from having librarians manage either technical or access services departments (McGowan, 2012).

New Roles for Academic Health Sciences Librarians

While there seems to be a reduction of professional librarians in the more traditional service areas there is an incremental increase in professional librarians, albeit with a growing number possessing additional academic credentials, taking part in the four cornerstones of academic medicine, teaching, research, clinical service, and professional service, in the form of knowledge management. With the requirements to link electronic articles to disparate bibliographic databases and to find obscure publications for document delivery and interlibrary loan, paraprofessionals must be trained or have traditional library degrees to insure the necessary levels of competencies in these critical areas. This raises the question of whether or not there should be two types of professional librarians in academic health sciences library, those who provide more traditional library support services and those who are more actively involved in traditional faculty roles.

Teaching

Academic health sciences librarians have had an active role in teaching search strategies to medical students since MEDLINE, primary bibliographic database of medicine, became an end user's tool (McGowan, Passiment, & Hoffman, 2007). More recently, they have become involved with evidence-based medicine (EBM) courses, a content area that teaches medical students to critically analyze the articles to ensure that they obtain the best evidence for the patient care problem. However, even EBM tends to be an extension

of an old paradigm, and the roles of many librarians in this content area tend to be more of teaching identification and access skills rather than teaching the analysis competency.

There are a number of teaching opportunities that most academic health sciences librarians have not pursued but which fall into areas of critical importance to the next generation of both clinical practice and translational research. These include the need to inform future researchers about the knowledge-based tools that are available from both national and global sources and to teach not only their use but also how they can be efficiently and effectively linked into local databases to improve decision support and create new knowledge.

In clinical practice, with the mandate for meaningful use of EHRs, librarians have a unique opportunity to own the teaching content of linking decision support (knowledge-based) components of the EHRs to patient care – when to use alerts and how to insure that knowledge questions are answered when they could have a noticeable impact on patient safety and quality of care. In addition, librarians generally have exceptional organizational management skills and have the opportunity to teach/disseminate knowledge about quality improvement projects and other similar process activities that are critical in today's health care environment.

Although falling outside of the more traditional teaching of health sciences students, librarians also have a major opportunity to participate in any patient care project that focuses on therapy compliance or patient decision-making that requires improved health information literacy. Librarians are in a distinctive position to work with patients in helping them understand information on which they need to base their health care choices.

Research

Academic health sciences librarians have generally focused their efforts on supporting research projects within their institutions through providing high quality literature searches. However, with the dramatic change in the preferred sources of research knowledge, even this traditional service role is being lessened. Cancer researchers tend to rely on the Cancer Biomedical Informatics Grid® (CABig) while the proteomics and genomics researchers rely on Entrez and many similar knowledge sources, bypassing the refereed journal literature. Since the National Institutes of Health (NIH) requiring all grant supported research data be made freely available, this trend will grow towards access to primary source data rather than published analysis of data, even if it is in a highly respected refereed journal.

Again, librarians have a unique opportunity to become knowledge leaders in research projects, but to move into that area, as with the Research Informationist, a subject specific second master's degree or a Ph.D. is generally a prerequisite. There are some notable examples of dual degreed academic health sciences librarians who are part of research departments and actively participant on research grants as investigators in their own right. However, this type of individual is currently rare and some academic health sciences libraries are hiring Ph.D.s without the master's degree in library science and training them as information managers to fill a critical need in their institutions (McGowan, 2012).

There are some areas that do not require the advanced degree but rather the ability to expand the definition of the types of information needed in academic medical centers. These require the ability to span boundaries but could have a significant impact on both the profession and the institution. Again, knowledge of the information needed is critical and this could be gleaned from a librarian embedded in a department or even a major institute who "researches" information problems and offers potential solutions. Examples include finding the best reagent to facilitate an experiment, mining major local, regional, or national data and knowledge bases to discover new relationships among disparate entities, or linking databases with knowledge

bases to create decision support tools. None of these falls into the traditional expert searcher definition, but they are all important to the research and clinical enterprise and offer new roles for librarians willing to move outside the physical and virtual library space.

Clinical Service

Ten years after the first Informationist article was published, Davidoff and Miglus (2011) called for building an information system to deliver evidence-based medicine. The information system they discussed was an organizational construct in which the informationist would be part of the health care team. However, there is a tension between the information system optimally being an organization or a technology. Dr. Lawrence Weed in his recent monograph stated that "Patient data must be systematically linked to medical knowledge in a combinatorial manner, *before* the exercise of clinical judgement…," (Weed & Weed, 2011, p. x) suggesting a framework that includes both the data found in the electronic health record and the knowledge parsed from the peer reviewed literature. While the clinical Informationist has a place in today's health care environment, there is some question as to whether or not this position will remain viable if technology enables this linking automatically. When this happens, the unique patient will not fall victim to Bayesian based decision support systems which suggest the most common diagnosis or management for the condition rather than taking all of the individual patient data into account. Again, this can open unique opportunities for academic health sciences librarians willing to transform their role in providing clinical information support to health care providers.

Rather than supporting the individual provider, librarians are critically important to searching the peer reviewed literature and finding unique factoids of information that can become critical elements in a massive knowledge network. This network in turn is requisite to supporting the type of clinical decision making assistance that will ensure the most appropriate diagnosis or management of the individual patient, whether delivered by Watson or some other computer system (Mathews, 2011).

In addition to helping to create the next generation of EHR-linked decision support tools, academic health sciences librarians are uniquely positioned to teach the use of these tools, thus bringing the information roles full circle with the aim of best patient care practices. In this way, academic health sciences librarians will become essential to the next generation of the academic medical enterprise.

Professional Service

Professional service has been considered the fourth cornerstone of academic medicine although it has not been perceived as important as the first three. In many institutions, academic health sciences librarians have frequently viewed service on institutional committees or service in their professional associations as a way to validate their contributions. While this type of service is important, it is generally not considered as a measure of success within the institution. However, many librarians continue to build their vitae around the numbers of committees on which they serve.

To ensure that professional service is valued, again, a new way of looking at the concept is necessary. Academic health sciences librarians possess a great deal of skill in knowledge management and the academic medical center has significant needs in high quality knowledge management. Translational and transformative sciences initiatives that cross basic and clinical sciences and push new therapies into the community have substantive needs for information management using social networking tools, creating utilities to evaluate new forms of research, and capturing tacit knowledge to facilitate the creation of new hypotheses leading to innovation.

The next generation of knowledge management must also involve the entire academic medical enterprise and assist in capturing its knowledge capital and helping it to grow. Again, this is an area in which academic health sciences librarians can be

actively involved and help support the true learning organization fostered on access to and creation of knowledge essential for the health care community.

Threat Assessment

While there are many opportunities for academic health sciences libraries and librarians to transform themselves within a new domain of knowledge management, being able to successfully accomplish this will not be easy. There are a number of perceived threats that will inhibit rapid advancement into a new and more viable profession.

Many middle and older generation librarians pursued a library degree because they loved books and envisioned that they could make substantial contributions by providing essential information to others through retrieval and dissemination, capture and control, and creation of knowledge. The work done by these librarians has been substantial and has made major contributions to health care. However, new tools have been developed and new organizational models have been created that put the current paradigm of academic health sciences libraries at risk and threaten many of these librarians.

Results of semi-structured interviews done in conjunction with the survey of academic health sciences library directors indicated that the characteristic of librarians most valued to move the profession forward was a "willingness to be proactive and innovative in seeking opportunities outside of conventional library roles" (McGowan, 2012, p. 45).Lack of librarian tenure was considered an asset for those library directors who had been able to rapidly convert from a traditional medical library to one far more responsive to the needs of the dynamic academic medical center. Many directors also noted that recent hires, particularly those with dual degrees or National Library of Medicine Fellowships, were embracing the new models and providing thought leadership for the next generation of academic health sciences knowledge managers.

What does this mean for academic health sciences librarians who are reluctant to give up their traditional work and embrace new forms of knowledge discovery and dissemination? For those with tenure there is a degree of protection but at the potential expense of their libraries. With more and more academic medical centers rewarding departments, including their libraries, based on the quality of their work products, even the perception that the professional librarians are not contributing to the mission of the institution while being able to demonstrate a positive return on investment could lead to reduction in funding and, concomitantly, staff.

Conclusion

Academic health sciences libraries are at a watershed period. They are under an increasing mandate to demonstrate their value beyond the accreditation requirement for the health professions schools. The move to electronic, aggregated collections and the re-engineering of former library space into classrooms and research labs have resulted in a loss of identity. Clients no longer come to the library for information that is available in their labs or clinics and even the formats of needed knowledge is changing. Academic health sciences libraries are agonizing over change.

However, these same libraries have exciting opportunities and wonderful challenges to re-engineer themselves into the knowledge centers of the future and the trusted source of knowledge management for their institutions. Academic health sciences librarians, by expanding their views of knowledge curation, communication and creation, and their roles in these activities that embrace the needs of their institutions, can experience the ecstasy of renaissance as essential and transformational team members in the new academic health sciences environment.

References

Association of Academic Health Sciences Libraries. (2007). *Annual statistics of medical school libraries in the United States and Canada.* (29th ed.) Seattle, WA: The Association.

Association of Academic Health Sciences Libraries. (2011). *Annual statistics of medical school libraries in the United States and Canada.* (33rd ed.) Seattle, WA: The Association.

Blumenthal D. (2010). Launching HITECH. *New England Journal of Medicine,* 362, 382-385.

Davidoff, F. & Florance V. (2000). The informationist: A new health profession? *Annals of Internal Medicine,* 132, 996-998.

Davidoff, F. & Miglus J. (2011). Delivering clinical evidence where it's needed: Building an information system worthy of the profession. *Journal of the American Medical Association,* 305, 1906-1907.

Lindberg, D.A.B. & Humphreys, B.L. (2005). 2015-the future of medical libraries. *New England Journal of Medicine*, 352, 1067-1070.

Mathews, A.W. (2011, September 12). WellPoint's new hire. What is Watson? *Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB10001424053111903532804576564600781798420.html

McGowan, J.J. (2012, January). Tomorrow's academic health sciences library today. *Journal of the Medical Library Association*, 100, 43-46.

McGowan, J.J., Passiment, M., & Hoffman, H.M. (2007). Educating medical students as competent users of health information technologies: The MSOP data. *Studies in Health Technology and Informatics*, 129 (Pt 2), 1414-1418.

Shipman, J.P., Cunningham, D.J., Holst, R. & Watson, L.A. (2002). The informationist conference report. *Journal of the Medical Library Association*, 90, 458-464.

Weed, L.L. & Weed, L. (2011). *Medicine in denial.* Charleston, SC: Creative Commons.

Bio

Julie J. McGowan, former Associate Dean for Information Resources and Educational Technology and Chair of the Department of Knowledge Informatics and Translation at the IU School of Medicine, served as the Director of the Ruth Lilly Medical Library from 1999-2011. During that time she oversaw a major facilities renovation and changing the collections from print to electronic. She is the author of over 50 journal articles and recipient of several national awards.

Indiana University School of Medicine
Ruth Lilly Medical Library
Professor and Librarian Emeritus
jjmcgowa@iupui.edu

Intellectual Freedom and Academic Libraries: New Challenges

By J. Douglas Archer

All libraries strive to provide a connection for their users to the accumulated information, knowledge, and wisdom of humankind. Most libraries, regardless of their size, contribute to the preservation of that accumulated wealth. This ranges from the largest collections with their corners of esoterica to the smallest public library's holdings of local history. Academic research libraries in particular, along with the great urban research libraries and national libraries, affirm preservation as a core value central to their being. This has been the case since their founding in the Middle Ages. [Note: for simplicity's sake "book" will be used throughout this essay to refer to all texts including books, documents, pamphlets, periodicals, etc. Exceptions will be noted when appropriate.]

A revolution is underway. While books will continue to exist in print on papyri, vellum, paper, and microfilm into the far distant future, new works are being "born digital." It is likely that in only a short period of time most if not all new information will become available only in digital form. Librarians are facing a revolution as great, if not greater, than that ushered in by the printing press. Information, knowledge, and wisdom will cease to be fixed in a tangible form. It will come into being as electrons in motion.

Of course, librarians have recognized for several decades that the information environment was in flux. Saying that this is a revolutionary age is a cliché. The library world has generally (with a bit of foot dragging and a few wails of anguish from a minority) welcomed changes such as the digitization of catalogs, the arrival of desk top access to serials, and the growth of the Internet -- albeit at considerable cost. On the whole this has been an incredibly positive development. The ability of citizens to contribute to public discourse has been widely democratized and access to information has been enhanced and expanded, thanks in large part, to libraries providing free access to the Internet to their primary communities and to the general public.

This is only the most obvious result of digitization and the arrival of the Internet. An even greater change is underway and its implications are only beginning to be realized. Until recently, at least since Guttenberg's invention of moveable type, the major players in the information industry have had relatively clear and distinct roles. Writers created; publishers published; printers printed; vendors distributed; retailers sold; readers bought and read; and lastly, libraries collected, made available to the public, and preserved for posterity. While great changes have occurred within those various segments of the book world over the centuries and some of these roles have at time been combined, these relationships have remained fairly stable.

Until recently, once a book was purchased, physical copies were no longer the concern of authors, publishers, or booksellers – with the exceptions of copyright violations and royalties. Operating under the principle of "first sale," once an item was purchased, one could do anything one liked with it – except duplicate it. The item belonged to the buyer. No one could alter it without the permission of the owner. If errors were detected or new information became available, new editions or an errata sheet were the only effective alternatives for

making changes in the published text. Of course, in extremely rare cases, at least in the United States, a publisher might be obligated to recall and pulp a published work. But even then copies tended to survive. The historical record, the creative art, the original text -- however erroneous or libelous -- remained intact for later study and analysis. Censorship, whether by government or by other authorities, was extremely difficult.

Today, two related changes threaten this arrangement, the shift in original production of texts from print to digital format and the change in the role of libraries from purchaser to licensee. Content is created in digital (read "fluid") form and, in an increasing number of cases, libraries no longer actually buy books, they merely purchase licensed access to digital content. Leasing schemes have been around for a long time but, until recently, have not been a major model for publishers. Publishers were quite happy to be rid of any responsibility for the physical item after its sale since an overflowing warehouse was not generally considered a good thing.

When libraries lease access to content from publishers or vendors, libraries no longer own and, therefore, no longer control access to that content and its preservation. Until now, the library served as a primary guarantor or preserver of the cultural patrimony. In the new digital age, by selling access rights rather than content, publishers are becoming de facto custodians of that content – whether they have thought through the implications or not. One consequence of this shift from sale of content to licensing access to content is that publishers will be free to alter content at will if they so choose -- and if they hold copyright. In the paper world, such alteration was cost prohibitive. In the digital future the fact that content may exist only in digital format makes such alteration relatively easy and cheap.

Hints as to what might be coming have popped up many times over the last two decades as journals and newspapers have gone digital. Most librarians have experienced the instability of aggregator packages in which journal access is here today and gone tomorrow (Quint, 2010). If one reads the license agreements, this is usually well within the rights of the vendor as publishers jockey for enhanced profits for their journals in an ever shifting market. This inherent fluidity is a major problem in guaranteeing continued access to journal content for individual institutions. However, it does not necessarily threaten the historical record as journal content usually remains unaltered though its location shifts.

Institutional concerns for journal content preservation are being addressed by several means. One is the loading of back issues of serials into multiple, more or less, permanent storage sites via contractual arrangements such as LOCKSS (lots of copies keep stuff safe). Another is self-sustaining projects such as JSTOR and Project Muse that contractually guarantee access to back runs of journals.

These access issues are not, however, the most challenging ones facing libraries as preservers of the cultural record and defenders of intellectual freedom. As early as 2002 Elsevier, already a major player in international journal production in the sciences, was discovered to have removed or altered the content of numerous journal articles which they published – after they had been available for some time through various databases (Foster, 2003). It's one thing to sell off access rights to a different vendor. It is quite another to alter the text itself. In the former case, the content remains available if somewhat elusive. In the other, the content itself has been made permanently unavailable.

Publishers argued they were merely correcting erroneous information. However, by removing or editing texts after the fact, the publishers removed the ability of others to learn from or analyze the source of those "errors."

This argument that "we're only correcting errors" keeps popping up with dismaying regularity. Those who make the argument apparently fail to see how the possibility of altered texts undermines the credibility and reliability of the historical record. This author

heard the same argument from a Google Books project manager during a webinar last year. The project manager seemed genuinely surprised (as if he hadn't thought of the implications) when challenged over Google's retention of the right to alter digital copy in the Google Books corpus to "correct errors" (Badger, 2010).

This is a radically new challenge to intellectual freedom. Until now the library community has organized itself in cooperation with authors, publishers, and booksellers to fight government censorship. It has relied upon the First Amendment's guarantees of free speech and a free press to oppose efforts to censor content. While the threat of government censorship remains, censorship in its more generic form from non-governmental sources such as publishers and vendors may become the greater threat. There are no constitutional provisions to protect content in such cases. Rights to content are reduced to contract law.

In the book *1984*, Winston Smith was employed by the Ministry of Truth to edit the news -- not the new news but the old news, the historical record. He sat at his desk excising unpopular people and views and substituting acceptable ones using scissors, paste, and a pneumatic tube to the Ministry's incinerators (Orwell, 1954). While extremely difficult to accomplish in a paper environment, Orwell made it seem frighteningly plausible. With the coming of the all digital age, such a scenario is becoming all too possible. Whether it is likely to occur will depend in large part on the actions of authors and publishers on the one hand and libraries, librarians, and the library profession on the other.

While the threat of government censorship remains ever present and requires continuous vigilance, the greatest threat to the integrity and availability of content may shift to publishers and vendors. In the past it was in the best interest of the publisher to see that published work became widely available – and remained available. First, it fit the self-understanding held by many in the industry that they were fundamentally serving the public good – of making new ideas, insights, knowledge, wisdom, and creative endeavors available to their readership. Second, it maximized their potential profit. Publishing involves significant investment in editing, printing, and marketing that would be wasted if a book were pulled from circulation. Therefore, for both idealistic and self-interested motives, it was best for publishers to defend their publications to the upmost.

With the advent of the born digital copy, the second motive for the defense of the text as published, self-interest in profit, could be significantly reduced. This in turn could open the way for alteration in digital text. If enough pressure were brought to bear upon a publisher, it might be in his or her best interest to do a "find and replace" on offensive text in order to make the "problem" go away. The recent republication of Mark Twain's *Huckleberry Finn* with the "N" word replaced throughout by "slave" is a good example of this capability if not intent (Schultz, 2011). Of course, in this case, the original remains available and the publisher certainly had the right to publish an altered edition of a work in the public domain.

Another issue related to the shift of libraries from owners to licensees of content is the loss of control over that content. Traditionally, once a library had purchased a book, it was free under the doctrine of "first sale" to loan that item as many times as it wished to whomever it wished until it became unusable. At that point the library had the option of replacing the item if it were still available for purchase or not. In the digital world, access rights can be limited in both time and number of uses.

In February 2011, HarperCollins attempted to do just that. It announced a change in its licensing agreements for electronic books that would have limited the number of uses for a set fee. Once the limit was reached, a new license (and payment) would be required. Needless to say a public furor developed and, after the dust settled, the proposal was withdrawn (Hadro, 2011).

In another widely publicized case, Amazon removed access (i.e., deleted the content from Kindles) to an edition of *1984* without prior notice to its customers. This came as shock because those customers had incorrectly assumed that they had actually purchased the book in question just as they would have if they had ordered a paper copy from Amazon. Not so; they had only purchased a license to access the content in question. One customer, a student who had added class notes to "his" book, and his professor sued. In light of the resulting negative publicity, Amazon settled out of court for a $150,000 donation to charity and a promise not to do it again except in certain cases and without advanced warning (Newman, 2009). To give Amazon its due, it removed the book because it discovered that it did not have the rights to sell electronic access to that particular edition of *1984.* (Please note the irony!) It was a wakeup call to readers everywhere. Just because someone purchases the right to download a book onto his or her e-reader, doesn't mean that he or she has purchased the content. He or she may only have purchased access rights.

While being suitably appalled by the potential implications for libraries and their reading publics of these various events, it must be admitted that 1) HarperCollins and Amazon were perfectly within their constitutional rights in proposing a new leasing model in one case and pulling a book for which they didn't have the rights to distribute in the other and 2) that publishers in general are being hard pressed in the changing digital environment to find ways to continue making a reasonable profit. Nevertheless, the potential threat to libraries is real. Will publishers remain steadfast defenders of the first amendment's press protection in the new all-digital environment? Will they continue to view libraries as friends and allies or at worst friendly rivals for the reading public?

In addition to these threats, there is the inherent insecurity of digital content. All users of the Internet have experienced the "here today, gone tomorrow" nature of websites. Website owners, particularly political candidates, are notorious for cleaning up their mistakes quickly. The "did I see it, or did I not" / "did she say it, or did she not" quandary is not limited to intentional alteration of content by its owners. Hacking and other unauthorized alteration is a constant threat. The media is filled with stories of the latest digital break-in – involving personal and corporate records. All of these activities were next to impossible in a world of printed publication.

New systems and accompanying guarantees will need to be developed to insure the integrity and reliability of digital content. Tracking changes in text as does Wikipedia is one approach. Authentication protocols are another. They have already been developed for U.S. government documents so that citizens and government officials alike can rely on official documents accessed via the Web (Authentication, 2011). Such protocols will need to be applied to the commercial world if trust is to be maintained in the "written" word.

Concerns such as these lead naturally and inexorably to another classic concern of libraries, patron privacy and confidentiality of their records. In order to guarantee that users are not overstepping licensing agreements, many vendors now require readers to set up personal accounts as a precondition for access to books licensed by a library for the use of its community. These reader records are then maintained by a third party on their own servers or in "the cloud." Since the privacy of library reader records are contingent upon the maintenance of a "reasonable expectation of privacy" (the assumption that libraries protect readers' privacy and the confidentiality of their records), providing personal information to a third party may compromise that expectation and consequently may eliminate the legal protections a reader might otherwise have enjoyed (Surveillance, 2011).

At this time the library profession certainly doesn't have all the answers to the questions posed by this shift from paper to digital publication. In fact, it doesn't even have all of the questions. And it knows it. In partial

response, the American Library Association recently established a Digital Content and Libraries Working Group to continuously monitor digital developments and recommend appropriate responses. In addition, it is in regular conversation with representatives of the publishing industry in hopes of ameliorating the most problematic aspects of this coming revolution. Hold on to your seats; the only thing of which we can be certain is change – radical change.

REFERENCES

Authentication.(n.d.). In gpoaccess. gov. Retrieved from http://www.gpo.gov/authentication/index.htm.

Badger, B. (2010, February 10). Google book settlement webinar.

Foster, A. L. (2003). Elsevier's vanishing act. *Chronicle of Higher Education*, 49 (18), 27-8. Retrieved from Academic Search Premier (ESBCOHost).

Hadro, J. (2011, February 25). HarperCollins puts 26 loan cap on ebook circulations. *Library Journal***.** Retrieved from http://www.libraryjournal.com/lj_home/889452-264/harpercollins_puts_26_loan_cap.html.csp

Newman, J. (2009, October 1). Amazon settles Kindle "1984" lawsuit." *PCWorld*. Retrieved from http://www.pcworld.com/article/172953/amazon_settles_kindle_1984_lawsuit.html

Orwell, G. (1954). *Nineteen Eighty-Four a novel*. London: Secker & Warburg, 41-43.

Quint, B. (2010). Rats!! *Searcher,* 18(2), 4-6. Retrieved from Academic Search Premier (EBSCOHost).

Schultz, M. (2011, January 3). Upcoming NewSouth 'Huck Finn' eliminates the 'N' word. *Publishers Weekly*. Retrieved from http://www.publishersweekly.com/pw/by-topic/industry-news/publisher-news/article/45645-upcoming-newsouth-huck-finn-eliminates-the-n-word.html.

Surveillance self-defense: Reasonable expectation of privacy. (2011). In eff. org. Retrieved from https://ssd.eff.org/your-computer/govt/privacy [See section, "Records stored by others."]

BIO:

J. Douglas (Doug) Archer is Reference and Peace Studies Librarian at the Hesburgh Libraries of the University of Notre Dame and is an ordained minister in the Church of the Brethren. He is past chair of the American Library Association (ALA) and Indiana Library Federation (ILF) Intellectual Freedom Committees (IFC) and ALA's Intellectual Freedom Round Table (IFRT). In addition, he is currently co-chair of the Peace and Justice Studies Association.

The Changing Definition and Role of Collections and Services in the University Research Library

By James L. Mullins

It is no surprise to any of us who work in libraries, whether school, public, special, college, or university, that the role we play in supporting the learning, discovery, and information needs of our clientele has changed. It was evolutionary, at first, by incorporating computer assisted access to resources, primarily through integrated library systems that provided enhanced and remote access to the holdings in our collections. Increased sharing and collaboration emerged as a result of enhanced access facilitated by information technology, thereby meeting more fully the needs of clientele throughout the state, region, nation, and increasingly the world. Although this change has been significant for all types of libraries, this article will focus on the significant changes and trends that influenced, and will influence in the future, collection development growth and services in university research libraries.

Foundation of University Research Libraries

The unique role that university research libraries have traditionally had that separates them from other types of libraries is the expectation that a university research library will be committed to growing and stewarding ever larger, comprehensive collections. The Association of Research Libraries (ARL) standards for ranking research libraries were based on the size and depth of collections and resources of its founding members in 1932. The original members of ARL were the largest and most recognized research libraries in the country, e.g., Harvard, Yale, Columbia, Stanford, Michigan, Illinois, California-Berkeley, and Wisconsin. Although the ARL founding institutions represented the largest and deepest collections in the United States, even these libraries were feeling the effect of the Great Depression, and realized the need to cooperate, coordinate growth, and designate areas of responsibility for collection development.

A similar story occurred at the end of World War II when ten Midwestern research universities (including Indiana University and Purdue University) came together to form the Midwest Inter-Library Corporation (MILC). Initially, MILC was formed to provide a collaborative facility to store little used materials due to the overcrowded conditions most research libraries faced (prior to the building boom in the 1950s and 1960s). The membership of MILC expanded in the 1970s to include research universities around the country, and, reflecting this growth, changed its name to the Center for Research Libraries (CRL).

CRL presently has over 250 members. Since its founding, the mission of CRL has evolved to not only serve as a repository for materials little used by its members, but a cooperative collection development provider insuring that little used, but very expensive materials, would be purchased (such as microfilm of international dissertations or newspapers) that no single research library could afford to purchase or house. Presently there are four members of CRL from Indiana: Indiana University – Bloomington, Purdue University – West Lafayette, University of Notre Dame, and Valparaiso University.

During the last century, research university libraries also took on the responsibility for

the development of archives and special collections. Although research university libraries had been developing ever growing collections of monographs and journals, there was also an increasing need to collect rare and one of a kind material in danger of being lost either through neglect or through the ravages of war. After World War I, research university libraries in the United States became involved in creating research collections that drew from private collections in Europe and Asia. As the economic crisis deepened in the 1920s in Europe (high taxation on wealth to recover the costs of the war), American libraries were able to purchase entire libraries of rare books and manuscripts from the owners.

In addition, the collections of some of the late nineteenth century industrialists, upon their death, were given to research university libraries in the United States. Josiah K. Lilly, Jr., is a good example of an industrialist (Lilly Pharmaceuticals) who had a passion for collecting rare books and manuscripts; in the 1950s he donated his extensive collection to Indiana University. His collection served as the foundation for the creation of the Lilly Library in 1960. Purdue University, although not generally known for its rare books or special collections, was given in the 1920s a comprehensive collection of rare books that encompassed the history of science and the technology of transportation from the 16th to the 20th centuries. The collection included a rare edition of the Sir Isaac Newton's, *Philosophiae naturalis principia mathematica.*

The Present Climate within the University Research Library

The 21st century has seen the advent of major digitization efforts to make research collections available electronically through the Internet, anywhere in the world. One such initiative is the one facilitated by the collaborative effort of Google, Inc., the Committee for Institutional Cooperation (CIC - the Big 10 universities plus University of Chicago), the University of California, and other American research university libraries to digitize and provide full text access to English language public domain materials published prior to 1923. A Google search provides access to an index of the text of copyrighted materials for more timely and efficient determination whether a book is needed and should be requested through interlibrary loan to support research. To ensure that these scanned copies of holdings in major research libraries remain in the public domain and are available, the HathiTrust was formed in 2007 by the CIC and the University of California to provide a permanent repository for the digital images of these materials. By early 2012, nearly 10 million items had been deposited into the HathiTrust, and of these, 2.8 million are in the public domain and openly accessible to member libraries. A major initiative is in place to digitize all federal government documents. Indiana University took a leadership role in the formation of the HathiTrust; Purdue University and the University of Notre Dame are also members.

Although the digitization of books is a fairly recent phenomenon, the digitization of journal literature has been proceeding for the past fifteen years. Collaborative, non-profit efforts, such as JSTOR, were an early endeavor to digitize runs of journals initially with the support and good will of most journal publishers, since the publishers saw little value in older issues of their journals (as demonstrated by little or no effort on the part of the publishers to maintain a comprehensive run of their print journals). They relied on libraries to maintain and retain the historical record of their publishing. University research libraries took this responsibility very seriously, since the only reliable manner by which their faculty could be assured access to an older article was to have it "in-house," that necessarily meant that major portions of university research libraries' collections duplicated each other.

The inauguration of JSTOR in the mid-1990s and its success demonstrated the value placed upon journal back files by researchers who wanted easy and ubiquitous access to digital journal files. By taking the initiative, JSTOR provided a cost effective mechanism to provide access within the non-profit sector. Today,

most university research libraries have already disposed of, or are seriously considering disposal of, their JSTOR print titles. The satisfaction that the research community has with digital access rather than print access was at first seriously underestimated by research librarians. An example is the removal of nearly all JSTOR titles in 2008 from the stacks of the Purdue Libraries to storage in a basement at the Veterinary Medicine School. After four years, only three volumes have been called from the repository for use. With this as an indicator, these volumes will soon be recycled to provide space for other lesser used materials. A collaborative project with Indiana University will provide at least one print copy for research purposes housed in IU's Auxiliary Library Facility (ALF) for the CIC members.

Along with the increased availability of digitized older monographs and journals came the introduction of e-books as an option. Although it has taken a few years for the academic community to respond enthusiastically to e-books, the advances that have taken place in access and format stability have caused many university research libraries to seriously consider e-books in addition to print, and others are close to preferring the e-version over print as the initial purchase. University research libraries are also opting, which in earlier decades would have been an anathema, to purchase on demand since the provision of digital access will ensure, for the most part, that the title will be available if needed in the future. Previously, once a print run was sold out, its availability was also gone. University research libraries are making the decision that the cost of having an item on the shelf "just in case" it is needed does not outweigh the cost of acquiring, cataloging, and housing it.

The Publishing Business Model, a Conundrum

Research university libraries find themselves between a rock and a hard place. Members of their faculty are expected to create research, evaluate and referee research proposed to be published, and consume published research. Often many faculty members provide additional services (sometimes contributed, at other times paid) such as serving on an editorial board or as an editor of a professional, scholarly journal.

It is necessary to look back about twenty-five years to correctly assess how universities, faculty, and libraries created this situation. After World War II, with the proliferation of research and the need to disseminate research through professional society publications, the disciplinary societies turned to its members to contribute their time and knowledge to perform not only research and write articles detailing their research findings, but to serve as referees for and editors of the journals. This required that university administrators accepted that faculty would be given reduced teaching loads to accommodate the demands placed upon them to edit a scholarly journal and, usually, provide secretarial support to assist in the production of the journal. By doing this, research universities shared the burden for advancing research.

In the 1980s as universities became more and more conscious of expenditures and the limitations of their budgets, they looked at this as a cost that they should not have to bear even though it was contributing to the "common good." As universities eliminated their support, the professional societies realized they were faced with significant increases in the cost to produce their professional journals. The options they had were not good, since they included increasing membership dues for members, charging significantly more for the journal, or out-sourcing the publication of the journal. The professional societies, for the most part, ultimately chose to contain the membership and subscription fees for their members while increasing the annual subscription cost to academic libraries. Or, if this was not appealing or if the organization was too small to maintain the operations necessary to publish the journal, the society contracted with a commercial publisher who would guarantee a steady revenue stream while keeping the cost of the journal to due paying members of the professional society relatively low and stable.

For the past fifteen years research university libraries have been challenged to fund annual 6-8% inflationary increases from the publishers. Although this is referred to as "inflation" by the publishers, it really reflects the monopoly held by the publishers. The university and its library have little recourse or options but must purchase the journals to support faculty research. Although all colleges and universities are faced with the challenge of meeting annual increases for the cost of library materials, those libraries that are more book-focused and not scientific-, medical- or technical-journal dependent do not face the same challenge. It is estimated that on average, 70 to 80% of the research university materials budget expenditure is in support of graduate and faculty research with much, much less committed solely to support undergraduate education. Purdue's experience is consistent with this breakdown.

The cost of library research materials is partially recovered through the research process itself. Research universities are highly dependent on overhead charges made on sponsored research. This overhead charge, called Facilities and Administration - F&A, is computed by the university to identify costs that are incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity. F&A costs are synonymous with 'indirect" costs and "overhead" costs. One of the components in the calculation of the F&A charge is the cost of supporting the library. Both professional staff and the cost of providing scholarly resources such as books and journals are included in the calculation of the F&A rate for each university.

In 2011, the F&A rate approved by the Federal Government for Purdue to charge on a grant was 53%, that is: a principal investigator (PI) may be awarded a grant from the National Science Foundation (NSF) for $10 million of that amount $5,300,000 is taken off the top to cover the "overhead" that supports the research through the provision of facilities, computer infrastructure, administrative support, and library resources. So, in this example, the PI has $4,700,000 to complete the actual work proposed as part of the grant agreement (partial salary recovery, graduate assistants, equipment, etc.).

Although it could be assumed that the research university library has it made in that the cost associated with acquiring journals and books is covered by the federal government, it isn't the case. Rarely, if ever, is there a direct link between the income from F&A and that allocated to libraries for support of the materials budget or staffing. Since the auditing agency limits the amount that can be recovered for administrative costs (the area in which library materials are included), generally the amount included in the calculation is far below the actual cost of scholarly research materials. Even if there were a direct correlation, it is doubtful that any academic research library would want its funding directly tied to the income generated by F&A and therefore be dependent on the annual fluctuations in the amount of sponsored research undertaken during any five year period. However, it does support the case when the university librarian makes the annual request for increased support to meet the inflationary cost of library resources, especially if the amount of sponsored research income is steadily increasing.

Data Management: A new challenge and opportunity

Ten years ago if university research librarians had been told that during the second decade of the 21st century they would be asked to participate in managing data sets as part of their work as a university research librarian, they would have been incredulous. Traditionally, librarians have been involved at the end of the research process, especially in the scientific and technical disciplines. The only active participation a librarian would have in a chemical or biological research project would have been providing access to online indexing or scholarly journal resources. Scientific and technical research was completed in a lab

using equipment that required highly skilled (and patient) attention. In the laboratory, there was no place for a librarian to be a collaborator.

In a very short time, from the 1990s on, research moved from the laboratory to computational model building dependent on data sets. Computational science, sometimes referred to as e-science, replaced the need to perform many laboratory experiments. Once data was generated, that data set could be used and re-used in model building and testing. However, in short order, scientists, engineers, and medical researchers were overwhelmed with the data generated. Data could be stored, but the retrieval, organization, and sharing of a data set was a challenge that seemed insurmountable to the researcher.

In 2010, to allow for "data mining," the National Science Foundation (NSF) followed the lead of the National Institutes of Health (NIH) in requiring that data generated with sponsored research from the NSF must be easily and generally made available to the research community (after an agreed upon embargo period to safeguard research undertaken as part of the sponsored project). The role of university research libraries in data management was not clear to everyone (least of all to the researchers). Their understanding of librarians was what they saw them do, that is, the management and organization of tangible objects - books and periodicals. However, as some researchers became aware of the tenets of library science and the benefit of applying the principles of organization, dissemination, and preservation, this created a new and important role for university research librarians to undertake, especially at Purdue.

Two obstacles presented themselves as librarians explored a role in data management: librarians want to share everything, and researchers generally don't want to share their data until they have determined and shared their findings; and, second, librarians didn't see themselves participating on the front end of the research process, there was no precedent for this role.
First, by integrating the principles of archival science, we can respond to the researchers concern about "sharing" data before its time. Archival science allows for restrictions on access for a specific, limited time and/or to a limited group. By looking to archival science and its practices, we can create a synthesis of library and archival sciences that can provide an acceptable balance between access and privacy/confidentiality.

Second, to refute the statement that librarians would make that "we don't get involved in the front end of research," is to remind them that libraries have been involved in managing data, albeit in a tangible format, for nearly a century through the collection of manuscripts and other archival print materials that are "bits of data" until a researcher accesses them and uses them to answer a research problem. Thinking of a data set as a collection of "objects" that together, will answer a research question can help place managing data into its appropriate role within the university research library.

The Association of Research Libraries (ARL) established a task force four years ago to focus on e-science issues. The e-Science Working Group during the past year solicited funds to support an e-science institute. Over seventy research university libraries committed to supporting and participating in the ARL e-Science Institute. Beginning in the summer of 2011, the participants were instructed on the basic principles of data curation and management with the overall goal of developing a strategic plan for the implementation of e-science support within their institution. Purdue Libraries has been a leader in implementing e-science and data management processes on the national and international level and has been actively participating in the offerings of the e-Science Institute.

How are these new activities integrated into the role of the library? How does a librarian take on these additional duties in an already committed work week? Through careful vetting of demand for services and time committed to operations that have little return on time invested, university research libraries are

deciding to jettison activities that would have been unthinkable twenty years ago. Reference desk service has been significantly scaled back or eliminated entirely. Collection development activities have been reduced through greater reliance on approval plans and purchase upon request. Branch libraries are being eliminated and/or merged into larger interdisciplinary libraries or the main library in order to increase efficiency and provide support for interdisciplinary collaboration.

What does the future hold for university research libraries?

It is always risky to forecast the future; two years ago who would have predicted the impact of the iPad on communication, recreation, and reading. The likely development of a common platform for e-books is becoming more and more possible, and if not a common platform, then at least one that will communicate and be transferrable from one device to another. What will be the impact upon the university research library? What is happening now will most likely accelerate; the adoption of e-books as an acceptable and even desirable alternative to the print monograph will likely grow exponentially.

One area that university research libraries share with their brethren in other academic libraries is the re-use of facility space from housing collections to user collaborative and individual study space. As mentioned above, collections of books or journals lined up neatly in the stacks waiting to be circulated for possibly serendipitous use, is a luxury that most research libraries can ill afford today and less likely to afford in the future. The reallocation of space to study, learning, and instruction is becoming more and more critical on campus and will become more so as new learning pedagogies (team projects and collaboration) become common place. Large public research universities that have relied on lecture halls of 400 to 500 students will find it increasingly important to break out of this format into smaller teaching environments to increase retention and success of the students. Purdue inaugurated in the fall of 2011 a new program titled *Instruction Matters: Purdue Academic Course Transformation* (IMPACT), which has taken courses that have traditionally been taught in a large lecture format and has broken them up into multiple sections of 160 students who then meet in a collaborative space to be coached by the professor. The challenge was to find spaces that would accommodate this teaching mode. The Purdue Libraries offered to give up a large study and shelving area in the Hicks Undergraduate Library to have it converted for the IMPACT classes. Plans are underway to create a second IMPACT classroom in the Hicks Library for 2012. Additionally, a university classroom capacity of 60 was created in the former unbound periodicals room in the Engineering Library.

The change in definition of what constitutes a university research library will continue to evolve during the next five to ten years. The portion of the materials expenditures committed to digital resources will continue to grow for most university research libraries (while coping with the continuing monopoly of the publishers). The commitment that university research libraries will need to make to open access will become increasingly important through the growth of institutional repositories. This will require institutional acceptance and commitment to open access and support of initiatives such as the *Berlin Declaration.*

A substantial role of libraries and librarians during the next five to ten years will be to define the responsibility to provide access to and stewardship of data sets. It will become an accepted role of the library as a collection development responsibility to develop taxonomies to describe data, collaborate with faculty on retention of data sets, and work to establish international protocols for the sharing of data sets.

Finally, the changes already experienced and the ones on the horizon will require librarians or professionals within the university research

library to accept these new challenges – not only accept but embrace these initiatives, similar to the effort it took to have librarians embrace information literacy as an expected role of a librarian. Library and Information Science (LIS) programs will need to collaborate and consult much more closely with the university research library community to re-think and revise the course offerings of their programs. ALA accreditation committees will need to be more aware of the changing environment within university research libraries and not tend to evaluate an LIS program on knowledge and practice that is out of date. Only a few of the LIS schools in the country are aware of the new expectations placed upon present and future librarians, however, these schools are not sufficient to prepare the librarians that will be needed as the *Baby Boomers* retire over the next five to ten years.

In the future, university research libraries will be less like each other than they were 20 years ago, and even more different than they are today. The identity of a university research library will be linked with signature disciplinary areas for which the university is known. Data management and collaboration in research will be of increased importance for science and engineering universities requiring an integration of the work of librarians and researchers at a level only beginning today. Those universities more embedded in the humanities will likely see an increased reliance on technology to enable new ways of undertaking research in literature, history, or philosophy. This will require a growth in collaboration among librarians, technologists, and other researchers.

The next five to ten years for university research libraries will be exciting ones. The transition that began nearly 40 years ago when the Ohio College Library Center first emerged and, through its leadership, eventually led to on-line catalogs and the elimination of the card catalog was the beginning. Everything we have done since and will continue to do in the future is only "fine tuning" compared to the seminal steps taken in the early 1970s.

Bio

James L. (Jim) Mullins has over 38 years of library experience. He has been at Purdue since 2004, prior to that he was with MIT Libraries as associate director for administration. Earlier, he held positions at Indiana University and Villanova University.

Dean Mullins received BA and MALS degrees from the University of Iowa and the PhD from Indiana University.

As a published authority, Dean Mullins has influenced and helped revise the practices and standards for college and university libraries nationally and internationally through ACRL, ALA, IATUL, and the International Federation of Library Associations (IFLA).

Engaging Faculty in a Discussion about the Future of Libraries

By Brenda L. Johnson

In this era of libraries needing to demonstrate return on investment and to justify their value to the institution, we all know it's more important then ever to include faculty in discussions about the library. In this article I want to share a recent example at Indiana University Bloomington of a forum intended to serve as the foundation for deep and ongoing engagement with faculty about the future of the libraries.

The impetus for the forum came from discussions with the provost about a report produced for a group of provosts around the country, authored by the Education Advisory Board, a consulting group based in Washington, D.C. Sometimes referred to as the Advisory Board, the group is essentially a think tank that works for both health care organizations and academia. This past year the provosts put the matter of the future of libraries on the agenda to be studied by the board. After learning more about their report, the provost and I agreed that it was important to begin an all-campus discussion of the issues summarized by the Advisory Board. Before continuing in my description of the forum, let me tell you a bit about what lead up to the forum and briefly describe the report.

I had known about the work being done by the Education Advisory Board for many months, since I had several long and thought-provoking phone calls with them, during which we discussed many topics. Their questions covered topics such as:

1. Assuming technology has displaced much of what has been traditional academic library turf, what do you think the academic library will look like in 5 to 10 years? What will be outsourced, eliminated, centralized, or moved to third party "cloud" services?
2. How has your library's budget changed in the last ten years and how will it change in the next ten years? How are decisions made about use of library resources?
3. How is your library assessed, and what are the key metrics for measuring "performance"? Which metrics are becoming irrelevant and which are emerging as central or what new metrics are needed? How is this data used?
4. Talk about managing change and what obstacles are the most challenging as you move forward with strategic plans and initiatives.
5. What does the future hold for librarianship? Do you need more specialists or more generalists, and where will they come from? What is the right balance of staff, full- and part-time librarians, and library faculty (with or without tenure)?
6. How have you managed to cut costs or improve quality without increasing costs? What are the most troubling expenses in your budget?
7. What do provosts need to know about the future of the library? Where could they be most helpful?

The Education Advisory Board (hereafter referred to as the "Board") interviewed university administrators and librarians from a range of universities (George Mason University, University of Utah, Prince George Community College, Gustavus Adolphus College, University of Michigan, Babson College, and others). In addition they spoke to representatives from publishers such as the American Chemical Society and Elsevier.

The Board consulted reports and publications from many organizations such as Online Computer Library Center (OCLC), the Council on Library and Information Resources (CLIR), Association of Research Libraries (ARL), the Taiga Forum, and Association of College and Research Libraries (ACRL). Armed with what they learned, they produced a report which was presented to the provosts and subsequently published as "Redefining the Academic Library: Managing the Migration to Digital Information Services." Without a doubt, they did a lot of research in order to write this report – both from interviews and published documents.

By now many of you have seen the report. The report has been described in many ways – as excellent, provocative, and startling in some cases. There are parts of the report that are spot on and, conversely, sections where the conclusions they drew were lacking a complete understanding of the issues. Or, the conclusions they drew might be true for some libraries (often depending on whether the library was a research library or a library serving an undergraduate or community college) but not true for others. The goals and missions of our libraries should and usually do reflect the goals and missions of our college or university. And, those can vary greatly.

The report begins with a look at the transformational changes in scholarly communication, information and technology. The main issues covered include the escalating and unsustainable costs of publications, alternatives to libraries such as Google and Wikipedia, the decline in circulation and reference requests, and the new and competing demands from our users.

The next section of the report covers the issue of "managing the migration to digital information services." It begins with a discussion of leveraging digital collections, covering e-books, patron-driven acquisition, and print-on-demand. The section on "changing the scholarly publishing model" addresses licensing, acquiring articles on demand, and open access publishing.

The following lengthy section addresses repurposing library space, taking on topics such as moving collections to off-campus remote storage facilities, collective collections, and trends in future library space planning. The final section explores redeploying library staff, touching on roles such as those in data management, embedded subject specialists, and information literacy instruction.

This report neatly brings together the issues we, as librarians, have been facing for years and, to some extent, pushes us to take those issues even more seriously. The facts and figures and predictions are familiar to us. But, think if you were reading this report from the perspective of a provost. For the most part, a provost has not seen these topics brought together in one dramatic package. The provost knew that print circulation was declining – but to that extent? She might have known that use of reference services was dwindling or that publishing costs were escalating or that students and faculty turn first to Google rather than the library. But, again, did she know just how dramatically some of these user behaviors and business practices have shifted? The answer, I can tell you, is "no."

After being interviewed by the Board, I was in contact with them to track the progress of their report and they were kind enough to share a draft of the slide set they shared with the provosts. Later, I was given a copy of the full report. It was extremely helpful to have a copy of the report before meeting with the provost about it. As mentioned earlier, we decided together there were some big and often surprising (at least from the perspective of a provost and presumably from a faculty perspective) issues raised in the report. For example, the preface to the report states, "While predictions of radical change in library and information services are by no means new, a confluence of shifts in technology, changing user demands, and increasing budget pressures are now forcing academic libraries to either adapt or risk obsolescence. The library's traditional role as a repository for physical books and periodicals is quickly fading, with important implications for space utilization,

resource acquisition, and staffing" (Education Advisory Board, viii).

For better or worse, the provost learned a great deal from the report and she felt strongly she needed to share information from the report that she found interesting, surprising, and even worrisome with the faculty. We began to talk about how best to do that. We decided the provost and dean of libraries would co-host a forum on the future of university research libraries. In our invitation to faculty we stated that a number of converging trends made it essential that faculty engage with their libraries to define the research library of the future. Together, the provost and dean would contextualize changes to libraries nationally and discuss ways in which the IU Libraries have responded to constraints and opportunities at both local and national levels.

We thought it was imperative to include faculty speakers in the forum. We invited a panel of eight faculty members to provide diverse perspectives on the changing expectations for and use of libraries' collections and services. They were also to discuss ways in which libraries and librarians can best meet the needs of today's faculty and students.

In my invitation to the faculty panelists I described the panel's purpose as to spark lively discussion among the faculty present. We tried very hard to compose the panel with faculty from a mix of disciplines, at various career stages, and with various views of the library. Each panelist had five minutes (they all took longer than five minutes, as we expected) to share his/her perspective and were encouraged to provide honest and open comments to help begin this important dialogue among the faculty.

After a great deal of planning and preparation, the forum took place on November 2, 2011. Over 160 faculty attended, a number which far exceeded my expectations. And, the number of faculty attending was only exceeded by the quality of the program. The provost's comments, the panelists' remarks, and the discussion with the audience were all substantive, thought-provoking, and almost certainly a solid precursor to future discussions.

The program began with the provost describing the key points from the Board report that captured her attention. She picked up on the provocative forecasts made by a group of Associate Library Deans (the Taiga Forum), who predicted by the year 2015, 90% of user information needs would come from sources not directly connected to the library; that there would be no need for traditional librarians; and that library space would be taken over by activities that are not related in any way to library services or collections. The remainder of her comments focused heavily on what the Board, in their presentation to the provost, called the "Four Horsemen of the Library Apocalypse" – those being "unsustainable costs, viable alternatives, declining usage, and new patron demands."

My presentation was not intended to be a reaction to the Provost's talk and the key points made by the Board report. As difficult as it was, I did not dispute some parts of the report that I thought were misguided. Instead, I acknowledged that we are living in a dramatically changed environment, citing the shift from print to electronic sources, movement from local to shared collections, the changing scholarly communication patterns, changing student behaviors, and new technologies and scholarly tools. I emphasized how IU has leveraged digital collections, both licensed e-resources and collections digitized through our participation in the Google Book Project and Hathi Trust. Of course, I talked about the very large use made of electronic resources, the statistics more than making up for the declining print collection use. Mentioning IU ScholarWorks, Open Folklore, and our support for digital humanities projects, I described new scholarly publishing modes. I encouraged them to think of libraries as "services" – teaching and learning, support for research (data curation, copyright advising, etc.), web services (mobile access, chat reference, etc.), and the changing nature of collections ("collective collections,"

preservation imperatives, etc.). On the topic of repurposing library space, I detailed the many partners we have welcomed into the library with complementary or integrated services – partnerships that have helped us to provide a range of services that support research, learning, and teaching or that enable students and faculty to be productive. I gave a long list of new roles for librarians – from intellectual property librarian to digital user experience librarian. My concluding remarks were that, yes, we have made strides to position ourselves for this drastically changed and changing environment. But, we cannot invest in every strategic possibility. And, most importantly, we need input and advice from the faculty as we move forward.

Without exception, the remarks of the eight faculty panelists were remarkable. We had faculty from Astronomy, Folklore, Informatics, English, French & Italian, American Studies, Biology, and Communication & Culture. Each had a very unique perspective and very different things they wanted to talk about. Several talked passionately about the libraries' role in open access and other ways libraries should and do contribute to publishing and/or new forms of scholarly communication. Another panelist reminded us of the profound task libraries have of building collections that will be used centuries from now, reminding us of how the New York Public Library had been criticized for collecting phone books from around the world. By 1946/47, those very phone books were all that was left to reconstruct information about thousands of people who were lost during the Holocaust. A computer scientist spoke to the libraries' role in the HathiTrust Research Center and its importance as a repository for scientific data. Another panelist spoke about her work at the National Science Foundation on a project called the Virtual Astronomical Observatory. She expounded upon the importance of librarians in the development of protocols, standards, and metadata for that particular project. One panelist cautioned us to not give in to any nostalgia about libraries, remembering historic and beautiful buildings, the smell of glue, paper, and ink, etc. Rather, we should imagine all that the future might present – where even the poorest person in the world has access to books, video interviews, original manuscripts and more via a push of a button.

The comments from the provost and the panelists were so rich and deep, that our time for questions and discussion with the audience was less that we had planned. However, in that short time there were many excellent questions and comments. Some spoke strongly to why it's still important for some researchers to use print collections. Others spoke to the incentive structure (or lack thereof) for young scholars to publish in open access publications. There were comments about the importance of university presses and how they relate to libraries. But, this was not meant to be the only opportunity for discussion and debate of these important topics.

We hope this forum will provide a platform from which librarians can begin discussions with faculty within their own discipline, department, or program. Most of these issues vary tremendously by discipline, and the libraries and the campus need to understand those differing faculty perspectives as we craft changes to the library. In the coming months, subject librarians will reach out to departments and programs in order to further engage faculty in this important conversation about the future of the libraries. The library will construct a website containing a summary of the forum, the Power Point slides, the Board report, related readings, reports from the department meetings, and opportunities for ongoing discussions.

What lessons have we learned from this forum?

1) The faculty care about the library and want to be involved in discussions and decisions about its future.

2) Individual faculty have very different needs/expectations from the library.

3) The library, itself, can benefit greatly from these discussions; as said, we can't invest in every strategic opportunity; we need help and input from the faculty.

4) An event such as this is profile-raising for the library; as one faculty panelist wrote to me later, "I cannot think of a previous moment where faculty from across the campus were invited to offer their thoughts and reflections on such a weighty topic! And I loved that you had such a great divergence of views. I hope it was helpful as you plot the road to the future."

5) As much as librarians may have hated hearing certain topics in the Board report, some are very accurate and relevant.

6) The Board report, as mentioned earlier, said academic libraries either need to adapt or risk obsolescence. One of our biology panelists, not aware of that point made by the report, mentioned a quote often attributed to Charles Darwin. It is believed that Darwin stated, "It is not the strongest of the species that survives, nor the most intelligent that survives, it's the one that is the most adaptable to change." And, the faculty member was pleased that this forum represented the library trying to discover how to be adaptable.

   It is our fervent hope this forum is but the beginning of even more meaningful dialogue with our faculty. Our librarians are already engaged in many ways with faculty, but this should help fuel discussions about some difficult and challenging issues – the real issues facing academic libraries and most certainly facing ours.

Note: For additional information and photos from the forum, please see: *http://homepages.indiana.edu/web/page/normal/20267.html*.

References

Education Advisory Board. (2011). *Redefining the academic library: Managing the migration to digital information services.* (23634). The Advisory Board Company. Washington, D.C. Retrieved from http://educationadvisoryboard.com/

Bio

Brenda L. Johnson currently serves as the Ruth Lilly Dean of University Libraries at Indiana University Bloomington. Prior to her arrival at Indiana University in 2010, she was the University Librarian at the University of California, Santa Barbara. Before joining the UCSB libraries, she served as Interim Co-University Librarian of the University of Michigan Libraries. She served the University of Michigan Libraries in various roles for more than 20 years, where she distinguished herself as Associate University Librarian for Public Services with responsibility for their 19 libraries. At Michigan, Johnson pioneered innovative services to integrate librarians into the academic process and created programs to recognize innovation in librarians. She received her MLS from Rutgers University and then worked there for the first five years of her career.

Johnson's representation within the national and international library community includes her membership on the Executive Committee of HathiTrust, the Controlled Lots of Copies Keep Stuff Safe (CLOCKSS) Board of Directors, and the Kuali Object Linking and Embedding (OLE) Board of Directors. She currently serves on the ARL *Steering Committee for Transforming Research Libraries* and recently authored an article for ARL's *Research Library Issues* on transforming roles for academic librarians. Johnson is convening a Committee on Institutional Cooperation (CIC) Steering Committee to plan for a CIC shared print repository, with the first host site for the repository to be located at Indiana University.

The Academic Library and the Re-imagination of Undergraduate Education

By Cheryl B. Truesdell

In July 2010 the American Association of State Colleges and Universities (AASCU) launched its "Red Balloon Project: Re-Imagining Undergraduate Education" (Mehaffy, 2010).The inspiration for the Red Balloon moniker came from a Defense Advanced Research Projects Agency (DARPA) contest that challenged any individual or team to be the first to locate ten red weather balloons placed in random locations throughout the United States. The $40,000 reward was won by a team from MIT in 8 hours and 52 minutes using the Internet, social networking, shared expertise, and team work. In his white paper introducing the Red Balloon initiative, George L. Mehaffy (2010), AASCU's Vice President for Academic Leadership and Change, argues that this experiment captures the essence of his thesis that higher education is in crisis and must use its collective wisdom to reinvent institutional structures in order to meet the demands of teaching and learning in the information age.

Mehaffy characterizes public universities as outmoded institutions still faithful to an 11th century model in which information is delivered by experts (professors) and passively, even reverentially received by non-experts (students). This process of delivering core content is replicated in many classrooms at many universities across the country. He argues that declining funding, rising expectations for more college graduates, and rapidly developing technology requires a fundamental restructuring of the current expensive, non-scalable model of academic enterprise to scalable high-quality education models for the 21st century.

At Indiana University-Purdue University Fort Wayne (IPFW) the Vice Chancellor for Academic Affairs began the fall 2010 semester with a challenge to faculty, librarians, deans, and academic administrators to envision new models of institutional organization, enrollment management, faculty work, curriculum requirements, and course and instructional design. In spite of its emphasis on the changes technology has made on information transfer, neither libraries or librarians were mentioned as models of change in the AASCU Red Balloon article. Librarians at IPFW recognized the challenges identified in the Red Balloon article and felt particularly qualified to join the debate. In the spring IPFW Helmke librarians drafted a response to AASCU's white paper on re-imagining undergraduate education adding the academic librarian perspective to the debate on the future of higher education in the United States.

IPFW library's document , Red Balloon and Re-Imagining Academic Librarianship (2011), attempts to address all three of the challenges facing undergraduate education today as identified by AASCU's Red Balloon Project - declining funding; rising expectations regarding college completion: and rapidly developing technology - framed from the point of view of academic librarianship. Our response focused on maximizing campus resources through effective use of library facilities and resources, developing the Learning Commons as a significant teaching and learning space outside the classroom that promotes problem-solving, project-based learning, undergraduate research, and working with faculty to deploy new technology effectively in teaching and learning, especially as it relates to information literacy.

What follows is a copy of our document updated with author comments a year into its development.

Red Balloon and Re-imagining Academic Librarianship

Propositions

1.1 We assert that *librarians and libraries* play a key role in assuring that higher education institutions like IPFW *will meet the challenge to provide a more accessible, affordable, and high-quality undergraduate education*.

While this may seem like an unnecessary statement, we noted that AASCU's white paper devotes considerable attention to the impact of technology and the new information environment on how faculty and students acquire, evaluate, use, and create new information, but libraries and librarians are not mentioned anywhere in the document. In fact, IPFW was the first (and only) AASCU institution at the time to introduce the academic library as a valuable partner in re-inventing higher education.

1.2 Deploying *librarian expertise* in partnership with the teaching faculty *will directly and indirectly support student learning*.

AASCU recognizes the importance of information literacy (although they don't call it that) in re-imagining undergraduate education. Mehaffy argues in his Red Balloon article "that technology – the Internet, search capacities like Google, and our ability to find, aggregate, and use information in new, networked, more powerful ways – represents a profound challenge to the university as we know it" (p. 2). We assert that librarians are uniquely qualified to work with faculty to teach students how to find, evaluate, and use information effectively and ethically.

1.3 Reconceiving the purpose and uses of a *well-designed library facility* to create collaborative spaces outside of the traditional classroom *will foster student engagement*.

In a re-imagined undergraduate education, faculty spend less time in the classroom delivering content and more time designing effective educational experiences. Repurposed library space, offered as a place that encourages out-of-class learning, collaboration, and informal exchange of ideas, is ideal for these experiences to take place.

Assumptions

2.1 *A program of information literacy instruction integrated within the general-education curriculum* is critical to the success of students who must possess the skills to adapt to a complex, fast-changing information environment.

The pressure from constituencies other than librarians to integrate information literacy into the curriculum is increasing. The Association of American Colleges and Universities (AAC&U) LEAP (Liberal Education and America's Promise) initiative has identified information literacy as one of its Essential Learning Outcomes. The Lumina Foundation's *Degree Qualifications Profile, Defining Degrees* (2010) released in January 2011 includes information literacy concepts in all five of its areas of learning and for all levels of education from associate through master's degrees. No less than the President of the United States has recognized the importance of information literacy declaring October as Information Literacy Awareness Month. This is our opportunity to re-imagine information literacy education (not library skills training) with our faculty partners.

2.2 *A virtual space and physical place in a secure campus setting* where students can find and make effective use of academic-support services is critical to student learning, engagement, and success.

Transformational Times: An Environmental Scan Prepared for the ARL Strategic Plan Review Task Force (2009) notes that libraries have been able to demonstrate that their facilities are the logical providers

of primary learning spaces on campus, and they have been successful in creating undergraduate learning commons that are popular destinations for productivity and learning. It also urges academic libraries to increase services and resources available within virtual environments where students and faculty live, work, and play (p. 16-17).

2.3 *A clear understanding and accurate portrayal of IPFW students' particular needs and challenges* is critical to designing an integrated, discipline-based, valid assessment program, measured in terms of improved rates of persistence and attainment.

Academic libraries are being pressured to answer to new "value-centric" standards that demonstrate the library's impact on the academic success of students and faculty. *The Value of Academic Libraries: A Comprehensive Research Review and Report (*ACRL, 2010) was prepared to help academic libraries articulate their value to the institution by assessing their impact on university goals such as student enrollment, retention and graduation rates, student learning, faculty research productivity, faculty grant proposals and funding, and faculty teaching.

Expanded Roles for Academic Librarians

3.1 *Librarians have a distinctive role to play in teaching and validating the acquisition of information literacy proficiencies*, which represents more of a process than a set of discrete skills. These proficiencies include being able to know what information is needed for a given task, select the best source of information, develop strategies to locate and retrieve relevant information, critically evaluate the information, organize and use information ethically to accomplish stated goals, and communicate the results effectively. Information literacy in a disciplinary context, along with technological and numerical literacy, is fundamental to the aspirations of IPFW's Baccalaureate Framework (IPFW Faculty Senate, 2006).

Most academic library introductory information literacy courses or individual instruction sessions are still rooted in a training-skill-based model. Information literacy is much more than knowing how to use a specific interface at any given point in time. Recent studies of undergraduate research skills reveal that our undergraduate digital natives are not digital savvy and that librarians would do better to start with basic information literacy concepts tied to the tools they (the students) are already using so ineffectively. *Redefining the Academic Library: Managing the Migration to Digital Information Services,* prepared by the University Leadership Council, (2011), a non-library think tank, encourages librarians "to refocus student session on the inner workings of Google and Wikipedia, encouraging students to be better lifelong judges of information and better users of common search tools" (p. xii). In the new paradigm librarians "think like educators not service providers" (Long & Schonfeld, 2010, p. 21).

3.2 *Librarians need to be unbound from the physical library to work with students and the teaching faculty* wherever they congregate, in academic departments, classrooms, and informal settings. With so many resources available electronically, librarians can deploy and demonstrate the effective use of mobile technologies while interacting with students in cafés, hallways, laboratories, and any number of relevant sites where students like to meet and study.

In re-imagining undergraduate education, AASCU encourages faculty to delegate the delivery of basic information to prepackaged content readily available from other sources and concentrate their efforts in designing activities for working with students outside the classroom. ARL's *Transformational Times* (2009) calls for librarians to do the same: spend less time in classrooms and lecture halls and more

time creating learning objects, tutorials, video and multimedia-based instruction components and asynchronous instruction (p. 16-17).

3.3 *Liaison librarians use their combined information science and subject knowledge to teach, one on one and in the classroom, in coordination with the faculty*.

Faculty and librarians share the same goal of integrating information literacy teaching and learning into the curriculum. In *Redefining the Academic Library* (University, 2011), administrators recommend redeploying library staff as embedded e-Brarians or departmental informationists. Librarians could split time between library and departments, sit in on departmental meetings, conduct systematic literature reviews for grant proposals, and work with faculty to integrate information literacy into the curriculum (p. xii).

3.4 *Librarians are the campus' master collaborators and networkers*, joining forces long ago to maximize resources and increase access to valuable information for the benefit of their community of learners. Through state, regional, and national networks they continue to combine talents and expertise to provide innovative services and resources responsive to the needs of a broad spectrum of faculty and students. A few examples of this kind of creativity unleashed include innovations such as seamless information discovery and delivery systems, collaborative online reference services available 24/7, customized one-on-one research consulting, open-access digital collections of valued local content and those that showcase faculty and student scholarship, and information literacy applications for courseware or mobile devices.

A major premise of AASCU's Red Balloon project is that funding for higher education is static or declining and that universities will have to learn how to do more with less. This is a challenge that academic libraries have faced for years. Libraries are leaders in collaborative arrangements that maximize resources and who better to model the use of collective wisdom to create new tools and structures for a reconceived undergraduate education.

Changing Roles for Academic Library Buildings

4.1 *The brick-and-mortar library remains the most significant campus learning environment outside the classroom*. Today's academic library offers a discipline-neutral, non-threatening virtual and physical space replete with human, technological, and research resources.

The success of library efforts to repurpose space to support collaborative learning may result in pressures to accept new tenants and services that do not enhance the library and its learning commons mission to support research, teaching, and learning. Assessment data that documents the impact of these spaces on student academic success is critical (*Transformational Times*, 2009, p. 17).

4.2 *The library is an ideal environment for engaged learning opportunities to take place*, such as undergraduate research forums, group projects, workshops, lectures, seminars, and coffee and book chats. Simply by observing and being part of the dynamic energy that permeates a busy library can lead students to greater involvement and academic success. The mentoring role of students employed as peer-teachers may also be demonstrated most dramatically in the library-learning commons context.

While the library learning commons has realized much success in providing reinvigorated space for student learning, faculty have not yet flocked to the space to engage with students in teaching and learning activities outside the classroom. This is the next challenge for libraries, to promote its facilities to faculty as an environment outside the classroom to

conduct more meaningful interactions with students.

4.3 *The physical library building must be fully integrated with virtual learning spaces* to deliver the array of skills students need to succeed in the 21st century. Combining writing, research, and technology consultants together in a unified physical/virtual setting is the right approach to take.

Our students and faculty work in the virtual environment even as they inhabit the physical library space. The challenge is for librarians is to spend more time creating quality online products and services that meet their teaching and learning needs.

Next Steps to Reimagining Academic Librarianship

5.1 *Develop the physical IPFW Learning Commons to articulate with the new Student Services Complex*, incorporating a unified information desk staffed by student employees and professionals, an innovative classroom for teaching information literacy and technology skills, schedulable small-group study and seminar rooms, semi-private research- and writing-consulting cubicles, and an appealing café environment that encourages students to study alone or in groups. Cross-training for all staff, especially student employees, will be a critical component to its success.

In November 2011 IPFW's 44.2 million dollar student services complex, which includes a 260-foot long, 30-foot wide glass enclosed sky bridge addition to the Helmke Library second floor Learning Commons, opened its doors. To date the IPFW Learning Commons includes student peer information services, librarian consulting services, writing center consultation, laptop checkouts, group study rooms, a mid-sized conference room, fireplace, some new soft furniture selected by students, seven large study bays equipped with white boards, movable tables and chairs, electrical outlets, and updated wireless. Phase two of the Learning Commons is underway with plans for a café, multi-media lab, teaching-learning classroom, more student access computing group and single workstations, and the possible addition of the campus Honors program.

5.2 *Develop the virtual IPFW Learning Commons to feature a range of online services and mobile technologies that support accessibility in its broadest sense*, including access to online resources, contacts with liaison librarians, systems to schedule time to meet with librarians, writing consultants, and technology trainers, systems to reserve laptops and group-study rooms, and other emerging needs based on student use and feedback.

The virtual Learning Commons is a work in progress. No single web portal has been implemented yet, but individual units in the Learning Commons are continuing to design and offer virtual services for students and faculty, including IM and email reference, online writing center appointments, and mobile interfaces for Learning Commons hours, computer and study room availability, online course guides, and some library databases. Work continues to design a single Learning Commons web portal, identify a mutually acceptable online calendar and scheduling system, and select and/or develop apps for iPhones and iPads.

5.3 *Design a research project involving 2-3 liaison librarians to learn more about the information-access and teaching-learning issues facing beginning students and their instructors* by meeting with them in their departments, classrooms, and the Learning Commons, with the ultimate aim of providing more relevant instruction and support for the first 30 hours of credit classes in an effort to increase retention beyond the first year.

In the fall of 2011, IPFW's office of Academic Affairs launched its *Re-Imagining IPFW's Academic Future: Mobile Technology Initiative*. Through a grant process, faculty

and librarians could apply for an iPad to be used to enhance teaching and learning. All grant recipients were required to attend a training session, meet and work within a randomly selected cohort group throughout the semester to share mobile technology successes and failures, and present an individual report at the end of the semester on lessons learned from the use of the iPad for teaching and learning. All information services and instruction librarians now have iPads and are part of the campus iPad faculty cohort groups. Several librarians received their iPads through the grant process and others received theirs through a joint purchase collaboration between the library administration and the Deans or Department Chairs of the liaison librarians' academic departments. Librarians are now actively engaged with faculty in exploring how the iPad can enhance, support and/or transform teaching, research, and scholarship and cross-discipline collaboration at IPFW. As part of the mobile technology initiative, librarians have developed an online guide to the best educational apps for the iPad as identified by IPFW faculty. The library's libguide covers apps from note-taking to citation management to GradebookPro as well as apps by discipline (App-Ed). In addition, the library's Emerging Technology librarian provides reviews of helpful apps each month in the library's newsletter *Helmke Highlights*.

5.4 *Deploy 1-2 liaison librarians as half-time appointments in selected academic departments and schools or colleges to further the goal of validating knowledge about IPFW's community of learners*, shifting the emphasis from recording service encounters to measuring indicators of student engagement within their majors and its correlated increase in degree completion.

The librarians at IPFW do not have half-time appointments in academic departments yet. However, librarians have taken steps to become more involved in the academic life of their departments. The Business librarian is a member of School of Business Undergraduate Curriculum Committee and the Health and Human Services librarian has co-designed and co-teaches the graduate nursing informatics course. A half-time appointment for librarians in one or two departments has been broached with the Vice Chancellor for Academic Affairs and deans and the idea has raised some interest. The time may come soon when we can experiment with this arrangement.

5.5 *Pilot a project in the library to supply and evaluate the use of appropriate mobile devices for delivery of enhanced e-textbooks*, to realize a more interactive learning experience and cost savings for students, to be executed in coordination with Follett's Bookstore and Center for the Enhancement of Learning and Teaching (CELT), with funding from Indiana-Purdue Student Government Association (IPSGA). This project is an example of the kind of responsive collaboration and ready adoption of emerging technologies that academic librarians are typically eager to undertake, if given the adequate means to support a new program, define its goals, and validate the outcomes.

Over one-third of IPFW faculty now have iPads as part of the *Re-Imagining IPFW's Academic Future: Mobile Technology Initiative* (see above) and are beginning to develop courses built around mobile devices. The library, Academic Success Center, and CELT have collaborated on an IPSGA grant request to purchase 80-100 iPads to be made available to students for a semester (rental) or short-term (free checkout). This proposal has had preliminary approval by the IPSGA board. In addition the administration will be piloting a few e-textbook only sections during the summer session of 2012.

Last year IPFW's academic Vice Chancellor challenged faculty to question traditional faculty approaches to teaching, learning and scholarship. The traditional academic library

would not see an active role for librarians in this discussion, but the re-defined academic library is vital to a re-imagined undergraduate education. Who is more qualified than academic librarians to integrate information literacy education into the curriculum? What facility is better positioned to create spaces outside the classroom where engaged teaching and learning can take place? And where can higher education administrators find better models for maximizing resources than successful collaborations of library administrators in database licensing, shared collection storage, or collaborative digitization projects to name a few? The library of course!

References

App-Ed. Retrieved from http://libguides.lib.ipfw.edu/AppEd

Association of American Colleges and Universities. Liberal education and America's promise (LEAP). Retrieved from http://www.aacu.org/leap/vision.cfm

Association of College and Research Libraries (ACRL). (2010). The value of academic libraries: A comprehensive research review and report. Chicago: Association of College and Research Libraries. Retrieved from http://www.ala.org/value

IPFW Faculty Senate. (2006) Baccalaureate Framework. Retrieved from http://new.ipfw.edu/academics/programs/baccalaureate-framework.html

IPFW Walter E. Helmke Library. (2011). Red Balloon and Re-Imagining Academic Librarianship. Retrieved from http://www.lib.ipfw.edu/3486.0.html

Lumina Foundation. (2010). *The degree qualifications profile, defining degrees*. Indianapolis, IN: Lumina Foundation. Retrieved from http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf

Mehaffy, G. (2010). The red balloon project: Re-Imagining undergraduate education,. Retrieved from http://survey.csuprojects.org/uploads/9B/zH/9BzHz97fy5T2-qsHc_kQDg/Re-Imagining-Undergraduate-Education.pdf

Transformational times: An environmental scan prepared for the ARL strategic plan review task force. (2009). Washington, D.C.: Association of Research Libraries. Retrieved from http://www.arl.org/bm~doc/transformational-times.pdf

University Leadership Council. (2011). *Redefining the academic library: Managing the migration to digital information services.* Washington, D.C.: The Advisory Board Company. Retrieved from http://www.educationadvisoryboard.com/pdf/23634-EAB-Redefining-the-Academic-Library.pdf

Bio

Cheryl B. Truesdell is Dean of the Indiana University-Purdue University Fort Wayne (IPFW) Helmke Library and has achieved full rank. Her expertise and professional interests include strategic planning, building digital library collections, resource sharing, copyright law, U.S. government information services, and Open Access Scholarly Communication. She has been active in Indiana libraries and library organizations since 1980, serving in leadership roles in the American Library Association, the Indiana State Library Advisory Council, Indiana Government Documents Organization, INDIGO, and the Indiana Library Federation. She has also been active in a number of Indiana University Libraries system-wide committees. She has published articles in the *Journal of Academic Librarianship, Indiana Libraries*, and *DTTP: Documents to the People*, and has been a presenter at state, regional, and national conferences. In her spare time, Ms. Truesdell indulges in her love for gardening and mystery novels.

Issues Facing Academic Law Libraries - New Challenges, New Opportunities

By Linda K. Fariss

When I first started working at the Indiana University Law Library in 1976, I was introduced to a strange new world. I had worked in academic libraries before, but this was a new experience, familiar in some ways, but different in others. Today, thanks largely to new technology, law libraries share more in common with other academic libraries than they did in the time that I first arrived at the Law Library. As a result, all of these libraries typically share closer working relationships. Many of the issues facing law libraries are similar to issues facing the general academic library, but with a different twist. Law libraries, like all types of libraries, are looking for ways to re-invent themselves. Budgets are shrinking, space is being reduced, and students and faculty are approaching research in different ways than in the past.

Standard 601(a) of the *ABA Standards for Approval of Law Schools* states that "A law school shall maintain a law library that is an active and responsive force in the educational life of the law school. A law library's effective support of the school's teaching, scholarship, research and service programs requires a direct, continuing and informed relationship with the faculty, students and administration of the law school" (American Bar Association [ABA], 2011, p.44). Historically, the common phrase used to describe the academic law library is "the laboratory of the law school" (Price, 1960, p. 231). The law library has always been a core part of the law school with the primary mission to serve the legal research needs of law school faculty and students.

Because of the close relationship that a law library maintains with its law school, the vast majority of law libraries are "autonomous," a term that causes confusion among librarians. For most law libraries, this is simply an administrative arrangement whereby the law library is under the umbrella of the law school and not the university library, especially for budgetary and policy purposes. The case for autonomy comes from Standard 602(a) of the *ABA Standards for Approval of Law Schools*, which does not require but strongly encourages that the law library be part of the law school administrative structure. This standard requires that "a law school have sufficient administrative autonomy to direct the growth and development of the law library and to control the use of its resources" (ABA, 2011, p.44). In the past this has caused some misunderstanding between libraries within a university as to its meaning. It certainly does not suggest that the law library operates outside of all university administrative control. The chain of that control is simply somewhat different than for other academic libraries. Today this appears to be a less contentious issue because technology, primarily in the form of shared online catalogs and databases, has brought libraries closer together. Typically on university campuses you will find law libraries working together with the other libraries for the common good, creating a much healthier atmosphere.

Because most law libraries are administratively part of the law school structure, they share a very special relationship with the school. All libraries by their nature are service units, and this is especially true for the law library in regard to the law school. Because the budget for the law library flows from the law school, it is important that the library remain a vital part of the school. Law librarians work closely with the faculty and student body to provide outstanding service.

Interacting with a smaller group of faculty makes it possible to provide more personalized

service. As faculty and students rely more heavily on electronic resources for their research, librarians are constantly looking at new ways to maintain contact with these groups. Teaching plays an increasingly important role for law librarians. Ad hoc lectures are given in substantive law courses and many law librarians teach legal research courses in the law school, either as part of the first year legal research and writing program or advanced legal research courses. At our library, we also hold lunch time programs for the faculty to inform them of new databases and services, and we offer one-on-one training sessions for faculty who are more comfortable with that type of environment.

As is true of most academic libraries, law libraries have faced budgetary challenges in the last few years. Many of these problems are a result of budgetary cutbacks at the university level. A prevalent belief among law librarians is that we are facing an additional challenge due to the importance of law school rankings, primarily those in *U.S. News and World Report*. As competition for students and faculty becomes more rigorous, all law school deans are aware of their school's ranking and the rankings of peer schools. Unfortunately for law libraries, they do not figure prominently into the calculations for determining rank (Morse, 2010). When deans are looking to increase support for areas that are important to the rankings, such as admissions and career services, the library budget will likely be heavily scrutinized. This makes it even more important for the law librarian to make sure that the dean and faculty understand the importance of maintaining a strong law library to support their curricular and research needs.

The loss of space is another issue facing many law libraries. At a director's breakfast at the American Association of Law Libraries annual meeting a few years ago, the directors were asked how many were losing space for non-library purposes. Over half of the librarians responded affirmatively (Fitchett, Hambleton, Hazelton, Klinefelter, & Wright, 2011). As noted previously, law schools are placing more emphasis on expanding offices such as admissions and career services and many are also increasing student enrollment in response to decreased budgetary support at the university level. The space for these offices and classrooms has to come from somewhere within the current building. As the availability of electronic resources grows, law school administrators assume that the law library needs less physical space and frequently will turn there first. The wise librarian has already devised a plan in response to this very real possibility!

Law libraries are responding to the loss of physical space in several ways. If the library is fortunate enough to have access to an off-site storage facility within the university, many of the space issues can easily be handled. However, not every campus has such a facility or the library might not be able to get permission to place all of the volumes in storage. As a result, law libraries are looking to permanently reduce print collections, both by cancelling subscriptions and discarding print volumes. Electronic sources such as *Hein Online*, *Lexis,* and *Westlaw* are increasingly being relied upon as the only source for periodicals and case reporters.

Obviously budget and space reductions are something that no librarian wants to be facing, but it does not have to be an entirely negative experience. I have dealt with both at the Maurer Law Library. While initially devastating, in the long run there were positive aspects to both experiences. It is easy to go along with the status quo, not really thinking about whether the collection accurately reflects the way patrons are using the resources. When faced with a budget reduction, we reviewed every serial subscription to decide whether to keep a publication in print or to rely on electronic access. In addition to cancelling many print subscriptions, we ultimately discarded all print periodicals that were available electronically in order to deal with a space reduction. We have found that our patrons do not miss them for the most part, and we were able to use the space more effectively and divert the subscription costs to other more pressing areas in our book budget.

We were also fortunate enough to have access to an off-site storage facility. Of course, a library cannot go through these experiences multiple times without seriously damaging the quality of the collection and services.

One of the most exciting new opportunities to come along in academic law libraries is the institutional repository. When law libraries are re-inventing themselves to remain relevant to the law school, I believe that this is an important service to offer. Law libraries have long maintained print archives of the law school's history, and the digital institutional repository is a logical next step. Libraries can collect and make available in digital format, brochures, photos, publications, conferences, and other materials from the law school. Additionally, faculty scholarship is an important part of the institutional repository. The concept of open access for scholarly work has been gaining in popularity for some time in academic circles. By making the law school faculty's scholarship available through the institutional repository, it becomes freely accessible to anybody in the world, not just the legal community.

The push for open access in law schools received much interest after a group of law library directors got together at Duke University in November 2008 and began drafting the "Durham Statement on Open Access to Legal Scholarship," which was finalized in February 2009 (Danner, Leong, & Miller, 2011). The statement calls for law schools to stop publishing their journals in print and to publish them electronically in a stable and open format (Danner et al., 2011). Law school journals are different than other types of journals in that they are generally run by a student editorial board and are not large income producers for a law school. Although more journals are now providing open access, either through their website or in the law library's institutional repository, few have ceased to provide a print copy as well. Newly established law journals are sometimes published only in a digital format. This provides an excellent opportunity for the law library to partner with the law school to host the journal on its repository. The Maurer School of Law has established two new journals in recent years and both are available in electronic format only. Both will be hosted on the Law Library's repository.

As law libraries are discarding print collections and important resources are becoming available only in a digital format, concern has increased about preserving these valuable publications. Libraries that cancel subscriptions and discard entire periodical collections are encouraged to at least retain and preserve the journals that originate at their own law school. Insuring that digital materials are retained in a stable environment is also a concern. To address many of these concerns, the Legal Information Preservation Alliance (LIPA) was established by a group of law school libraries following a preservation conference sponsored by Georgetown University Law Library and the American Association of Law Libraries in 2003. The goal of LIPA is to preserve legal information in both print and digital formats that are at a risk of loss (LIPA, 2011). The activities of LIPA are supported by a growing number of member law libraries.

Since I began working at the Law Library incredible changes have occurred. The early years were spent building a large physical facility to house an increasing print collection. Law libraries were generally measured by the size of their collection. Today, less emphasis is placed on the size of the collection, and libraries are cancelling print subscriptions and actually discarding large segments of their collection. More emphasis is placed on the quality of service and depth of the collection, regardless of format. As budgets and physical space shrink, law librarians are working to remain relevant to the law school by providing new services while retaining the core of what we are - an indispensable research facility for our faculty and students. The Law Library is still the "laboratory of the law school." That laboratory has just taken on a different appearance.

References

American Bar Association. (2011) *Standards and rules of procedure for approval of law schools.* Chicago: American Bar Association.

Danner, R. A., Leong, K., & Miller, W. V. (2011). The Durham statement two years later: Open access in the law school journal environment. *Law Library Journal,* 103, 39-54.

Fitchett, T., Hambleton, J., Hazelton, P., Klinefelter, A., & Wright, J. (2011). Law library budgets in hard times. *Law Library Journal*, 103, 91-111.

LIPA: Legal Information Preservation Alliance. History of LIPA & AALL support. (2011). Retrieved from http://lipalliance.wordpress.com/about-2/history-of-lipa-aall-support/

Morse, R. & Flanigan, S. (2010). The law school rankings methodology. *U.S. News & World Report*. Retrieved from http:/www.usnews.com/articles/education/best-law-schools/2010/04/15/the-law-school-rankings-methodology.html

Price, M.O. (1960). The place of the law school library in library administration*. Journal of Legal Education,* 13*,* 230-238.

Bio

Linda K. Fariss has recently been appointed Director of the Law Library at the Indiana University Maurer School of Law. Prior to this she served as the Associate Director of the Law Library. She received her MLS and JD from Indiana University - Bloomington. For many years she has co-taught, along with Keith Buckley, the Law Librarianship Course at the Indiana University School of Library and Information Science.

A Case for Vibrant Library Consortia and for the Academic Libraries of Indiana (ALI): As Much and More

By Daniel J. Bowell

Librarians, mission and collaboration

A few months ago I was in a conversation about the fiscal and sustainability challenges facing higher education. Discussion turned to the duplication of efforts among institutions. I suggested that libraries had a record of success along these lines from smaller to larger cooperative efforts. No sooner had I spoken than a colleague was quick to suggest, "But you are librarians. You're about service, not wielding power or building domains." That does suggest something of our situation. We may be recognized as players in teaching, research, and administration, but we do not often sit at the big table where power and resources are brokered. Still, I find the record of accomplishment of libraries working together to be a source of professional pride and also a suggestion that there are other areas for institutional cooperation to be explored. I believe this speaks to a general disposition among librarians aiming toward a common mission, though variably expressed, that seeks to connect people with information for learning, personal enrichment, and meaningful leisure.

Libraries have a strong record of resource sharing. While such cooperation may arguably have roots before the era of typewriters and multi-part forms, libraries have effectively used computerization to develop effective sharing capacities. This clearly has been the case in Indiana for well over the past quarter century with multiple initiatives: INCOLSA (and its regional precursors) and PALNI (the Private Academic Network of Indiana), as well as numerous other state, regional, and local efforts. These in turn helped spawn ALI (the Academic Libraries of Indiana). Additionally, many Indiana libraries have been long-time participants in OCLC and other cooperative regional and national endeavors. Indiana has been fortunate to have had library leaders, elected officials, and funding agencies who discerned the benefits of working together.

It would be too limited a view to see the benefits of consortia only in terms of fiscal and operational efficiencies, though these rightly are important engines that spur cooperation. Collective engagement provides a forum for mutual critique and honing of ideas and strategies that translate into sharper thinking and refined outcomes. Personally, I regard my participation with colleagues in consortia to be the most fruitful venue for professional education throughout my career. At heart, library cooperation is premised upon the mutual benefit that it brings to respective constituencies. But even more, librarians, at least on our better days, are committed to a larger vision of educating humanity for their development, benefit, and fulfillment.

More not less collaboration

From my perspective, the need for effective collaboration will continue, even heighten. The litany of challenges and opportunities is long. There are several factors that make continued and heightened library cooperation all the more pertinent. Foremost is the likelihood that many libraries will have to live within persistent fiscal constraints, even reductions. The prospect for increasing fiscal resources to academic libraries is not bright, at least in the near-term. As firmly as we know that the universe of information is not entirely digital, the all-too-common perception to the contrary abounds, and the current usage of library provided digital resources reinforces this idea. Consequently, librarians must strategize vigilantly about how to do as much or more

with the same resources and to do so with integrity and effectiveness. This requires that libraries not only seek internal efficiencies but also explore how select operations can be more efficient through the scale that cooperation affords. Increasingly, libraries will need to eliminate duplication wherever that is feasible – from physical resources to routinized operations. A key challenge is to identify those areas in which we can minimize redundancy through implementing operations on a larger scale that yield benefits fiscally and operationally. Recouped human and fiscal resources can in turn be reinvested toward enhancing library services to constituencies in locally defining ways. In short, we must do more together in order to concentrate on what serves local needs best. While premised upon a commitment to collaborate, this requires a heightened emphasis upon economies of scale within those areas of library operations that can and should increasingly become commonalities.

What are some areas for this kind of development within library consortia? It first requires identification of those areas which yield true economies of scale that can be scaled effectively. Already with a record of cooperative success, this will increasingly entail information content. Discovery tools pressure libraries to provide ever greater panoply of resources, especially of the digital sort. It is difficult to imagine this impulse abating but with constrained fiscal resources there are obviously limits to what any library can provide. Consequently, libraries must discover how to obtain broader access to content with finite or diminished purchasing power. Consortial efforts have been effective. We have a positive record of success in this regard within ALI. However, as we increasingly consider consortial purchase as our first recourse for most resources, we also need to explore how to provide other services and resources more efficiently through consortial efforts. One can imagine shared projects like technical processing, cooperative storage, print-on-demand, serials acquisition, and collective, original ownership of resources. Such efforts will not proceed without challenge. Recently we have witnessed efforts by some for-profit vendors and publishers to restrain or negate consortium acquisition options. This will require that library consortia band together in a concerted effort to enact market influence. (A recent, encouraging but embryonic effort by a scientific journal publisher to permit "pay to play" transactions within their aggregation of titles and at a reasonable cost suggests the possibility that library voices in harmony might wield some effect upon revised marketing models.) The International Consortium on Library Consortia (ICOLC), a loose affiliation of consortia, speaks on behalf of consortia but may need closer alignment and a broader range of cooperation from consortia in order to speak with sufficient clarity and volume to those market sectors that wish to harness consortial efforts. Can libraries collectively influence pricing, marketing, and repackaging? Perhaps, with technologies that will better enable us to understand the extent of duplication and inequities. Only collectively will we have a voice strong enough to be heard above the din of excessive profits.

The commoditization of information resources

Information resources will, I believe, increasingly become commodities akin to utilities. Libraries and consortia will more frequently work with brokers for the best mix to address collective and local needs. Arguably large scale consortia will offer the most leverage -- and provide the most effective brokerage; but, we must band together. ALI on its own may not be large enough to negotiate most effectively but combined with Lyrasis and other consortia may have a chance for continuing and elevated success. There have been recent pressures upon library consortia to force consolidation at the publisher or distributor level. We will not succeed if we make lone-ranger a concession to obdurate marketers no matter how momentarily enticing the bait appears! It is even thinkable that information content, management, and control could all become commodities as "web-scale" and "cloud-based" alternatives mature and flourish. How do libraries and consortia extend

scalable service and still maintain governance? Our non-profit consortia and their initiatives may be what enable libraries to survive, even thrive.

Scale and emerging technologies

A corollary to enlarged scale is reduced local customization. There is little benefit and even danger in continuing to customize in the wrong places. This has been a persistent plague upon integrated library system development. Too many libraries (read librarians) have focused on the back room mantra ("how we do it here") and not enough on what the back room is trying to accomplish for users. This is not to say that the back room isn't important, but we need to align, even consolidate our back room experiences. Many things simply do not need to be done differently within different contexts. This is congruent with trends in the larger business of software development where the migration of on-premise software to "software-as-a-service" (or, SaaS) reverses a prior direction toward customization. The challenge is to identify the local customizations that make a difference. We must be clear that what truly matters lies with library users and their experiences and not in how the library back room works. From my perspective, this is where projects like OCLC Web-scale Management, OLE, Evergreen, and others hold considerable promise. The back room is, at least to some degree, one-size-fits-all. While this is surely an overstatement, I think it is an important direction for consideration. If it breaks down because of local library demands for customization, such efforts with promise for immense scalability will not succeed. This is not, however, to minimize the ultimate requirement for local library effectiveness. There must be ongoing revision about the demarcation of responsibilities between the local library and the consortium. By doing all that we can together, while understanding that the local library's interpretation and implementation must fit with and serve its specific constituencies and context, we will effectively accomplish mutual goals.

Notwithstanding the caveats about technologically possible but excessive or misplaced local customization, there are potentially vastly increased levels of cooperation and collaboration to be realized through emerging technologies. As amorphous and allusive to define as "cloud computing" is, it suggests unprecedented opportunities for sharing not only information resources and metadata but management and discovery of archived content, collaborative interpretation, instructional resources, and cooperative management of operations and processes. In addition, developing technologies could make possible new models for shared or collective ownership of both new and retrospective resources. A decentralized, deduplicated collective repository of traditional formats is conceivable with shared technologies for management (i.e., a "last copy (ies)" distributed collection). Technologies currently, and will increasingly, permit consortia to share intellectual efforts that inform instruction, mediate information for users, and provide timely, even instantaneous, professional awareness.

Morphing consortia for effectiveness and benefit

As many consortia, including ALI, have discovered, a consortium can only go so far on volunteer staffing. This awareness gave impetus to ALI's decision in 2007 to seek a vendor to provide exploration, negotiation, licensing, and invoicing for electronic information resources. PALNI has witnessed significant organizational and operational progress with its recent advent of full-time consortium employees. As with most cooperative endeavors, there is challenge in balancing the appropriate scale for economies with a satisfactory member representation. Part of this concern has been for a sufficient voice and consequent direct representative allocation for each member institution. With increasing inter-consortial programs, a more indirect administrative approach may be required along with more decision-making assigned to a representative executive or managing body.

A potential danger may be a sense of distance or even alienation that member libraries feel without direct representation. Such a perception may diminish the sense of shared ownership and organizational commitment. To counter this concern will require that representatives achieve effective communication, understanding, and solidarity with their constituents.

Emerging technologies will also make possible expanded inter-consortial relationships. New means for aggregating, managing, and sharing information and systems will challenge prior boundaries of geography, governance, and specialization. Although there will be an extended need, even if the duration is uncertain, to share print/physical objects, we must extend our thinking about collaboration beyond traditional geographic boundaries which understandably were defined by consideration for the transport of physical artifacts.

Other commensurate challenges may redefine ownership, organizational structures, and representation in augmented consortial relationships. I am cautiously optimistic that librarians can overcome these challenges because of our common focus upon purpose and persons. It will require commitment, diligence, and change. And, it will require a perspective that appreciates the nexus of commitments and interdependencies that are requisite for successful collaborative endeavors.

ALI and the future

ALI has realized success in cooperative acquisition of information resources, expanded resource sharing initiatives, and broader investment in collaborative information instruction across multiple types of libraries. Just as with one's personal professional development, if an organization remains static it will atrophy, cloud its vision, and stifle the energies of its members. ALI must envision its future amid a dynamic landscape of information and libraries. Will it remain an organization that provides "buying club" benefits and impetus for modest, incremental developments? Or, does it need to pursue a larger role as a cogent guide for academic libraries (and beyond) onto the uncharted waters of sea-change in information creation, collection, and dissemination? Can ALI become an agent for promoting, coordinating, and consolidating change across Indiana academic libraries? I think so; not alone but in partnership, as it identifies mutual opportunities and expanded prospects with other entities and consortia within Indiana and the region.

A consortium affords considerable benefits with its collective environmental awareness of complexities, challenges, and opportunities. And, these are reinforced by a commitment to mutual progress and prospering, especially of the sort to which librarians are inclined. ALI demonstrates such benefits currently with more informed resource acquisition, licensing, and resource sharing. In order to continue and expand its viability and for its members to perceive organizational value and vitality, ALI must undertake new or augmented activities that demonstrate forward movement and align with the missions of its members and the profession. This requires a commitment to change purposefully, a will to venture and to risk (cushioned by calculated risk and the shared investment of a consortia initiative). As ALI refines its vision to see the continuing role of academic libraries and librarians with expanded emphasis upon users, resource interpretation, and service coupled with a shift of traditional services and operations to enlarged cooperative, collective scale, we will move forward together.

With over three decades of experience with library consortia, I remain optimistic about their value and contributions. I am optimistic about ALI. Professionally, we are bigger than the threats of competition and context that may try to divide us. We strive to see a fuller picture, a more informed world with more luminous human beings. I'm glad that we are different -- "but you are librarians." We can and do work toward these positive ends individually and in consort.

Bio

Since 2000, Daniel (Dan) J. Bowell has been the University Librarian at Taylor University, Upland, Indiana, and currently serves as the President of Academic Libraries of Indiana. Over the course of 35 years in academic librarianship, he has actively participated in no fewer than seven library consortia in four states. He believes heartily that there is much to be gained from libraries working together both in benefits to constituencies and also in professional and personal reward for librarians.

Hail: Hoosiers and Information Literacy

By Susan Clark

In October 2010, the Board of Directors for the Academic Libraries of Indiana (ALI) endorsed an initiative proposed by the membership of its Information Literacy Committee (ILC). Named HAIL—Hoosiers and Information Literacy—this project was developed to purposefully and actively involve Indiana librarians in a leadership role in the teaching and promotion of information literacy skills.This paper chronicles the development of the HAIL project.

In late summer, 2010, the Information Literacy Committee (ILC) of the Academic Libraries of Indiana (ALI) met to develop the committee's working plan for the coming year. The ILC membership determined based on the literature and what members were seeing in their libraries, that the time had come for a significant statewide effort to address information literacy needs across Indiana. In 2008, McAskill contended that academic librarians, in understanding the critical need for the development of strong information literacy skills, should step up to the challenge of assuming "the leadership role" (p. 3). This supported the belief of the ILC that ALI, 71 libraries strong, was in an excellent position to organize and coordinate such an effort.

In discussions leading to the creation of HAIL (Hoosiers and Information Literacy), the members of the ILC recognized that information literacy deficiencies that are maddeningly evident when students walk through the doors of their college libraries begin many years earlier—often from the time these students are infants. The literature observes that information literacy skills can be taught to toddlers, but the majority of preschool instructors do not have the opportunity to work with librarians to help determine instructional goals and develop the curriculum (Heider, 2009, p. 514). Prospects do not appear to improve in grade school or high school in Indiana, a matter of growing concern especially in light of recent cuts to library positions. ALI members supported a letter written by that organization's president to school administrators around the state expressing concern for the number of school librarian positions being cut just the previous year (A. W. Hafner, personal communication, June 28, 2010).

The mission of HAIL, the ILC determined, would be to incorporate the development of information literacy skills into all areas of Hoosier lives. However, if information literacy begins in the cradle, how could the academic librarians address the earliest years, how could they tackle the effort in grade schools and high schools, and how could they reach adult individuals with medical, social, or legal information needs? The ILC quickly realized that by themselves they could not be successful in this endeavor. This challenge would need to be shared by librarians from all areas of the profession: public, academic, school, health science, and special. In endorsing the HAIL initiative, the ALI Board of Directors voiced strong support for the idea of forming partnerships and alliances among the state's library community.

A golden opportunity for ILC members to spread the word about HAIL presented itself early in 2011 in the form of district meetings sponsored by the Indiana Library Federation (ILF). In almost all of the districts around the state, proposals were accepted for roundtable HAIL discussions. ILC members who volunteered to lead these discussions wanted to learn as much from those attending as they wanted to share the concept of HAIL and gather ideas for growing the initiative. From February through May, the ILC volunteers fanned out over the state and reported back to the main committee. What the discussion leaders learned was that librarians in Indiana

have a great interest in information literacy and are acutely aware of the need for individuals within their communities to be information literate, but the session leaders also learned about the information literacy challenges librarians face: the difficulty of raising awareness in their communities, a lack of understanding as to the definition of information literacy and its importance to the development of critical thinking skills, and that efforts made are not having enough of an impact. Happily for the HAIL project, session attendees at each district meeting expressed enthusiasm for the core idea of librarians from all over Indiana working together to tackle information literacy needs across the state.

Most of the librarians attending the HAIL sessions reported they were from public libraries, and a question repeatedly asked of the ILC discussion leaders concerned the action steps ALI and its Information Literacy Committee were planning with regard to the HAIL initiative. The discussion leaders emphasized that the academic librarians had recognized the need for librarian partnerships and joint efforts and that their goal was to welcome librarian voices from all areas of the profession so that everyone—not just a few—could work together to determine the direction for HAIL and the initiatives that would make up its composition.

When the ILC members who attended the ILF district conferences reported back to the larger group, a small ILC subcommittee was formed to plan an information literacy gathering that would attempt to bring stakeholders together in the summer of 2011. The ILC planning team determined that the best approach for this first gathering would be to host a daylong Information Literacy Summit and invite officers from the state's library organizations and representatives from the State Library and the Department of Education. The event was scheduled for July to allow school librarians to participate.

At a Saturday lunch gathering in late winter, a small group of ILC members met with a few school librarians at their request to share more about the HAIL project and to gather thoughts and ideas from their constituency's perspective. Like the public librarians, the school librarians who attended the lunch, members of the Association of Indiana School Librarian Educators (AISLE), were very enthusiastic about a statewide effort that would bring librarians together to discuss the issue of information literacy. They recalled the ALI letter of support from the preceding year and expressed hope that the HAIL initiative would help to make a difference in the lives of school-age children and, at some point, cause school administrators and school boards to rethink the need for school librarians in the crucial effort of creating information literate students.

Invitations were sent in February to Indiana library officers and organization leaders. In the invitation, each group represented was asked to prepare a brief presentation in which they would discuss, from their constituency's view, the current state of information literacy as well as challenges, opportunities, and possible goals for the future. The ILC planning team determined that rather than bring in an information literacy expert to speak to attendees, for this first summit the emphasis should be on meeting one another, sharing thoughts and experiences relative to the topic, and beginning the process of becoming an active working body. On the day of the summit, the organizations represented were:

Association of Indiana School Library Educators
Indiana Academic Library Association
Indiana Black Librarians Network
Indiana Chapter of Special Libraries Association
Indiana Department of Education
Indiana Public Library Association
Indiana Health Sciences Librarians Association
Indiana Library Federation- Instruction and Education Division
Indiana Library Federation
Indiana Online Users Group
Indiana State Library

In the presentations, some of the themes addressed included the growing need for information literacy skills for people seeking

medical care; the information literacy component which will be included in all areas of the Common Core Standards set to be fully implemented in all grades in Indiana by 2014-2015; efforts to teach information literacy skills to preschool children; and providing fundamental skills in information access and use for people looking for work, planning retirement, paying taxes, and the countless other occurrences in life that send individuals on the search for information.

During the last session of the day, attendees separated into six groups and were given the task of providing the ILC with at least three suggestions for next steps for the HAIL project. The summit leaders assured attendees that their suggestions would be considered by the full committee. After meeting separately, the groups came together and concluded a successful summit with a review and discussion of suggested next steps.

In August, the ALI Information Literacy Committee met for its annual planning meeting. After reviewing and evaluating the summit itself, members turned to the topic of the HAIL project and plans for that effort in the coming year, and the suggestions of next steps were discussed. Suggestions included determining ways to efficiently and effectively communicate with the larger group now established (Summit attendees and ILC members), continuing to raise awareness of HAIL, consideration of outreach efforts with regard to teacher education programs, and conducting surveys and gathering statistics.

After considerable discussion, ILC members agreed that the first "next step" would be working through ALI to establish a listserv devoted to the HAIL project and those wishing to actively participate in the initiative in order to facilitate and encourage discussion and information sharing. Secondly, four working groups were established: PR/Marketing, Teacher Education, Outreach, and Professional Development.

For this phase of the project, a third step addressed assigning each working group a facilitator from the ILC whose responsibilities include welcoming participants to the group, formulating a list of goals for the group arranging a first meeting, and serving as the group liaison to the ILC. From the point of the first meeting, each working group will decide on its leadership (not necessarily academic librarians) and the work of the group will begin. Groups will interact and keep each other informed primarily through the newly established HAIL listserv, report regularly to the ILC, and pursue initiatives approved and/or suggested by the ILC and the ALI Board of Directors.

At this point, the working group facilitators have established initial goals and have started the process of setting up group meetings. The ILC continues to actively recruit members interested in joining the listserv and becoming active participants in the HAIL working groups. The HAIL project is still very new and much time and effort will be needed for its impact to be felt around the state. Of course, adding to the challenge is the fact that busy, working librarians in all areas of the profession, already with plenty on their plates, have taken on this huge responsibility of moving information literacy instruction forward. But since the evidence indicates that information literacy is vital to our state and its citizens, it is now up to HAIL members and others joining the effort to raise awareness of the meaning of information literacy, to promote and develop initiatives that actively teach information literacy skills in all areas of life, and to build programs in schools and colleges across the state that firmly establish a commitment to the incorporation of information literacy in all areas of the curriculum. To this point, McAskill (2008) observes that librarians in educational institutions have the "responsibility to ensure that their faculty teaching partners understand what it is and how it will benefit not only students but faculty as well" (p.13). Of course, librarians strongly believe faculty will not prove difficult to convince.

Given the economic, social, and educational challenges the state and the country face today, it should not be difficult to convince

anyone of the growing need for people to possess this critical skill set. Of course, there is recognition that what should be does not always match reality, but as school librarians begin to partner with academic librarians in dual credit initiatives, and hospital administrators come to see the value in medical librarians partnering with public librarians to provide health-related information literacy instruction to seniors, there exists the hope that Indiana citizens will agree with the conviction expressed in the report on the High-Level Colloquium on Information Literacy and Lifelong Learning held in Alexandria, Egypt, in 2005 that being information literate means that an individual has learned how to learn, and that ability, in turn, is the key to lifelong learning (Garner, 2006).

REFERENCES

Garner, S.D. (Ed.) (2005, November 6-9). High-level colloquium on information literacy and lifelong learning: Report of a meeting sponsored by the United Nations Education, Scientific, and Cultural Organization (UNESCO), National Forum on Information Literacy (NFIL) and the International Federation of Library Associations and Institutions (IFLA), Bibliotheca Alexandrina, Alexandria, Egypt. Retrieved from http://archive.ifla.org/III/wsis/High-Level-Colloquium.pdf

Heider, K.L. (2009). Information literacy: The missing link in early childhood education. *Early Childhood Education Journal*. 36, 513-518. doi: 10.1007/s10643-009-0313-4

McAskill, W. (2008). Information literacy: The leadership role of the academic librarian. *College Quarterly*. 11(1), 1-15.

BIO

Susan Clark received her MLS from Indiana University-Indianapolis. Her professional experience includes working as a reference librarian at Anderson Public Library from 1992-1996 and serving as the director of Pendleton Community Library from 1996-1999. Since 1999, she has been the director of Ivy Tech Community College's East Central libraries. She serves as chair of the Ivy Tech Statewide Library Directors Committee, Vice-President of the Academic Libraries of Indiana, and chair of the ALI Information Literacy Committee.

The mission of HAIL is to actively promote information literacy efforts beginning with Indiana's youngest citizens and continuing through adulthood to foster in Hoosiers skills for finding the information they need and the ability to use that information effectively while building a knowledge base that will serve them throughout their lives.

For information about joining the HAIL initiative, please contact Susan Clark at jsclark@ivytech.edu.

The Importance of Achieving Diversity in Libraries

By Marcia Smith-Woodard

Introduction

While I have witnessed progress in my lifetime, Indiana libraries still have a long way to go in achieving ethnic and racial diversity in library staffing and in providing targeted services to diverse populations. As a native Hoosier, I have had a library card for more than 50 years. I have been a librarian for more than 31 years. I've worked in an urban library in one of the state's largest library systems serving roughly 40,000 constituents and in several state-wide library positions via the Indiana State Library (ISL). After working with ISL's diversity initiatives over the past five years, I would like to share my experiences with Indiana's Librarians Leading In Diversity (I-LLID).

I-LLID Begins

Investigating ways to recruit a more diverse workforce for Indiana libraries, the State Library surveyed libraries in 2006 to ask about the ethnic makeup of their workforce. While the surveys returned responses from a very small segment of Indiana's public libraries and fewer still from academic, school, or special libraries, there was sufficient information available to warrant a taskforce being established to study the issue. A call went out on the statewide library listservs, and 22 people volunteered to join the taskforce.

By October 2007, the taskforce, finding a need for more diversity in Indiana libraries, recommended pursuit of an Institute for Museum and Library Services (IMLS) funded grant. (The IMLS is the primary source of federal support for the nation's libraries and museums. For more information check their website at http://www.imls.gov.) The Diversity Taskforce transitioned to become the Diversity Advisory Council (DAC) and pursued writing an IMLS grant application for the Laura Bush 21st Century Librarian Program. DAC had entertained several means for encouraging a statewide interest in librarianship as a viable profession among minority students but finally settled on seeking funds to recruit 30 fellows from ethnically/racially underrepresented populations. With input from DAC, ISL and the Indiana University School of Library and Information Science (SLIS) at the Indiana University-Purdue University Indianapolis (IUPUI) campus, the group partnered to develop the proposal. UPUI SLIS Associate Executive Director, Dr. Marilyn Irwin, and ISL Special Services Consultant, Marcia Smith-Woodard, worked together to complete and submit the application to IMLS in December 2007.

We received notification that our application had been accepted in June 2008. The million dollar award was the beginning of the I-LLID MLS Fellowship Project. DAC met to develop the student application form and criteria for letters of recommendation as well as to refine public fact sheets that were distributed to market the project. Initially planned to attract applicants who self-identified with the race and Hispanic Origin categories as defined by the U.S. Census Bureau, the final application included the following categories:

- American Indiana or Alaska Native (AIAN)
- Asian
- Black/ African-American
- Hispanic
- Native Hawaiian or Other Pacific Islander (NHOPI)

- White
- Other_____

I-LLID Fellowship

DAC sub-committees were formed to evaluate the applications. A total of 70 candidates applied during the four cohort rounds of applications. The I-LLID fellowship included tuition payment, a stipend, and some travel expenses. Fellows agreed to maintain a minimum 3.0 grade point average and to work in Indiana libraries for two years. The fellows graduated between May 2010 and August 2011.

The four cohorts included 32 successful applicants resulting in 29 fellows who successfully completed the fellowship project and received the MLS Degree. Not all of the applicants self-identified as one ethnicity/race. Out of these 29 successful fellows, 20 were African American, two were Asian, two were Asian/white, one was American Indian or Alaska Native, one was Hispanic, one was American Indian/Alaska Native, black, Hispanic/Latino, one was white, and one was Other-East Indian.

Post I-LLID

After graduation, most of the fellows had difficulty finding library positions. According to the Bureau of Labor Statistics on data available for library careers, employment of librarians was projected to grow by 4 percent between 2006 and 2016 (U.S. Department of Labor, 2008-09). In 2006, library positions were thought to be plentiful because many long-time librarians would be retiring. What we didn't know in 2006 was that the economy would soon bottom out which would have a strong impact on library careers. Today, eight librarians work in academic libraries; six in public libraries; four in school libraries; three in museums; and two in special libraries. A number of these positions were temporary, part-time, or paraprofessional. Several of the full-time positions limited library work and required the graduated fellows to work at other types of tasks. There may have been job openings between 2006 – 2011, but many open jobs were not filled, leaving more graduates than positions available. In addition, as the economy fell so did many pensions resulting in many librarians financially unable to retire.

Some librarians have suggested another issue that could hamper employment of librarians. It is often said, "It is not what you know – but who you know." For these newly minted minority librarians that statement had been true in other professions, and they felt it would with employment in librarianship as well. Many positions never appear in the newspaper, on company websites, or any other job lists. Some people who find out about "unadvertised positions open" tend to hear about them through networks of people they know, those with inside information. Librarians from ethnically/racially underrepresented groups are often on the outside of those networks.

Lessons Learned

The vast majority of Indiana libraries do not have a diverse workforce. This made me wonder about the role of diversity in our institutions and in library education. My hope had been that libraries would have long-range plans in place to make marked improvements in diversity hiring. Race often seems a difficult subject to get people to engage in discussing. For example, while many libraries supported our survey and shared the ethnic/racial breakdown of their library staff members, many indicated that they were not comfortable sharing that data. Some felt that such information was of local interest and not important at the state level. Once the grant opportunity was publicized, library staff and students from some areas questioned why the grant was focused on diversity and not on rural or other populations of Hoosiers who also needed help paying for their library education. While some were not satisfied with the purpose of the grant, one recent demographic study of the American Library Association's (ALA) membership (61,000 members) shows that the makeup of the national library profession

also falls short of employing librarians of color. For example, a survey from the ALA Office for Research & Statistics (See http://in.gov/library/3703.htm.) that began in May 2005 reported in March 2011 that 69% of their membership responded and 89.3% of those who responded identified as white with only 4.2 percent responding as black or African American and 3.5 percent as Asian, followed closely by Hispanic or Latino at 3.4 percent; the other minorities who self-reported totaled less than 5 percent.

The I-LLID MLS Fellowship Project added 28 self-identified ethnically/racially diverse librarians to these numbers. But while the number of diverse librarians has increased, so has the competition for library positions. What needs to change is the availability of open positions and for those charged with hiring new talent to be open to meeting and interviewing qualified candidates who can also bring positive differences to library environments that are steeped in traditions of sameness.

Positive Outcomes of I-LLID

The I-LLID fellows had a variety of mentoring experiences with librarians representing most of the diverse categories listed above. While most of them had lifetime experiences and encounters with white librarians, most had not had such encounters with diverse librarians in library settings or as library instructors. However, a number of White librarians also provided successful mentoring experiences to the fellows. The fellows recognized that efforts are being made to hire more diverse library educators, but they also acknowledge that this shift is occurring at a slow rate. They also stated that while the fellowship made a small increase in the campus diversity numbers, their classmates remained overwhelmingly white. So what gave the fellows a sense of diversity in the program? It was their camaraderie.

Additionally, the fellows had opportunities to join listservs and library associations, to network with diverse librarians and attend conferences, and hear from diverse library leaders; all of which contributed to their progression as students and eventually professional librarians. The fellows as a whole excelled in library school. The diversity of their backgrounds combined with the knowledge gained through their library education positions them to help any library better serve their current and future library communities.

The fellowship also introduced them to library leaders. Some leaders were mentors for fellows and others gave one-day presentations that made a lasting impact on their librarianship perspectives. They have mingled with library deans, directors, department heads, advisors, library association heads, and human resources personnel from across the state. Past President of the Kentucky Library Association and former Indiana librarian, Fannie M. Cox, was the first out-of-state presenter the fellows met. They were fortunate to also have an audience with three past ALA Presidents – Dr. Carla D. Hayden, Dr. Loriene Roy, and Dr. Camila A. Alire.

In addition to DAC, the Administrators and Directors of Large Public Libraries in Indiana, Academic Libraries of Indiana, Indiana Black Librarians Network, Indiana Library Federation, and Indiana Special Libraries Association pledged their support to the fellowship project. The ten-year-old Indiana Black Librarians Network (IBLN) never wavered in its support of the fellowship project. IBLN is an affiliate of the Black Caucus of the American Library Association (BCALA) – one of five ethnic caucuses.

The fellows were also made aware of the American Indian Library Association (AILA); Asian/Pacific American Librarians Association (APALA); Chinese American Librarians Association (CALA); and the National Association to Promote Library and Information Services to Latinos and the Spanish Speaking (REFORMA). These associations specifically provide ethnic and racially diverse librarians with resources for leadership and professional development forums for exposure, experience, and recognition they might otherwise find a long time coming in mainstream, non-diverse library environments. Like ALA, these

organizations accept membership from any librarian who supports their mission.

The Future of Diversity in Indiana Libraries

Indiana librarians and library systems need to focus purposely on recruiting a more diverse workforce. Indiana libraries that hire staff who can relate to all of the patrons they serve, that hire staff who bring differences culturally as well as other aspects of diversity, will move closer to inclusion and infusion that will enhance the services they offer. In 1980, I had to overcome what I saw as very dated thinking just to get into my first library position. The Diversity Counts Report (2007) had yet to be written. Library administrators and supporters didn't acknowledge that promoting diversity, career ladders, and professional development opportunities to all library staff would make the entire library a better resource for its users. Now we know from that report: "The very existence of libraries rests on our ability to create institutions and resource centers where would-be users see their information needs and themselves reflected."

Finally, one of the goals of the I-LLID grant was to see diversity opportunities continue in Indiana. To that end, SLIS IUPUI has established a Scholarship for Diversity. (For more information see http://iufoundation.iu.edu/giving.html.)

Conclusion

Recruitment to the profession cannot be the job of the library school alone. Local library leaders should know or find out where to recruit students and staff from a diversity of ethnic backgrounds for their workplaces. These leaders should partner with the secondary schools to find out which students in their communities show academic promise and an interest in a library career. If it is important to recruit from local communities then consider all in the local community. If there is little to no ethnic or racial diversity in the local community, meet the challenge to enrich your community with a fresh perspective and new voice that working towards achieving diversity can bring your community when you diligently seek difference.

2011-2012 ALA President, Molly Raphael, focuses her presidential initiatives on advocacy, diversity and inclusiveness, and defending our core values. Her emphasis is on empowering diverse voices. If you can envision your library being more – rise to her visibility challenge!

Do you need information on where to find diverse candidates for your open library positions? Put those reference skills to good use. Ask somebody. Ask me…

REFERENCES

ALA Office for Research & Statistics. (n.d.). Retrieved from http://www.ala.org/ala/aboutala/offices/ors/index.cfm

The Diversity Counts Report. (2007, January, Revised) Compiled 2006 by Denise M. Davis, Director, Office for Research & Statistics and Tracie Hall, Director, Office for Diversity.

U.S. Department of Labor, Bureau of Labor Statistics. (2008-09 ed.). Occupational Outlook Handbook

BIO

Marcia Smith-Woodard began her second tour of duty at the Indiana State Library in May of 1999 where she currently administers LSTA grants and serves as Special Services Consultant to 30 state agency libraries. She is the Project Director for Indiana's Librarians Leading In Diversity MLS Fellowship Project; 2008-2010 Past-President of the Indiana Black Librarians Network; 2010-2012 ILF Reference Division Director-At-Large; 2012 ILF Mentoring Division Chair; and 2011 Recipient of the ILF Special Services Award.

Indiana State Library
Library Development Office Special Services Consultant
mwoodard@library.in.gov

Clay Shirky on Newspapers and What It Can Teach Academic Libraries

By David W. Lewis

In March 2009 Clay Shirky posted the essay, "Newspapers and Thinking the Unthinkable," on his blog and in July 2011 he posted a second essay "Why We Need the New News Environment to be Chaotic." These two essays are concerned with the newspapers and the news, but taken together they provide useful insights for academic librarians. Newspapers and libraries are in many ways quite different, but they share a common heritage, both born out of the technology of the printing press and its 19th century industrialization. Similar technologies drove economic and organizational structures and the values of libraries and newspapers. Both face similar challenges as the Internet unwinds their economic and technical underpinnings and by doing so stresses organizations and the professional values that have sustained them.

Shirky is a keen and frank observer. One could simply do a global search and replace — "libraries" for "newspapers" — and get the general view of what will follow. I will, however, risk my own parsing of Shirky's views and what we as academic librarians can learn from them. I will do so by focusing on a few key passages.

Shirky (2009) states,

> With the old economics destroyed, organizational forms perfected for industrial production have to be replaced with structures optimized for digital data. It makes increasingly less sense even to talk about a publishing industry, because the core problem publishing solves — the incredible difficulty, complexity, and expense of making something available to the public — has stopped being a problem.

Like newspapers, libraries as we know them are the product of the 19th century industrialization of printing. Industrialized printing made books and journals more common, providing the means to distribute the increase in scholarship created by growing research oriented universities. Libraries were shaped by Melvil Dewey and his colleagues to manage the growth of publications that resulted. They designed libraries to manage large numbers of relatively scarce documents.

Beginning in the 1970s bibliographic structures were automated, but this did not change the fundamentals. People still had to come to libraries to use print materials. Over the past decade and a half more and more items have become digital. We are about to see most books cross into the digital realm. With this, our world flips. Local collections will no longer be the only, or the best, means for individuals to discover and acquire documents and information. These functions will move to web-scale services like Google, Google Scholar, Wikipedia, the HathiTrust, arXiv.org, and *PLoS ONE*. Communities and organizations may still need to pay for some information, though I believe increasingly scholarship will be open access and freely available. Libraries may still be the mechanism for making these purchases, but writing a few checks does not require the organizations that exist today.

Shirky puts it this way, **"**The moment we are living through, the moment our historical generation is living through, is the largest increase in expressive capacity in human history" (Shirky, 2009). Much in the way the printing press allowed literacy to move from a professional scribal activity to a mass amateur activity, the Internet makes it possible for anyone to become a publisher. This is on one hand liberating and democratizing and on the other frightening. This is especially true for the established institutions built to support the old order. Libraries are seeing many of

the institutions we had counted on to provide content —newspapers and university presses, for example — slowly passing away, and at the same time there is a whole new universe of content — individual web pages, blogs, Twitter feeds, and whatever comes next — that we have no idea how to manage. As Shirky says about the impact of the printing press, "The old institutions seemed exhausted while new ones seemed untrustworthy" (Shirky, 2009b).

Shirky (2009b) also goes on to say, "That is what real revolutions are like. The old stuff gets broken faster than the new stuff is put in its place." We know this is true. The reference desk broke ten years ago. Five years ago the Online Public Access Catalog (OPAC) broke. Scientific journals have been broken for several decades. The core strategy libraries have used for providing books, the local print collection, is breaking or about to break. As documents become digital, our ability to preserve archives, correspondence, and personal papers breaks. And we don't know what to do. E-mail, chat, and texting haven't fixed the reference desk. New discovery layers haven't really fixed the OPAC. The "big deal" didn't fix scientific journals, though open access might. Circulation continues to decline, and most libraries still pretend that we can manage e-books as if they are exactly the same as their print predecessors. We are beginning to figure out digital archiving, but much will be lost.

All of this is disconcerting. What Shirky tells us is, get use to it. This is just the way it has to be.

Shirky (2009b) states, "When we shift our attention from 'save newspapers' to 'save society', the imperative changes from 'preserve the current institutions' to 'do whatever works.' And what works today isn't the same as what used to work." As we look for what works, it is hard to look beyond preserving the current institution, but if we don't we will be unsuccessful. As I have argued elsewhere, as information becomes digital and moves to the network, libraries as we have known them could become less important. As I put it, we need to consider, "Whether libraries are the only, or even the best, means of making information easily and conveniently available" (Lewis, 1998, p. 192). I am convinced that part of the answer is in free and openly available web-scale services. Some of these will engage amateur contributions, such as Wikipedia. Many others will be built around smaller groups of knowledgeable individuals. Take for example eBird, a project of the Cornell Lab of Ornithology, which provides tools for birders and uses the resulting data in research (eBird, n.d.) or the web site of the Polynesian Voyaging Society (Polynesian, n.d.), probably the single best source of information on the subject created by a combination of anthropologists, native islanders, and interested amateurs. Open access journals also fit this mold and I am prepared to predict this will be the dominant business model for scholarly journal publication within the next decade (Lewis, in press).

I believe individual libraries have a significant role to play in supporting the development of, access to, and preservation of such unique content and many libraries are beginning to engage in these activities. But most are not prepared to make this a major focus of their programs or to divert significant resources to it. This will not be adequate going forward. We need to develop the means to provide significant subsidy to a wide variety of web scale projects. We will have to resist the temptation to be free riders. My own view is that something like the United Way is required; an organization to which we can all contribute that will evaluate projects and make reasoned strategic investments in content and infrastructure.

Shirky (2011) says, "There are only three things I'm sure of: News has to be subsidized, and it has to be cheap, and it has to be free," this points to the fact that subsidy is important. As I have argued, libraries can be viewed as the means that communities and organizations use to provide an information subsidy to their members (Lewis, 1998). As Shirky (2011) frames it in the newspaper context, "Most people don't care about the news, and most of the people who do don't care enough to pay

for it, but we need the ones who care to have it, even if they care only a little bit, only some of the time. To create more of something than people will pay for requires subsidy." Librarians need to make the case for subsidy. Easy and cheap access to information is an important public good. We need to make sure this is not forgotten.

News and scholarly information need to be cheap because many of the people who need both can't afford the current costs. Both are more expensive than need be. Both newspapers and academic libraries, the traditional institutions for providing the news and scholarly information, are now expensive and difficult to use and thus unavailable to many who need them. Newspapers feel this in the market place as they lose advertising and readers. Libraries face a slower, but no less certain, decline if they cannot rein in their journal expenses and demonstrate the value of reference and instruction work done by librarians. If libraries are not cheap, or at least cheaper, they will inevitably face a downward spiral of undervalued services leading to less support leading to less capacity, etc. The hard reality is that the level of subsidy that communities and institutions are providing libraries is sufficient. We have enough money. The problem is that the subsidy is not efficiently or effectively applied. There are two causes. First, commercial journal publishers discovered that they could extract the subsidy from the system and channel it to their stockholders as corporate profits, and they have done so relentlessly for three decades. Second, librarians have been slow to reframe their professional roles in light of the disruptive changes that we confront. This is understandable, changing organizations and professional values is hard, but if we don't make these changes, we cannot make scholarly information cheap.

Shirky (2011) states, "News has to be free, because it has to spread. The few people who care about the news need to be able to share it with one another and, in times of crisis, to sound the alarm for the rest of us." Scholarship is similar. As Peter Suber puts it, explaining why we need open access, "Authors need OA [open access] to reach all the readers who could build on their work, apply it, extend it, cite it, or make use of it. Readers need OA to find and retrieve everything they need to read and to allow their software prosthetics to process everything they need to process. OA doesn't merely share knowledge. It accelerates research by helping authors and readers find one another" (Poynder, 2011). Scholarly information is of course not without cost, but given the technology of the network, it can in many, if not most, cases be free to the user. Making as much scholarship open access and free to users should be one of the primary goals driving academic libraries.

Shirky (2011), speaking on reporting says,

> Having one kind of institution do most of the reporting for most communities in the US seemed like a great idea right up until it seemed like a single point of failure. As that failure spreads, the news ecosystem isn't just getting more chaotic, we need it to be more chaotic, because we need multiple competing approaches. It isn't newspapers we should be worrying about, but news, and there are many more ways of getting and reporting the news that we haven't tried than that we have.

In the past, documents in local library collections were the primary mechanism that communities and organizations used to provide their members with the information they needed to be successful. With the growth of information on the web, this historic function of libraries is waning. What is not clear is what will replace it, but as with the news, it is in everyone's interest to explore all of the options.

Librarians are by their nature conservative and so are our libraries. As those trusted to make sure the artifacts of our culture are preserved for the long haul, this makes sense. But we are now in a period where our environment has fundamentally and radically shifted. We don't know what will work going forward so it is in our interest to try all sorts of things,

even if they seem crazy and fail. In disruptive environments no one knows what will work so recourse to experts or taskforce reports will be less effective than trying things. What is sometimes called "exploratory development" should be the norm. Expecting failure and having fiscal strategies based on that assumption will also be key.

What I take from Shirky is that we are in the midst of historic disruption. Academic libraries will not survive in their current form. The times we are living in require us to step back and consider how we serve the cause of scholarly information, how it can be subsidized and made cheap and free. And importantly, how is it preserved. To figure all of this out, we need to explore. Old strategies are unlikely to be successful and no one yet knows what will work, thus chaos is not only expected, but also useful. It will be interesting, challenging, and ultimately rewarding work.

References

eBird. (n.d.). Retrieved from: http://ebird.org/content/ebird

Lewis, D.W. (inevitability of open access). The Inevitability of Open Access. *College & Research Libraries*. Preprint available at http://crl.acrl.org/content/early/recent

Lewis, D.W. (1998, December). What if libraries are artifact-bound institutions? *Information Technology and Libraries*, *7*(1), 191-197. Retrieved from: https://scholarworks.iupui.edu/handle/1805/434

Polynesian Voyaging Society. (n.d.). Retrieved from http://pvs.kcc.hawaii.edu/

Poynder, R. (2011, July/August). Suber: Leader of a leaderless revolution. *Information Today*, 28. Retrieved from http://www.infotoday.com/it/jul11/Suber-Leader-of-a-Leaderless-Revolution.shtml

C. Shirky. (2009a, June). How social media can make history. [Video file]. Retrieved from http://www.ted.com/talks/clay_shirky_how_cellphones_twitter_facebook_can_make_history.html

C. Shirky. (2009b, March 13). Newspapers and thinking the unthinkable. [Web log comment]. Retrieved from http://www.shirky.com/weblog/2009/03/newspapers-and-thinking-the-unthinkable/

C. Shirky. (2011, July 9). Why we need the new news environment to be chaotic. [Web log comment]. Retrieved from http://www.shirky.com/weblog/2011/07/we-need-the-new-news-environment-to-be-chaotic/

Bio

David W. Lewis is Dean of the IUPUI University Library and Indiana University Assistant Vice President Digital Scholarly Communications. He has a BA form Carleton College and an MLS from Columbia University. After working in a number of positions on the east coast, he came to IUPUI in 1993 and has been the dean since 2000. He is chair of ISLAC and a member of the ALI board.

HathiTrust: Transforming the Library Landscape

By Diane Parr Walker

Many in attendance at the HathiTrust Constitutional Convention (Constitutional Convention 2011, n.d.) in October 2011 seemed to feel that the event and its outcomes were historic. Whether or not that was indeed the case will be determined in the future. For now, I will offer one perspective on the organization and on the collective actions taken during three days this past fall by representatives from the voting member institutions that made up the HathiTrust community at this moment in time.

What is HathiTrust?

In the words of John Wilkin, HathiTrust Executive Director and Associate University Librarian for Library Information Technology at the University of Michigan, "HathiTrust is a remarkable example of collective action, of our community working together to solve a common problem" (Wilkin, 2011).

The HathiTrust website describes the effort and its history:

> HathiTrust began in 2008 as a collaboration of the 13 universities of the Committee on Institutional Cooperation, the University of California system, and the University of Virginia to establish a repository to archive and share their digitized collections. HathiTrust has quickly expanded to include additional partners and to provide those partners with an easy means to archive their digital content.
>
> The initial focus of the partnership has been on preserving and providing access to digitized book and journal content from the partner library collections. This includes both in copyright and public domain materials digitized by Google, the Internet Archive, and Microsoft, as well as through in-house initiatives. The partners aim to build a comprehensive archive of published literature from around the world and develop shared strategies for managing and developing their digital and print holdings in a collaborative way.
>
> The primary community that HathiTrust serves are the members (faculty, students, and users) of its partners libraries, but the materials in HathiTrust are available to all to the extent permitted by law and contracts, providing the published record as a public good to users around the world (Our Partnership, n.d.).

Hathi (pronounced HAH-tee), is the Hindi word for elephant. The name is intended to underscore the immensity of this undertaking, but also to evoke memory, wisdom, and strength ("Major library partners," 2008). The original mission established for HathiTrust is "to contribute to the common good by collecting, organizing, preserving, communicating, and sharing the record of human knowledge" (Mission and Goals, n.d.). Its founding goals are:

1. To build a reliable and increasingly comprehensive digital archive of library materials converted from print that is co-owned and managed by a number of academic institutions.
2. To dramatically improve access to these materials in ways that, first and foremost, meet the needs of the co-owning institutions.
3. To help preserve these important human records by creating reliable and accessible electronic representations.
4. To stimulate redoubled efforts to

coordinate shared storage strategies among libraries, thus reducing long-term capital and operating costs of libraries associated with the storage and care of print collections.

5. To create and sustain this "public good" in a way that mitigates the problem of free-riders.

6. To create a technical framework that is simultaneously responsive to members through the centralized creation of functionality and sufficiently open to the creation of tools and services not created by the central organization.

Three libraries in Indiana are members of HathiTrust as of October 2011. Indiana University along with the University of Michigan led the formation of the initiative. Purdue University, as a member of the Committee on Institutional Cooperation (CIC), was also among the founding members. The University of Notre Dame joined in May 2011. Although only member institutions that joined before October 2010 were allowed to speak and vote at the Constitutional Convention, Notre Dame representatives, along with thirteen other new members, were invited to attend as observers. [1]

At the time of the Constitutional Convention, the HathiTrust website statistics reported cumulative digital holdings of nearly 10 million volumes, representing over 5 million book titles and 250,000 serial titles. In his remarks to the Convention, Wilkin stated that already by June 2010 (two years after the formation of HathiTrust) "nearly every ARL (Association of Research Libraries) library could depend on finding approximately 31% of its collection online in HathiTrust" (Wilkin, 2011). At current rates of ingestion to the database, Wilkin estimated that by early 2012 research libraries will likely be able to find about 50% of their collections in digital form in the archive, and he noted that rates of overlap between the HathiTrust digitized collections and those of individual academic libraries are even higher for non-ARL institutions.

Re-stated in perhaps overly-simplistic terms, HathiTrust was formed to preserve securely the digitized content of the printed holdings of research libraries, created through such programs as the Google Book Project (http://www.google.com/googlebooks/library.html), the Internet Archive (http://www.archive.org/), and individual library digitization projects, and to provide full text access for research and academic purposes.

If the oft-uttered assumption that in the future anything not digital won't be found and used is true, HathiTrust is the means of assuring that the record of past human intellectual effort, at least as represented by the collective holdings of U.S. research libraries, will not pass into non-digital obscurity. That alone is a significant accomplishment, but is not all the HathiTrust partnership has accomplished so far or aspires to accomplish in the future.

Significant Accomplishments before the Constitutional Convention

In his opening presentation at the convention, Wilkin emphasized that the HathiTrust partnership has gone beyond the initial goal of a collective repository to create a "rich, open system with a nuanced understanding of rights and the ability to deliver various forms of content to different audiences in different ways" (Wilkin, 2011). His emphasis, though, was on the fact that this has been accomplished collectively, through the contributed efforts of the partner/member[2] institutions rather than by an external organization for libraries.

Wilkin highlighted three significant accomplishments, among the many the partnership can site (see others at http://www.hathitrust.org/news_publications).

- The HathiTrust has been certified by the Center for Research Libraries (CRL) as a trustworthy digital repository. CRL established a rigorous Trustworthy Repositories Audit and Certification (TRAC) assessment program in 2007 (Center for Research Libraries, n.d.). TRAC Certification requires a rigorous

and thorough review by an advisory panel of leaders in library collection development, administration, and digital technology, based on a set of criteria intended to "identify digital repositories capable of reliably storing, migrating, and providing access to digital collections" (Center for Research Libraries, 2007, p. Foreword). In other words, this certification signifies that the permanence of HathiTrust digital content can be relied upon in ways that ongoing accessibility of much web content cannot be.

- HathiTrust has created a viable full-text search mechanism that works across all of the content in the repository. In Wilkins's words: "I hope no one here is so jaded as to think that full-text searching across millions of volumes is a slam-dunk… Our users can now search over 3 billion words and get results in a split second. Collective work in the partnership has produced faceted results in our full text, and ranking that takes bibliographic information in the full text into account. The functionality that we have today is tremendous, and it provides a foundation for a next generation of search that gives our users access to bibliographic information where needed, and full text where desired (Wilkin, 2011).

Indiana University and the University of Illinois have created a research center to support uses of the HathiTrust collection (http://newsinfo.iu.edu/news/page/normal/19252.html). The intent of this initiative is to develop methods of using computational tools to analyze texts across the HathiTrust collection in ways that do not infringe copyright or require that the researcher read individual items in the collection. As Wilkin observed, the significance of this development is that the research center initiative "comes from faculty leadership (from those who would *do* the research), drawn to use of this immense library, rather than from us [i.e., libraries] in support of those faculty" (Wilkin, 2011).

In addition, HathiTrust has begun working with publishers and authors to make it possible for rights holders to open access to their works in HathiTrust and for publishers to deposit digital master files for perpetual archiving. Also, the collective is beginning to facilitate lawful uses of in-copyright materials, including access for users with print disabilities and developing collaborative methods for identifying and providing access to orphan works.

Constitutional Convention

Wilkin observed in his opening remarks at the Constitutional Convention that since beginning large-scale digitization of library collections in 2005 through such efforts as the Google Book Project and the Internet Archive, the research library community has digitized over half of the collective holdings of ARL libraries. The launching of HathiTrust in 2008 established an organization to facilitate collective action among research libraries on a grand scale. He asserted that "seldom has so much in our world changed in such a short time. Together, we have utterly transformed parts of the library landscape" (Wilkin, 2011).

Why hold a Constitutional Convention? As articulated on the HathiTrust website:

HathiTrust was chartered by the founding partners for an initial five-year period, from 2008-2012, with a formal review of governance and sustainability to be conducted by the partners in the third year. In October, 2011, institutions who joined HathiTrust by October 31, 2010 will participate in a Constitutional Convention to determine the governance model for the partnership and set directions for its next phase (Governance, n.d.).

HathiTrust contracted with Ithaka S+R to conduct the required three-year review of HathiTrust's accomplishments and progress. The resulting report provided background for the Convention (Ithaka S+R, 2011).

The review focused on three inquiries:

1. How participating libraries perceive the value of HathiTrust

2. Expectations of participating libraries for operating and governing the initiative moving forward

3. The views of libraries that do not yet participate in HathiTrust

Findings revealed that among participating libraries HathiTrust is valued as a preservation service, that participating libraries value the fact that HathiTrust is a collaborative effort "growing from, and led by the research community," (Demas, 2011, p.9) and that there is significant goodwill and enthusiasm for the HathiTrust initiative and its missions. Among the questions raised was whether HathiTrust has the potential to help manage print collections (Demas, 2011, p. 9).

This set of findings seemed to give significant imperative to continuing to move forward as a partnership, rather than moving toward alternative models such as forming a separate non-profit enterprise or contracting with an external party for services. Ithaka S&R concluded that "the current structure of HathiTrust is somewhat unique in that it is a collaboration that is trying to deeply operationalize tasks in a distributed, volunteer mode. This is an opportunity to investigate collaborative staffing models and is perhaps a key role for HathiTrust with its innovative spirit" (Demas, 2011, p. 12).

Regarding expectations, those interviewed for the review noted the high amount of expertise and effort contributed by partner institutions but questioned whether it is sustainable to build an organization based on "volunteer" effort. Consultation, input, and transparency emerged as core desires for governance going forward, along with a general sense that those partners contributing more in terms of effort and content should rightfully have more "weight" in decision-making.

As for views of libraries not currently members of HathiTrust, there was strong interest in the mission and preservation function of HathiTrust from libraries with rare and unique collections, but a perception that there is currently not an effective ingest method for these sorts of materials. International libraries are hesitant to join an initiative perceived as U.S.-based. Some regional and consortial digital library projects see HathiTrust as duplicative (Demas, 2011, p. 10).

While the report of the review provided substantial documentation on how HathiTrust is perceived by member and non-member institutions and a summary of areas to which it was suggested HathiTrust might next turn its attention, the Convention was structured around ballot proposals submitted by partner institutions in advance. The structure was relatively formal, with sessions allotted to consider each of seven ballot proposals through presentation of the proposal, invitation and discussion of amendments to the proposal, and a vote by the partnering institutions and consortia that had joined HathiTrust prior to October 31, 2010. Voting was weighted to allocate a certain number of votes to each participating institution, according to a formula that considered each member's relative financial and digital content contribution. The list of ballot proposals and the outcome of voting was posted to the HathiTrust website almost immediately (Constitutional Convention Ballot Proposals, n.d.).

By passage of the ballot proposal to establish an effective governance structure, the convention determined that at the end of HathiTrust's initial five-years (2008-2012), the partnership will be led by a Board of Governors, a Board Executive Committee, and Board-appointed committees "to ensure timely review of current issues, including periodic review of the cost model" and that "HathiTrust's governance [shall] be based on a set of clearly articulated Bylaws and a process for amending them" (Proposal 3 - Governance Structure, n.d.). It is important to understand that Bylaws do not yet exist, nor does the framework for electing the Board of Governors. The ballot proposal resolves that the Board of Governors shall develop Bylaws to be presented to the membership for ratification or rejection within six months of its formation. Passage of this ballot proposal presumably sets in motion action on the part of the

founding Executive Committee to implement formation of and election to the Board of Governors in the coming months. Overall, passage of this proposal represented a strong vote of confidence in the current executive management.

The other ballot proposals passed chart a new and ambitious expansion of HathiTrust's goals. Based on those proposals, we can look to this partnership to undertake several specific activities:

- Establish a distributed print monograph archiving program among HathiTrust member libraries (Proposal 1 - Distributed Print Monographs Archive, n.d.).
- Formalize a transparent process for inviting, evaluating, ranking, launching and assessing development initiatives (including the incorporation of existing services and tools along with those to be newly developed) from HathiTrust partner institutions (Proposal 2 - Approval Process for Development Initiatives, n.d.).
- Through coordinated and collective action, expand and enhance access to U.S. Federal publications, including those issued by the Government Printing Office and other federal agencies (Proposal 4 - U.S. Government Documents, nd.).
- Develop and vet a fee-for-service model to allow contribution of content from non-partner entities (Proposal 7 - Fee-for-service Content Deposit, n.d.).

A proposal to create a HathiTrust committee to review the implications and applicability of service, policies, and procedures developed by its members before they are adopted generated much discussion (Proposal 6 - HathiTrust Implementation Review Committee, n.d.) but was not passed. According to the rules established for the Constitutional Convention, the proposal will likely not be taken up again.

One remaining proposal (Proposal 5 - Mission and Goals, n.d.), to broaden the stated mission of HathiTrust to expand its focus from building "a digital archive of library materials converted from print" to considering the full range of "digital assets of intellectual value" to researchers, also generated much discussion. In the end, the Convention voted to refer this proposal to the incoming Board of Governors for further consideration.

Does the HathiTrust and this Constitutional Convention transform the library landscape? I would say that both are a significant part of what Abby Smith Rumsey, who convened and moderated the Convention, described as "a deliberate transition to 21st century modes of scholarly communication" (Demas, 2011, p. 5). In an open letter regarding Ithaka S+R's three-year review, Ed Van Gemert, Chair of the HathiTrust Strategic Advisory Board, observed, "The strength of the collaborative is in thinking big while engaging in focused strategic work. The challenge is to remain focused on strategic needs by not trying to be everything for everyone, while at the same time continuing to tackle large issues" (Van Gemert, n.d.). The HathiTrust Constitutional Convention aimed to do just that: to think big while focusing on the strategic need to establish a long-term governance structure to ensure future progress. The ballot proposals that were passed, together with the long list of future potential activities and issues to be addressed that emerged during discussion (Demas, 2011, pp. 3, 36-38), will test the ongoing strength of the collaborative. Accomplishments to date, in only three years, and the evident commitment of the participants in the Convention bode well for the future. This collective commitment "to contribute to the common good by collecting, organizing, preserving, communicating, and sharing the record of human knowledge" in digital and digitized form is changing the landscape of libraries (Mission and Goals. (n.d.). Through HathiTrust, libraries are pooling resources and mobilizing expertise at an unprecedented scale to address common problems, ranging from preserving and accessing the collective content in research libraries, to beginning to approach questions

of copyright and fair use in a progressive and coordinated way. The Constitutional Convention confirmed the collective commitment of the member institutions to aggressively and intentionally change our landscape.

Reference

Center for Research Libraries. (n.d.). *Certification and assessment of digital repositories*. Retrieved from http://www.crl.edu/archiving-preservation/digital-archives/certification-and-assessment-digital-repositories

Center for Research Libraries. (2007). *Trustworthy repositories audit & certification: Criteria and checklist.* Chicago: Center for Research Libraries and OCLC Online Computer Library Center, Inc.

Constitutional Convention 2011. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011

Constitutional Convention Ballot Proposals. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals

Demas, S. (2011, October 8-9). *Notes of the HathiTrust Constitutional Convention*. Retrieved from http://www.hathitrust.org/documents/HathiTrust-ConCon-Notes.pdf

Governance. (n.d.). Retrieved from http://www.hathitrust.org/governance

Ithaka S+R. (2011). Briefing paper on progress and opportunities for HathiTrust. Retrieved from http://www.hathitrust.org/documents/hathitrust-3year-review-2011.pdf

Major library partners launch HathiTrust shared digital repository. (2008, October 13). Retrieved from http://ns.umich.edu/new/releases/6774

Mission and Goals. (n.d.). Retrieved from http://www.hathitrust.org/mission_goals

Our Partnership. (n.d.). Retrieved from http://www.hathitrust.org/partnership

Proposal 1 - Distributed Print Monographs Archive. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal1

Proposal 2 - Approval Process for Development Initiatives. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal2

Proposal 3 - Governance Structure. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal3

Proposal 4 - U.S. Government Documents. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal4

Proposal 5 - Mission and Goals. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal5

Proposal 6 - HathiTrust Implementation Review Committee. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal6

Proposal 7 - Fee-for-service Content Deposit. (n.d.). Retrieved from http://www.hathitrust.org/constitutional_convention2011_ballot_proposals#proposal7

Van Gemert, E. (n.d.). *Open letter regarding Ithaka S+R review of HathiTrust*. Retrieved from http://www.hathitrust.org/constitutional_convention2011

Wilkin, J. (2011, October). *HathiTrust's Past, Present, and Future*. Retrieved from http://www.hathitrust.org/blogs/perspectives-from-hathitrust/hathitrusts-

past-present-and-future

Footnotes

1. Prior to joining the University of Notre Dame in July 2011, I was Deputy University Librarian at the University of Virginia, an early partner in the HathiTrust.

2. The terms "partner" and "member" are used interchangeably in HathiTrust documentation and during discussions at the Constitutional Convention.

BIO

Diane Parr Walker, Edward H. Arnold University Librarian
Hesburgh Libraries University of Notre Dame
Email: dwalker6@nd.edu

Diane Parr Walker joined the University of Notre Dame as Edward H. Arnold University Librarian in July 2011. Prior to that, she was the Deputy University Librarian at the University of Virginia.

Waiting for the Future

By Rick Provine

I've been thinking a lot about the future lately. At least, that's what I think I should be doing. All of the literature tells me so. The Association of College and Researh Libraries (ACRL) released the "Top Ten Assumptions for the Future of Academic Libraries and Librarians: A Report from the ACRL Research Committee" (Mullins, Allen, and Hufford, 2007). Staley and Malenfant (2010) offered "Futures Thinking for Academic Librarians: Higher Education in 2025." There's more. Lots more.

Maybe if we looked more broadly at "the future." I visited NewsOfTheFuture.com to see what they had to say. I typed "libraries" in their search box. Nothing. Yikes!

So we have our discovery layer…check. Our digital library is up and running…check. EBooks…check. Excellent customer service… check. What now? Magic 8 Ball? Soothsayers? Alvin Toffler reading group? Stephen Abram on speed dial?

Then I saw it… "The Future of the Liberal Arts College Library Symposium." This was exactly what I needed. Kismet! So off to Milwaukee. Surely their command of beer and cheese could only enhance our ability to see what's coming?

But while I was there, I couldn't help but notice we mostly talked about our immediate future. Like tomorrow, next week, or after lunch. People are concerned with what's happening now. The future is swell, but what do we do in the meantime?

Back at home, I wondered what my Private Academic Library Network of Indiana (PALNI) colleagues were doing, thinking, and planning about the future? Were they able to put aside their day-to-day cares and woes to ensure sunshine and rainbows down the road?

I asked. Here is what some of my colleagues say…

> *My chief concern for our near-future here stems from my perception that the institutional perspective is one that has moved further away from the library as integral to the mission toward one where the library is but a department to be managed providing constraints to optimal service in support of said mission.*

Hmmm. That doesn't sound too good.

> *My concern is not so much the future of the liberal arts college library, but whether liberal arts colleges will still exist in 2021. Assuming annual tuition increases at 6% above inflation (the historical trend) and a 2011 average baseline price just north of $40,000, my 10-year-old son can expect to pay $300,000 to attend a national liberal arts college one decade from now.*

And further…

> *I believe the success and in some cases the survival of Library Services for libraries in Liberal Arts Institutions will hinge upon the library's level of integration into the General Education curriculum via Information Literacy skills requirements and assessment.Without this integration, libraries become silos of information.*

OK. So while we are figuring out our future, we need to save higher education as well.

I am going to have to start working Sundays.

What about specifics?

> *In order to stay relevant, academic libraries must remain in a state of flux for the foreseeable future. We have*

no way of knowing today the types of resources or the delivery systems we will be offering ten (or even five) years from now. Flexibility is the key to survival.

Flexible. Got it.

Even as libraries are rapidly moving from physical collections to electronic resources, we are still pouring too many resources (financial and personnel) into print processes. We must define new roles as teachers and digital resource creators/managers in order to remain essential in new learning environments.

And…

I have been struggling with the question of access versus ownership and all that entails in terms of budget, resource sharing, digital rights management, copyright, and preservation of information. I am concerned that if the majority of information becomes available only in electronic form coupled with prices out of range of my budget and restrictions on what's allowed and not allowed – e.g. such limits as no interlibrary loan – that this will impact libraries and the services we provide in a negative way. In addition, electronic resource management requires a great deal of time and effort as we need to keep on top of license terms, authentication, titles added or deleted from various online collections, and all the other work needed to ensure timely and accurate delivery of digital information.

And…

During the last 10 years, we have reduced subscriptions to print journals from more than 700 to about 275. We find no evidence that more than a handful of these current titles are ever opened by anyone. Within five years, we either will no longer subscribe to any printed periodicals, or we will only be doing it for show.

Dump the print. Check.

In a nutshell, here is where I see our library going:
-- Transformation of space into a learning commons
-- Journals completely online (currently we still have over 400 print subscriptions)
-- E-books on demand
-- Continued support of relevant print collections

OK. We can keep some of the print. So what about staffing?

[Our] biggest challenge is effectively managing a set of increasingly complex library management and discovery tools that are changing many of our current library practices. Developing the knowledge and skills needed to unlock the potential of these resources while providing traditional library services is a difficult balancing act.

"Difficult balancing act." That goes in next year's annual report.

I find myself worrying about staffing and budget. We're trying to do so much already and of course every year we are asked to do more with the same or less than we had the year before. I wonder as budgets shrink if more liberal arts colleges will find themselves more and more short-staffed as jobs may be cut to save money.

Less money. Fewer people. They told me none of this in library school.

But, there is some good news.

Perhaps the greatest challenge for us is the growing ambivalence toward the role of the library in the academic community. Too often the disintermediation of libraries in the process of information discovery and knowledge creation is accepted as inevitable.

> *Increasingly Google and Wikipedia are offered as proof that libraries (and librarians) are no longer relevant to the processes of information management and dissemination. Yet most in the community admit to being overwhelmed by the flood of information released via the Internet, and acknowledge a need to regulate the flow. Therein lies our greatest opportunity.*

Well, sort of good news. At least there is opportunity. But how?

> *1 - connect library resources and services more integrally with the curriculum*
>
> *2 - more aggressively move to on-demand acquisition*
>
> *3 - further re-purpose physical space to encourage learning and research and to promote connections with library resources*
>
> *4 - knowing what to stop doing in order to do the new thing*

At last! Directions!

I seem to have hit a psychological wall thinking about the future. But I know one thing…I am not alone. A cursory reading of the *Chronicle of Higher Education* conveys the angst not only of librarians, but also of faculty members afraid and confused about libraries.

I don't have any answers. It is obvious that the transitions taking place in scholarship, publishing, and technology will play a huge role. As we wait to hit 88 miles per hour and leap into the future, one thing we know for sure…we will have to work together to get there. The myriad pressures of time, money, and change make it impractical for each of us to individually develop the library of the future. The future is now. And we are not alone.

Thanks to my PALNI colleagues for allowing me to have a little fun at their expense. I treasure and value their insight, advice, help and collegiality. I have never worked with a more dedicated and supportive group.

Bio

Rick Provine is the Director of Libraries at DePauw University, and has been at DePauw since 2000. He previously held positions at the University of Virginia and Indiana University. He received a BA and MLS from Indiana University in Bloomington. He has served as Chair of several organizations, including the Private Academic Library Network of Indiana, the ALA Video Round Table, and the ACRL Media Resources Committee.

Indiana Libraries

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For more information and to discuss ideas for article topics, or to discuss guest editing a special theme issue, contact the Indiana Libraries editor:

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IUPUI University Library
755 W. Michigan
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