COMING SOON:
Submit your feedback through INSTANT POLLING and EXPRESS YOUR VALUE in a video and blog post contest!

ALIGN SLA
Help guide the creation of a new mission, vision and values statement for SLA.

Stay tuned for more details by e-mail, at the Alignment Portal Share Forum and on Twitter (#alignsla).

http://www.slaalignmentportal.org/
FOCUS: LIFELONG LEARNING

INFO VIEW
3 Love to Learn
JANICE LACHANCE

INSIDE INFO
4 Alignment Project Enters New Phase · Vormelker Award Presented to Chindlund · Call Issued for Conference Papers · New Section Approved for KM Division

INFO NEWS
6 Survey Suggests Librarians Should Develop Programming Skills · Sales of E-Books Outpacing Print

SLA 2010 CONTRIBUTED PAPER
17 Information Literacy for Professional Programs: Two Case Studies at One University
M. SARA LOWE AND SEAN M. STONE

ELECTRONIC RESOURCES
24 E-Resources Workflow Management
KIMBERLY W. STEVENS, MARY D. BEVIS, BETHANY LATHAM, AND JODI POE

MEMBER PROFILE
27 10 Questions: Maqsood Ahmad Shaheen
FORREST GLENN SPENCER

INFO TECH
30 P-Books vs. E-Books: Death Match?
STEPHEN ABRAM

INFO BUSINESS
33 Internalizing the Love of Learning
DEBBIE SCHACHTER

INFO RIGHTS
34 SLA 2010 Conference: Ask the Copyright Expert
LESLEY ELLEN HARRIS

36 Coming Events
Ad Index
In the Information Outlook Advisory Council:
Doris Helfer (Chair), Susan DiMattia, Dennie Heye, Bettie Jo Hibberd, Jill Hurst-Wahl, Renee Pope, David Shumaker, Tony Stankus

Editor: Stuart Hales
Graphic Design: Thought Word & Deed

Information Outlook® (ISSN 1091-0808) is published 8 times a year (January/February, March, April/May, June, July/August, September, October/November, December) by the Special Libraries Association, 331 South Patrick Street, Alexandria, Virginia 22314, magazine@sla.org. +1 703.647.4900

Subscription Rates:
Annual subscription, US$ 160 United States; US$ 175 International. Single issue, US$ 20. Please report missing copies promptly to publications@sla.org. To ensure continuous delivery of Information Outlook, please notify SLA promptly of address changes by writing membership@sla.org. When submitting address changes, please include all the information on the mailing label. Changes may not go into effect for four to six weeks.

Postmaster:
Send address changes to: Information Outlook: Subscriptions Special Libraries Association 331 South Patrick Street Alexandria, VA 22314-3501 USA

Periodicals postage paid at Alexandria, Virginia, and at additional mailing offices. Canadian Publications Mail Agreement #40031619. Return undeliverable Canadian addresses to: P.O. Box 1051, Fort Erie, ON L2A 6C7.

Advertising:
Acceptance of an advertisement does not constitute endorsement of the product by the Special Libraries Association.

To advertise, contact:
Julie Mines
SLA 331 S. Patrick Street Alexandria, Virginia 22314 Phone: +1.703.647.4942 Fax: +1.703.647.4901 jmines@sla.org

Information Outlook® is a registered trademark of the Special Libraries Association.

© 2010 by Special Libraries Association Material protected by this copyright may be photocopied for the non-commercial purpose of scholarship or research. magazine@sla.org To view Information Outlook online go to: http://www.sla.org/io/
Love to Learn

Sony announced several months ago that it will stop manufacturing floppy disks in 2011. Granted, it’s been years since I had a computer with a disk drive, but I can still vividly remember a former colleague impressing me by producing the floppy she kept in her handbag so she could transport her working documents to and from home. Now there are whole Web sites devoted to craft projects using these almost-obsolete storage devices!

We can still eat with our grandmothers’ silverware or hang a picture using our grandfathers’ hammer, but we cannot survive in the 21st century using 20th-century knowledge and skills. New applications that initially seemed silly to some of us (Twitter comes to mind) have become truly useful tools for exchanging information, collaborating on projects, and more. Today’s new gadget can quickly become tomorrow’s business necessity. We all have a choice—learn continuously, or become obsolete quickly. I love what Gen. Eric Shinseki said on the subject: “If you dislike change, you’re going to dislike irrelevance even more.”

One of SLA’s most critical roles is providing a variety of professional development opportunities so our members can learn what they need to know and do it in ways that suit both their budgets and schedules. We offer traditional continuing education sessions at our conferences and online certificate programs through Click University, SLA’s own online learning portal. We have a rich schedule of free Webinars that cover an array of hot professional topics. Members who want to learn how to use the latest applications can try out new technologies or tap into free software tutorials in our Innovation Lab. Upwardly mobile info pros can sign up for weekly execuBooks e-mails, with summaries of the best in business literature. SLA even offers members an online reference library.

We determine the topics and content of our professional development offerings through periodic member surveys, conversations with thought leaders in the information industry, conference surveys, and other approaches. Right now, members are telling us they want to learn more about such topics as knowledge management, social networking, competitive intelligence, marketing, demonstrating value and return on investment, and strategic planning. We also ask members to recommend presenters for our professional development offerings. We make every effort to engage those who are most frequently requested and also keep our ears to the ground for emerging talent in new areas of knowledge.

Lifelong learning is more than simply a matter of professional survival for knowledge and information professionals. It is part of the profession’s DNA.
Alignment Project Enters New Phase; Member Input Needed

SLA members will be asked to help define the association’s vision, mission and core values as part of a new initiative that builds on the Alignment Project, a multi-year research process designed to refine the positioning of the information profession in the marketplace and provide a framework for discussing the inherent value of information professionals and their association.

The latest phase of the Alignment Project, known as Align SLA, will attempt to capture input from SLA members into the association’s purpose and long-term goals and the beliefs that motivate and guide the profession. Draft statements of these documents are posted on the Alignment Portal, a Web site devoted exclusively to the Alignment Project.

SLA members are encouraged to review the draft statements and think about each one. In the weeks to come, SLA will post a series of questions about the mission, vision and values on a forum in the Alignment Portal and give members the opportunity to weigh in.

“We now find ourselves at a critical juncture for both the association and the profession,” stated an e-mail message to SLA members alerting them of the launch of Align SLA. “To ensure special librarians and information professionals continue to be recognized for the unique value you bring to the organizations you serve, we must establish a unified voice to talk about who we are, what we do and why it matters.”

The mission, vision and core values are supported by key messages and a positioning statement. Align SLA will not focus on these components, but SLA members are encouraged to review the language in them.

Vormelker Award Honors Chindlund’s Service to Others

A 23-year SLA member who has provided advice and guidance to everyone from library students to longtime librarians considering career changes has been named the 2010 recipient of the Rose L. Vormelker Award, which honors an SLA member for exceptional service to the profession through the education and mentoring of students and working professionals.

Jan Chindlund, library director at Columbia College Chicago, was presented with the award on June 13 during the opening general session of the SLA Annual Conference in New Orleans. The SLA Awards Committee noted her dedication to helping fellow librarians not only at the college but also at McDonald’s and Duff & Phelps, where she worked previously.

“She has touched the lives and careers, or in some way influenced or tried to help, just about every information professional walking around in our state and especially in our city,” says Dianna Wiggins, president of the SLA Illinois Chapter. “But most notably she ‘pays it forward’ by mentoring countless people who want to advance their careers as information and knowledge services professionals.”

Chindlund has professionally mentored numerous library practicum students from Dominican University and the University of Illinois Urbana-Champaign as well as many librarians seeking new directions in their professional careers. She has also been a guest lecturer at Dominican University’s Graduate School of Library & Information Science.

Chindlund has been active in SLA since joining the association in 1987. She has been president of the Illinois Chapter and secretary and director of the Business & Finance Committee, and has served on the President’s Task Force on Professional Value (2005-2006) and the Annual Conference Advisory Council (2005 and 2011). She received the Dow Jones Leadership Award in 2000 and was named an SLA Fellow in 2006.

“Generous time has been spent on me; contacts have been shared as well as insight and perspective,” she said upon receiving the award. “I feel that if I have anything to share with others, I’d like to do that.”

To view a video about Chindlund and her achievements, visit the awards channel on SLA-TV.

Call Issued for Papers for Conference Presentations

SLA is now accepting proposals for papers to be presented at the association’s 2011 Annual Conference, to be held June 12-15 in Philadelphia.

The paper topics should address library science, information management, research or other issues pertinent to client service, technology, or administration in special libraries. The topics must be related to the conference theme, “Future Ready,” or one of the three sub-themes:

Draft SLA Vision
To lead the information profession into the future by promoting its members as invaluable assets to their organizations. We will continually empower our members to be knowledge leaders who actively contribute to and drive the success of their organizations.

Draft SLA Mission
To serve as the unified voice for the information profession, advocating its value, promoting best practices, creating knowledge sharing and global networking opportunities, and empowering members to become critical assets within their organizations through continuous learning.
• Communicating value through strategic alignment;
• Leveraging technology for innovation; and
• Using knowledge sharing to encourage collaboration.

Proposals should be in the form of an abstract of between 250 and 300 words in length. The proposals will be evaluated by a panel of SLA members in a blind review, with the strongest submissions being selected for development into full papers.

The proposed papers must meet these requirements:
• At least one author is a member of SLA;
• At least one author commits to presenting the paper at the annual conference;
• The proposal is received by the deadline;
• The paper has not been published in or submitted to any other publication or offered to another conference planning group; and
• The author (and any co-authors) must be willing to sign a copyright assignment form that will permit SLA to use the paper in various formats.

Proposals must be submitted no later than 13 December 2010 to Martha Foote at mfoote@libraryco.ca. All applicants will be notified of the decision about their proposal on 17 January 2011, and those with the strongest proposals will be invited to develop them into full papers.

Completed papers and signed copyright assignment forms are due on 2 May 2011. The papers will be presented at 90-minute sessions at the conference, with each author allotted 15 minutes.

New Section Approved for KM Division; B&F Sections Merge

A new section, the Records Management Section, has been formed within the Knowledge Management (KM) Division of SLA, while the Business & Finance (B&F) Division has merged its Investment Services Section, Private Equity and Venture Capital Section, and Financial Institutions Section into the Financial Services Section.

KM Division Chair Karen Huffman informed SLA leaders of the division’s intentions to form a new section at the June Division Cabinet meeting and also sent an e-mail to the Leadership Discussion List. She contacted chairs of other SLA divisions with potential objections to the creation of the section as well as the convenor of the Archival & Preservation Caucus. Each of these division chairs and the caucus convenor responded that they had no objection to the formation of the section. More than the required number of division members’ signatures were obtained for the accompanying petition.

The new section, to be chaired by Judy Field, has this scope note: The Records Management (RM) Section focuses on the characteristics and processes through which organizations manage the full knowledge cycle of records in all formats, including the creation, organization, sharing, storing and either preservation or disposal.

The scope note for the Financial Services Section reads as follows: The Financial Services Section provides a forum for members to discuss domestic and international financial issues relating to banking and other areas of finance; capital markets; private equity and venture capital; as well as best practices and new investment products and services available to information professionals working in the sector.

The B&F Division obtained the required number of members’ signatures and the approval of its board to proceed with merging the three sections. The SLA Board of Directors was informed of the merger during its September 9 conference call; it learned of the formation of the Records Management Section during its August 12 conference call.

SLA
Survey Suggests Librarians Should Develop Application Programming Skills

Researchers overwhelmingly support open data and the development of open application programming interfaces (APIs), and librarians who can work with developers to help create APIs or who can acquire the skills to do so themselves are in a unique position to improve access to research information, according to data compiled by Elsevier.

A survey of more than 1,000 academic, government and private researchers found that 80 percent of them believe the availability of open APIs will foster the development of new search and discovery applications and nearly 70 percent would be interested in developing such applications. Of the latter group, three-fifths say their primary interest in developing a search and discovery application would be to speed up their own research, while one-third say their main motivation would be to quicken information access among the scientific community as a whole.

These findings suggest that if publishers and platform providers were to reduce their control and allow researchers to develop applications that better meet their needs, the scientific community could spend less time searching for information and more time putting information to use. A 2007 Outsell study found that researchers spend an average of 6.5 hours per week searching for information, compared to 5.8 hours organizing, analyzing and applying it.

The main barriers to developing such applications are time and money. The survey found that among researchers interested in creating search and discovery applications, only one in three believe their organizations would support them. More than 40 percent, meanwhile, say their organizations would expect them to work on this project on their own time, using their own resources.

Because librarians are familiar with the information needs of researchers, they may be in a position to help bring search and discovery applications to fruition. Even better, if they can acquire programming skills, they may be able to create such applications themselves and thereby help make scientific information more open to those who need it.

For more information about the “Future of Search and Discovery” survey, visit Elsevier.com.

Sales of E-Books Surpass Those with Hard Covers

Although the market for printed books remains much larger than that for electronic books, the latter is growing rapidly, if sales figures from online retailer Amazon.com are any indication.

Amazon reported that it sold 143 e-books for every 100 hardcover books during the second quarter of 2010, and that rate is accelerating: during June, the ratio was 180 e-books for every 100 printed books. Overall, Amazon sold three times as many e-books in the first six months of this year as it did in the first half of 2009.

At least some of the growth in sales of e-books has resulted from Amazon’s decision to reduce the price of its Kindle e-book reader from $260 to $190. Although Amazon does not provide sales figures for the Kindle, it announced that Kindle sales had tripled since it cut the price. The Kindle has been Amazon’s best-selling product almost since it was released in 2008.

The rapid growth in e-book sales also has its origins in simple economics. Printed books cost $26 on average, while more than 500,000 of the titles in Amazon’s e-book catalog cost $10 or less, according to the company. Amazon’s Kindle bookstore now offers more than 630,000 books plus 1.8 million free, out-of-copyright titles. But readers don’t need a Kindle to read Kindle books—Amazon also offers Kindle e-book readers for the iPhone, iPad, BlackBerry, Android phones, and for Mac and Windows PCs.

Even with the growth in sales, the overall e-book market pales in comparison to that of print publishing. Publisher’s Weekly reported last year that hardback sales were projected to be about $4.4 billion in 2009 (including both adults’ and children’s titles), while paperbacks were expected to generate $5.1 billion in revenue, audio books $218 million, and e-books just $81 million—less than 1 percent of their print equivalents. These figures don’t include textbooks, Bibles and professional books, which would increase the overall printed book market to $35 billion. SLA
“IEEE is the best source in engineering and computer science.”
—John Dupuis, Head, Science Library, York University

IEEE Xplore® Digital Library

The world’s leading universities and most successful research institutions rely on IEEE information.

- Access cutting-edge IEEE journals and conference proceedings
- View over 2 million full-text documents shaping industry today
- Customize subscription options to your degree program and relevant full-time enrollment

Free Trial!
Experience IEEE Xplore—request a trial for your institution.
www.ieee.org/academic

IEEE Information Driving Innovation
LIFELONG LEARNING

Making Sense of It All

SPECIAL LIBRARIANS ARE AT THE INTERSECTION OF THE EXCHANGE BETWEEN (GROWING AMOUNTS OF) INFORMATION AND PEOPLE, AND ONLY BY CONTINUING TO LEARN CAN WE EFFECTIVELY MEDIATE THAT TRANSFER.

BY JÚLIO DOS ANJOS

Lifelong learning is a concept that echoes in the hearts of all that find harbor in the tapestry of SLA membership. We excel at it (as individuals and as an organization) and we create value by enabling others to practice it. In fact, speaking of lifelong learning and of the Special Libraries Association in the same sentence is an overload of concepts.

Let’s try to count the ways that SLA and information professionals encourage lifelong learning:

• SLA members practice, and have always practiced, lifelong learning. Many of us became librarians through a continuous learning effort. The plethora of positions in which we find ourselves today—many of which have nothing to do with libraries—are, in fact, conclusive evidence that we, as SLA members, practice lifelong learning.

• Many times, SLA members hold positions where we are required to keep a close eye on the evolving needs and interests of our patrons in order to better serve them. This contributes to our continued learning and gives us a window into the learning activities of the communities we are monitoring.

• SLA as an organization has an active role as a facilitator of the lifelong learning of its members. SLA continually assesses the information ecosystem in which its members operate by conducting periodic environmental scans (the Alignment Project is just the most recent one). It uses the information it collects to help develop the learning opportunities (both formal and informal) it presents at every conference and through Click University.

• SLA members are at the forefront of the exchange between information and people, which leads to knowledge and which constitutes the basic premise of learning.

• SLA members are increasingly involved with the efforts of organizations to manage their knowledge.

JÚLIO DOS ANJOS has been working with computers since 1982. In 1991, he founded a company that provided services for libraries, so it was no surprise to anyone that in 2003 he went back to school to get a degree in library and information sciences and technologies (Oporto Polytechnic Institute). Since then he has also earned degrees in information systems management and business management. He is executive president of INCITE, the Portuguese Information Management Association (www.incite.pt).
base by actively pursuing and capturing past experiences and incorporating the knowledge gathered into actions and decisions. This activity, which harvests the knowledge of each individual and recycles it throughout the organization and its members, is integral to the development of what we call “learning organizations.”

Let’s now consider our current information environment, where some studies point to a doubling of available information every 5 years in areas like medicine and 11 years in other areas. In such an environment, not one of us (if of a sane mind) will accept any bets on what our job descriptions will look like five years from now.

Lifelong learning is one of the methods we will use to keep making sense of it all. People and organizations, in ever greater numbers, will be looking to develop new skills. SLA members can help orient them toward information that is relevant to new opportunities and that will help them diminish their weaknesses and take advantage of their strengths.

The body of knowledge (both scientific and practical) that we have assembled over centuries to mediate the transformation of information into knowledge is alive and keeps being enriched by today’s information environment. More than ever before, that body of knowledge is relevant to surpass the challenges that society at large and we, as professionals, face.

If, indeed, the amount of information available doubles every five years, we may find out in the long term that not even lifelong learning is enough to keep special librarians at the forefront of change—but surely we can’t get along with anything less. SLA
Aligning Learning with Organizational Results

BY ALIGNING THEIR LEARNING INITIATIVES WITH ORGANIZATIONAL STRATEGIES, LIBRARIANS AND INFORMATION PROFESSIONALS CAN BETTER COMMUNICATE THEIR VALUE TO SENIOR LEADERS.

BY TONY BINGHAM

We are on the cusp of one of the most exciting transformations in business history. Organizations in the 21st century are facing unprecedented global challenges, and the speed, agility and creativity with which they address these challenges are of the utmost importance in an economy being influenced by enormous generational shifts in intellectual capital as well as vast demographic shifts that are changing social landscapes and economies worldwide.

Over the next 20 years, almost everything companies do will change to accommodate shifts that transcend geography, politics, language, and time. One constant will be the need to teach workers, leaders and innovators how to adapt to their changing world and perform at their very best. This is the time of lifelong learning, and it’s critically important to the workplace.

Working effectively in this new environment means embracing a model for aligning and integrating learning with the values, strategies, goals, and metrics of the organization in much more intentional ways. In the coming years, learning professionals—those who work in the learning and development field as well as those (such as information professionals) who facilitate the learning of others through different methods—are going to be charged with transforming their companies and clients into sophisticated, agile, responsive, learning-centered organizations that deliver meaningful results.

Learning professionals are responsible for making sure that people in an organization are properly skilled and that the enterprise is operating with the best-equipped staff. Ensuring that workers have the knowledge and skills to support the organization’s goals as effectively and efficiently as possible is a key responsibility. Because corporate decision makers are focused primarily on growth and understand that well-prepared people are their primary advantage, many are eager to see what learning professionals can do for them. It’s a huge responsibility, and learning professionals must deliver. They can best do so by aligning learning with organizational goals.

In a November 2008 issue of Training + Development (T+D) magazine, Rita Smith, vice president of enterprise learning at Ingersoll Rand University, wrote, “There is no magic involved in creating alignment, but I believe there is a formula for successfully aligning learning organizations with business strategy.
The formula is: leadership engagement + business rigor = alignment."

The challenge for learning professionals is to deliver meaningful, compelling results translated into metrics that senior management understands and cares about—metrics that prove that learning initiatives are aligned with organizational results and strategies. In addition, they must be able to continually communicate the value of those results to the enterprise and learn how to build on their successes. This means developing a new set of skills honed specifically for the task of speaking persuasively and presenting the case for learning in ways that decision makers find compelling enough to support the learning function regardless of the economic climate.

Connecting the Dots, Communicating Value

A pervasive challenge faced by learning professionals—one that can cause a host of communication problems—is connecting the dots between (1) an organization’s stated strategies and objectives, (2) learning programs that support those objectives, and (3) tangible results that demonstrate the effectiveness of a given learning program or solution.

Many learning professionals expend extraordinary amounts of energy gathering various statistics and evaluation materials but drop the ball when it comes to strategically using that information to demonstrate learning’s impact. The truth is that communicating one’s value in meaningful ways is imperative for survival. Those who can’t explain how or why they are valuable, in terms that the questioner can understand and embrace, risk being eliminated. The questions that vex learning professionals aren’t ones of “why,” but of “how.” How do I communicate the value of something I have difficulty measuring? How do I convince people that this program is vital, necessary and potentially profitable?

To answer those questions, a simple five-part strategy—the SPEAK model—is helpful for more effectively analyzing, articulating, and initiating learning in any organization. Aligning learning with the strategic objectives of the organization is the key. The only way to do that effectively is to take a proactive approach to the learning function.

By following the SPEAK model, you will develop your own strategies for handling any situations or challenges that confront you in your own organization or with the clients you serve. Whether you embrace them as tools to help you communicate the value of what you are doing or just use them as guidelines to help you do your job more effectively, they are essential for surviving and thriving in the 21st-century organization. They also happen to be good for business because, by using them, you naturally end up doing what’s best for the welfare of the organization.

The SPEAK Model

This model supports the formula for aligned learning espoused by Rita Smith of Ingersoll Rand (leadership engagement combined with business rigor). It is a five-part mnemonic for thinking about how to develop, articulate and link learning in any organization. It is an easy-to-remember general foundation of principles upon which to base your enhanced role in the organization. Communication is at the core of these principles, which are as follows:

- **Strategy;**
- **Preparation, practice and personalization;**
- **Execution;**
- **Accountability; and**
- **Knowledge.**

The SPEAK model is really a life cycle in which each part informs every other part. The parts, when combined, provide a replicable process for exceptional learning contributions. Let’s take a look at each component of the model.

**Strategy.** To align workforce strategies with your senior leadership’s overarch-ing goals, you have to know what your CEO and other executives view as the main challenges facing the organization today. The fact is, many organizations do not clearly articulate their strategies and objectives, even to their own employees. The reason: aligning these strategies is easier said than done. The consequence: alignment suffers and an organization’s strategic objectives aren’t achieved as quickly or as well as they could be.

That’s why learning professionals who want to play an active business role need to develop a deep understanding of organizational strategy and help link that knowledge with the practical means for attaining it. If you want to serve an organization better, you must know precisely what its strategic objectives are and devote yourself to finding ways to achieve them. Look for strengths and weaknesses and use learning to address the gaps.

**Preparation, practice and personalization.** Preparation is really a lifelong process of information gathering and relationship building combined with a dedication to excellence that shows in every detail. You should always be gathering stories and anecdotes, reading books and magazines, and absorbing any information that might sharpen your message.

Practice presenting what you know. Go over every detail of a presentation and leave nothing to chance. Research your audience thoroughly, tailor your message accordingly, do your best to anticipate any question or issue that might crop up, and have answers ready,
The health of workplace learning
To function efficiently, organizations
using business metrics. That perception
not embrace the idea of accountability
discipline that often operates outside of
has been thought of by many as a “soft”
of learning and human performance
in action.
but important details that will eventually
must be devoted to aligning many small
of mastery, one’s habits and energies
to excellence. To operate at a high level
attention to detail and devoting yourself
the weeks and months add up to a
knowledge and experience you’ve col-
needs to be done and using all of the
preparation are useless without great
execution. Execution is doing what
what needs to be done and using all of the
and experience you’ve col-
over the years to do it as well as
you can.
When presenting learning, however,
also means having all of the
the little things that you’ve done over the
weeks and months add up to a
successful outcome. It means paying
attention to detail and devoting yourself
to excellence. To operate at a high level
mastery, one’s habits and energies
be devoted to aligning many small
but important details that will eventually
add up to a big win. Execution is quality
in action.
Accountability. For too long, the field
of learning and human performance
has been thought of by many as a “soft”
discipline that often operates outside of
typical business parameters and does
not embrace the idea of accountability
using business metrics. That perception
has to change, for three reasons:
• To function efficiently, organizations
need to know learning’s true impact
on the enterprise in common busi-
ness terms.
• The health of workplace learning
depends upon accurately monitoring
and articulating learning’s contri-
bution to organizations in the only
language CEOs understand—the
language of business.
• Rigorous, business-oriented man-
gement of learning is the only way
to gain the long-term respect and
cooperation of decision makers.
Accountability in the professional
world involves using objective crite-
ria to evaluate people’s performance.
Performance expectations are the
benchmarks against which everything in
an organization is measured, and learn-
ing is no different. Senior management
typically measures performance by a
number of key metrics and indicators,
particularly financial ones. Part of your
job is to understand those metrics and,
insomuch as possible, package results—
the ultimate value to the enterprise—in
the form these metrics require.
Therefore, an important part of the
learning professional’s job is to help
develop effective and accurate mea-
surement tools and to insist on having
metrics that accurately track and report
learning’s value to the enterprise. Being
accountable to the organization in this
way is an important step in the quest for
business respectability. Only by making
learning’s value known on the balance
sheet will that seat at the table ever start
to feel comfortable.
Knowledge. Learning professionals
are chiefly responsible for two types of
knowledge: individual knowledge,
including their own, and institutional
knowledge, or the collective knowledge
of an enterprise. Most training is geared
toward teaching individuals what they
need to know to do their jobs. The
trickier part of the puzzle—the one that
learning professionals must become
more adept at—is managing the com-
plex network of human relationships
that exists in every organization.
Learning how an organization learns—
that is, how the organization processes
information to achieve the most com-
petitive, profitable outcome possible—
is becoming an important part of the
learning professional’s job. It’s no longer
enough to develop or acquire great
content that meets an organization’s
surface needs. Today, the learning pro-
fessional must also be deeply aware
of how an organization functions at
an organic level in terms of its people,
culture, attitudes, politics, and so forth.
Then, the professional must translate
that knowledge into effective learning
solutions.
It’s Up to You
If you’re trying to persuade top-tier
decision makers that your department,
programs or both bring value to the
organization, it’s ultimately your respon-
sibility to show them how. Fortunately,
that’s precisely what CEOs and their
management teams want to hear. They
want to know if the programs they have
already approved are getting the job
done. They want to know how future
programs, initiatives and solutions are
going to affect the bottom line. They
need to know the degree to which learn-
ing efforts are moving the organization’s
strategies forward.
By increasing your business acumen,
thinking strategically about the role
learning can play in positioning your
organization for the future, engaging
senior leadership, and developing your
ability to communicate with stakehold-
ers across the organization, you will
help provide for a culture of lifelong
learning that positively affects your col-
leagues and your organization’s bottom
line. SLA

REFERENCES
Smith, Rita. 2008. Aligning Learning with
Personal Knowledge Management: Working and Learning Smarter

MAKING SENSE OF INFORMATION AND SHARING IT WITH OTHERS CAN MAKE BOTH YOU AND YOUR ORGANIZATION MORE PRODUCTIVE.

BY HAROLD JARCHE

“I n the period ahead of us, more important than advances in computer design will be the advances we can make in our understanding of human information processing—of thinking, problem solving, and decision making…”

Herbert Simon, Nobel Prize winner in economics (1968)

The World Wide Web is changing how many of us do our work as we become more connected to information and each other. In California, Ray Prock, Jr. (2010) uses a Web-based note system to store messages, manage his financial risk and stay on top of the multiple factors necessary to run a successful dairy farm. He is constantly learning as he works and has found a method to keep up, thanks to the Internet.

For many, however, keeping up isn’t easy. The amount of information flowing through the Internet today is measured in exabytes, or billions of gigabytes. We now create as much data in days as it took us centuries to create in the past. This information overload has a direct impact on workplace learning. Workers have access to more information than ever before, but often don’t know if it’s the right information or if it’s current. In the industrial workplace, our training programs could prepare us for years of work, but much of what we learn today will be outdated in a few months or even weeks.

We need to re-think workplace learning for a networked society. Our organizational structures are becoming more decentralized, with individual access to almost unlimited information, distributed work teams, and digital media that can be copied and manipulated infinitely. In the interconnected workplace, who we know and how we find information are becoming more important than what we know.

As the Internet Time Alliance’s Jay Cross says, formal learning can be somewhat effective when things don’t change much and are predictable, but today’s world is the opposite in every way imaginable. Things are changing amazingly fast, and there’s so much to learn. Today’s work is all about dealing with novel situations (Cross 2010a).

Jane Hart, another colleague at the Internet Time Alliance, which works with business organizations to strengthen the bond between their workers and their strategic direction. He has held positions in learning and training and is an instructor in the iSchool Institute of the University of Toronto Faculty of Information. He can be reached at harold@jarche.com.
Internet Time Alliance, has examined social media and learning in the context of the workplace and has noted that much of it is informal (Hart 2010). Formal, structured learning plays only a small role in getting things done in the networked workplace. Research shows that about 80 percent of workplace learning is informal (Cross 2010b) and that less than 10 percent of what knowledge workers need to know for their jobs is in their heads (Kelley 1999). The graphic below highlights the relative importance of personal and informal learning in the workplace.

Informal learning is nothing new, but it is of growing importance in the modern, digitally connected workplace. Making sense of information, both personally and in networks, is becoming a key part of work. Teams and organizations that can share information faster and make better sense of it are more productive. Social learning is about getting things done in networks.

Making Sense of Ideas
Personal knowledge management (PKM) is an individual, disciplined process by which we make sense of information, observations and ideas. In the past, PKM may have involved keeping a journal, writing letters or having conversations. These are still valid, but with digital media we can add context by categorizing, commenting on, or even remixing information. We can also store information for easy retrieval as we need it.

PKM includes the following types of learning:
- Personal directed learning—how individuals can use social media for their own (self-directed) personal or professional learning; and
- Accidental and serendipitous learning—how individuals, by using social media, can learn without consciously realizing it (e.g., incidental or random learning).

At its core, PKM is a way to deal with an ever-increasing amount of digital information. It requires an open attitude toward learning and finding new things. Each worker needs to develop individualized processes of filing, classifying and annotating information for later retrieval.

Standard document management methods have been shown to fail over the years, as most workers do not personally adopt them. Developing good PKM process skills, on the other hand, can aid in observing, thinking and using information and knowledge. PKM also prepares the mind to be open to new ideas and can result in “enhanced serendipity.” As Louis Pasteur said, chance favors the prepared mind.

One way to look at PKM is as a continuous process of seeking, sensing and sharing:
- **Seeking** is finding things out and keeping up to date. Building a network of colleagues is helpful in this regard—it not only allows us to “pull” information, but also have it “pushed” to us by trusted sources.
- **Sensing** is how we personalize information and use it. Sensing includes reflection and putting into practice what we have learned. Often it requires experimentation, as we learn best by doing.
- **Sharing** includes exchanging resources, ideas and experiences with our networks and collaborating with our colleagues.

### Seeking: Using Filters
In seeking, we need to develop effective filters so we are not overwhelmed by too much information. A high signal-to-noise ratio is desirable.

We can use human filters, such as asking a close colleague for a good source of information on a subject. This often happens in open work environments, where someone asks the group, “Hey, does anybody know how to … ?” This is a naïve filter, in that the recommendations provided are not necessarily reliable. The closest people are not always the best sources of knowledge.

Another option is to find a known expert in a field and ask him or her for advice. It’s a better approach, but dependent on the expert.

The best option is to find a known expert in a field and ask him or her for advice. It’s a better approach, but dependent on the expert.

The best option is to connect with a network of expertise and corroborate advice from a variety of experts. Twitter is an example of a platform that enables this. We can follow many people in a discipline and fine-tune the network by adding or subtracting from it until we have an optimal signal-to-noise ratio.

There are also tools that use mechanical filters, such as search engines or analytical engines that show trending topics. Using both human and mechanical filters can ensure a good flow of information without being overwhelmed. Keyword alerts can be set up with a variety of online systems, or regular searches can be conducted on
Without the ongoing process of sense making, we can fall into the trap of grabbing the easiest information that is available at the time. Some Web tools for sense making include the following:

- Note taking (e.g., EverNote);
- Social bookmarks (e.g., Delicious);
- Micro-sharing (e.g., Twitter);
- Blogs (e.g., WordPress);
- Presentations (e.g., Slideshare); and
- Videos (e.g., Vimeo).

Not everyone will use all of these tools, and there are many others, but it is important to develop methods of sense making that work on a day-to-day basis.

Sharing: Joining a Community
PKM practices are part of a social learning contract for better organizational learning. Sharing is an essential part of PKM. Without it, we become islands of knowledge that cannot take collective action.

While the foundation of PKM may be personal, the use of online media enables sharing and can result in exponential network effects. Because knowledge has no known limits, the potential return on investment in knowledge co-creation can be many orders of magnitude greater than traditional process improvement methods.

The most wonderful aspect of Web-based social media is that they are designed for sharing. We can start our PKM journey in a completely selfish way, but by using Web tools we can easily share whenever we wish. For example, blogs can start as private journals, but after a while we may want to share our posts. As the blog is already online, it can be made public, and all of the information it contains is available for distribution. No extra programming is necessary.

By sharing information and engaging in online conversations, we become part of a community. We will discover that we are truly in a community of practice when it changes our practice.

By seeking, sensing and sharing on an individual basis, we create the building blocks for a dynamic community of knowledge workers, continuously push-

Sensing: Validating, Synthesizing, Presenting, and Customizing
We make sense of data by using our existing knowledge to create more information. This is what writers do—they take various data and write a coherent narrative that becomes information for someone else. While this is an efficient way of transmitting information from one to many, it does not transfer knowledge, as a recipe book does not a chef make. Each person makes sense and builds expertise on his or her own terms.

As mentioned, filtering information is an easy way to start to make sense of digital information flows. Social bookmarking services, such as Delicious, enable us to categorize and annotate Web pages. Social bookmarks are searchable and can be shared within a group or made public. They are a good initial step toward moving information to the cloud. Making information public helps to validate it, as we can check references, analyze logic and compare sources.

Another level of value can be added by synthesizing information. This synthesized information can then be presented in various digital formats to facilitate understanding. For example, a good graphic may make more sense than several pages of text. A slide show with voice-over can help convey complex ideas. Information presentations can be further customized for specific contexts, such as an analysis of global trends and how they may affect a specific business.

These are examples of taking information and adding value to it for the individual, the group, the organization and the network. By treating information as grist for our cognitive mills, we can build knowledge bases that will help us get work done. Thus, a blog can become a place for small, coherent thoughts that, when aggregated, become a discussion document or a policy paper.

REFERENCES


As an information professional, you understand the value of having the most reliable reference tools on hand for your patrons. So if your shelves are missing *Accredited Institutions of Postsecondary Education*, you’re missing the essential reference to more than 8,000 higher education institutions in the United States and abroad.

Published for more than 40 years by the American Council on Education, *AIPE* is the only comprehensive guide to institutions that are accredited by regional, faith-based, and private career-accrediting organizations recognized by the U.S. Department of Education and the Council for Higher Education Accreditation. *AIPE* is used by thousands of professionals to verify accreditation status, degrees offered, academic calendar, and much more!

To purchase your copy or learn more about *AIPE*, please visit our online bookstore at www.acenet.edu/bookstore or call (301) 632-6757. Use promo code “SLA” when ordering.

*AIPE* is also available online with a fast, searchable database that’s always up to date. Take a tour at www.aipeonline.acenet.edu.
Information Literacy for Professional Programs: Two Case Studies at One University

M. SARA LOWE, MLS, MA
REFERENCE LIBRARIAN AND ASSISTANT PROFESSOR
DRAKE UNIVERSITY LAW LIBRARY
DES MOINES, IOWA
MEMBER, SLA LEGAL DIVISION

SEAN M. STONE, MLS
PHARMACY/SCIENCE LIBRARIAN AND ASSISTANT PROFESSOR
DRAKE UNIVERSITY COWLES LIBRARY
DES MOINES, IOWA
MEMBER, SLA BIOMEDICAL AND LIFE SCIENCES DIVISION

ABSTRACT
Information literacy is a basic skill that all students should possess. Educators, employers and librarians lament students’ lack of information literacy skills. Students in professional programs are often particularly difficult to teach as they have already successfully passed undergraduate instruction and overestimate their level of information literacy. In other words, they think they know it all. In some extreme cases faculty have their own information literacy deficiencies and are unable to recognize or remediate the problem in their students often overestimating the information literacy levels of students. Complicating this is the barrier of professional school faculty being unwilling or unable to include librarians and information literacy as part of instruction particularly within the classroom.

This paper will discuss and contrast the integration of information literacy instruction in the professional programs of Law and Pharmacy at Drake University. In the pharmacy program, the librarian has become an integral member of the instruction team. In the law program, the librarians have made great strides with, among other things, one-shot instruction sections in seminar classes which are aided through individualized class web pages.

Professional programs are intrinsically and deeply connected to their body of professional information which is often complex and vast. Modern professionals in a variety of disciplines are largely judged successful or not based on their ability to locate and manipulate appropriate information and this is particularly true for Law and Pharmacy. For these professions, producing students that do not know how to find and evaluate information can lead to jail and even death for those reliant on the professional’s skills.

Through these case studies, the authors hope to illustrate how integrating information literacy skills into professional programs is advantageous and possible without compromising other aspects of the curriculum, requiring major additional resources, or making additional work for non-library faculty.

INTRODUCTION
Drake University has an FTE of 4,600. The pharmacy program has about 800 students and the law school approximately 450 students. Together, these two graduate professional programs account for over 25% of the student body. The law library has five librarians of which two regularly provide outreach and instruction sessions. The pharmacy program has a dedicated librarian who is affiliated with the main campus library (Cowles Library).

Accrediting bodies, the Accreditation Council for Pharmacy Education (ACPE) for Pharmacy and the American Bar Association (ABA) for Law, recognize the need for graduates to be information literate. Guideline 12.1 of the ACPE accreditation standards state that graduates must be able to “retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information and counseling to patients, their families or care givers, and other involved health care providers” as well as “demonstrate expertise in informatics.”2 Standard 302 of the ABA accreditation document is that a “law school shall require that each student receive substantial...
in instruction in:…legal analysis and reasoning, legal research, problem solving, and oral communication…”5

**PROGRAM OVERVIEW & BACKGROUND**

**Pharmacy**

Drake University College of Pharmacy and Health Sciences offers a PharmD as well as, beginning in Fall 2007, an undergraduate health sciences degree. It is somewhat unusual for a school to have a pharmacy program with no other allied health sciences such as nursing or medicine and this has presented a challenge for the main library to support a thriving program with very specific needs.

In 2005, Cowles Library participated in the LibQual+® evaluation process in an effort to identify potential strengths and weaknesses of the library. One of the major shortcomings identified by the surveying of staff and students was in the sciences. As a direct result of this, a new faculty librarian position, beginning the summer of 2007, was created to deal directly with pharmacy and science information issues.

The organization and curriculum of the pharmacy program presents unique challenges. Drake has a four year program with two pre-professional years generally completed at Drake. This means that most entering PharmD students are the equivalent of third year students. It also means that Drake is generally solely responsible for their information literacy training, particularly in science areas that students will need the most.

There have also been significant changes in the pharmacy curriculum that have affected information literacy and allowed for deeper integration. A number of classes have been combined into a large series of practica integrating skills and continuing throughout the first three professional years (the fourth being spent entirely on rotations). This includes the absorption of the traditional drug information course offered in the first year which is now integrated and diffused across three years. This series of courses, known as Pharmacy Skills and Applications (PSA), is taught by a core team of faculty including the pharmacy/science librarian.4

For a number of reasons, the College of Pharmacy and Health Sciences has been mindful of issues relating to the quality of their graduates information literacy, in part due to reactions from pharmacy preceptors, and have been very aggressive in improving conditions and supporting innovation including the adoption of an imbedded librarian.

**Law**

In contrast to the situation of the pharmacy librarian, in the past, librarians at the Law Library at Drake University have had a difficult relationship with some faculty. This may stem from the fact that less than ten years ago, librarians were classified as instructors. Although librarians are now tenure-track faculty there are many at the law school who remember the old labels and treat the librarians as less than equals; added to this are the hurdles of the curriculum: the case method, and the Legal Research course. In the traditional, and predominate, case method, the study of law is focused on the analysis of court opinions and incorporates very little research. In the required first year legal research course, students are bombarded with the variety of legal materials but exercises are guided and, again, leave little room for research and active learning.

The result of the job disparity, combined with the traditional method of teaching law, has made it difficult for librarians to integrate themselves into courses and teach information literacy. There is little room in normal legal classes for legal research and the dependence on the case method of teaching may lead students to devalue the importance of research.

Recently, however, librarians have made great strides in becoming a larger presence in law school classrooms. The pace of instruction has accelerated in the past year and is due to a combination of many factors. First, the reference librarian has initiated an aggressive marketing campaign to get into seminar classes and increase attendance in general library sessions. This includes outreach to faculty and students via e-mail, the website, weekly law school news announcements, and in person. Second, librarians have communicated quotes and kudos from other law professors and students who were pleased with the library instruction with other faculty and students. Peer-referrals work equally effectively on professors and students. Third, librarians have been willing to adapt methodologies to meet the needs of faculty and students which is discussed below.

**INFORMATION LITERACY INTEGRATION**

“Information literacy is critical to lifelong, independent learning in an era of rapid expansion of information technology.”6

**Pharmacy**

**Semester Long Courses/Sessions.** The cornerstone of the information literacy program in pharmacy has been the pharmacy/science librarian’s participation in the Pharmacy Skills and Applications (PSA) series of courses mentioned above. The librarian has been embedded in and participated at every level of planning from the series’ initial deployment in Fall 2007. The class covers six semesters and consists of a one hour lecture (~120 students) and five two hour labs (~24 students) each week. Each semester ends with a “high-stakes” lab practical in addition to a traditional written final exam. The lab practical tests eight defined competencies including drug information/information literacy and failure to pass any of the eight sections results in failure of the course with one chance to remediate.

The pharmacy/science librarian is responsible for full lectures and labs on a variety of information topics (plagiarism, proper citation, drug information resources, database searching, internet searching and evaluation, etc.). The librarian also develops integrated “short labs.” The short lab concept grew out of the identified problems of the traditional drug information class as well as experiences with the early PSA classes. Students were traditionally inundated with every conceivable information resource in one of their first semesters with little
practice and application of the skills in realistic situations. While lectures introduce students to major concepts, short labs introduce students to individual resources, usually one per week, over the course of several semesters. These take a short time in each lab (approximately 15 minutes) and are planned to be integrated with other topics and subject matter not just within PSA but with other concurrent classes in the curriculum. This also allows for short, regular assessment and practice of these skills with short weekly assignments using current and past resources.

One-Shot Instruction Sessions. Pharmacy information literacy instruction does not begin and end with PSA. Because of the nature of Drake’s pharmacy program (as discussed above), pharmacy faculty and administration are acutely aware of the importance of prerequisite science education in the pre-professional years including information literacy. Given this, the pharmacy/school librarian is active in the biology and chemistry departments delivering more traditional integrated instruction to students, many of whom are pre-pharmacy majors. There has been great success working with the freshman biology course in providing an integrated lab period held at the library that allows students to practice information literacy skills within the framework of an ongoing, existing class project.

Additional Outreach. There is also significant participation in more advanced and elective classes outside of the PSA series. This has led to the development and expansion of subject specific and even class specific resources for instruction as well as supplemental resources through the library website. With the web developer, the pharmacy/science librarian has developed a series of “virtual subject libraries” collecting and organizing key resources (http://library.drake.edu/pages/virtual-libraries; See Figure 1 for a screen shot). There have also been subject guides created for individual classes, such as clinical research, as well as areas of rapidly expanding interest and research at Drake, such as pharmacogenomics (http://library.drake.edu/subjects). In addition to electronic resources, subject specific bookmarks were also developed as an outreach and marketing tool. (See Figure 2)

Part of the success of the integration of a librarian and information literacy into the pharmacy program can be contributed to visibility and physical proximity of the librarian. The embedded librarian is regularly a part of class and holds informal "office hours" in a variety of public areas that students frequent. Students have begun to understand that the librarian is a "normal" faculty member and they understand the value in approaching them with questions.

Law

Like the pharmacy/science librarian, the librarians at the law library use a multi-pronged approach to integrate information literacy in law courses and expose students to the basic principles of information literacy.

One-Shot Instruction Sessions. Major inroads have been made in integrating librarians into seminar classes. Unlike traditional law classes, in seminars students are expected to complete a research paper making this an excellent venue for teaching information literacy. For seminar courses, class presentations are individually tailored to each course. Sessions can be as long as 75 minutes and as short as...
Usually this is done in one class session. However, librarians have begun to experiment with multiple class sessions. For example, in one session topic selection principles and sources are outlined while the second session goes into detail about where and how to locate sources. The set of skills presented are essentially the same regardless of the length of the class. With longer class periods there is a longer introductory discussion, more information about plagiarism, and information about a greater number of specific resources. This fall, librarians will move towards active learning and integrate an in-class assignment into the lectures as one of the most effective methods of information retention is to use what has just been learned.

Librarians create an individualized web page for every seminar course taught (this is also done for general library sessions). These pages are extremely subject-specific and librarians spend many hours creating them. While originating from a standard format, pages have been radically redesigned depending on the wants and needs of the faculty member teaching the course. Each page includes standard materials (reference and IT contacts; plagiarism; sources for topic selection; research sources; locating sources; current awareness; and interlibrary loan) that are customized for each seminar. Of these items, some are fairly static (for example, contacts, plagiarism, and interlibrary loan) while others are constantly in flux.

Previously created via the law school’s content management system (CMS) and formatted as a straight text block, last year the library purchased a subscription to LibGuides. Librarians have successfully migrated the old guides and created new guides in this system (http://drakelaw.libguides.com/cat.php?cid=17013). (See Figures 3 and 4 for screenshots illustrating the old and new seminar course pages.) The primary reason for this change was to increase librarians’ flexibility and control over research guides. However, not only has this increased behind-the-scenes usability, but also the librarians believe the new display greatly enhances end-user usability and has led to an increase in use. In fact, usage statistics for each seminar web page were close to 200 less than one month after librarians visited the classes. In addition, statistics for the “Note Resources” page which gives general, non-subject specific, research information were also high (views were close to 250 at the same time the individual course page statistics were noted) indicating that students are actually using the information presented in class. Note that prior to class visits, these course pages had
very low usage rates (about 10 to 20 hits) so the uptick can be confidently attributed to librarian’s appearance in class. An added benefit of the individualized pages is they guide the instruction sessions and keep librarians on point.

Other non-course specific one-shot sessions have been taught for many years. For example, every spring the library offers a research refresher course entitled “Research Reality Check” (http://drakelaw.libguides.com/researchRealityCheck). However, this session had become somewhat stale and attendance was low. Targeted towards graduating students, this one-shot was ignoring two-thirds of the student body. This year, the format was revamped to better highlight how important research skills are in the practice of law. All students were invited with the thought that first and second year students would also benefit from a refresher as they go out to work summer jobs in law firms. This approach, combined with aggressive marketing (See Figure 5), led to a turnout of twenty-two students (as opposed to 2008 and 2009 with attendance of 3 and 1 respectively).

**Semester Long Courses/Sessions.** Multiple efforts have been directed at more sustained information literacy instruction. Last fall, a weekly series of short (less than 30 minutes) instruction classes were taught, entitled “Research Bites” (http://www.law.drake.edu/library/?pageID=researchBites, see Figure 6). The sessions were geared and marketed towards first-year students who might desire more information on using library resources. However, all faculty, staff and students were welcome and students as well as staff attended the sessions. Sessions ranged from basic information on using the library catalog and journal finder to specialized legal databases such as Westlaw and HeinOnline.

Discussions with students and evidence from the legal profession outside of academia led reference librarians to develop a new Advanced Legal Research course specifically on Iowa Law which will be taught for the first time in Spring 2011. Iowa Law was chosen as the majority of Drake Law graduates stay in Iowa to practice law. Students have expressed frustration with the system which teaches them guided legal research their first year in law school but then leaves them without advanced legal research options to hone their skills. One question that arises frequently is “Where do I start?” Librarians hope this advanced legal research class will develop students’ information literacy skills as well as help them feel more confident approaching legal research issues when they start working as attorneys.

One major area that has been blocked to law librarians until now is access to the first year legal research course. At Drake Law, the Library Dean teaches this class. Historically, other librarians have had no presence in it. For the first time this fall, librarians will make multiple short appearances in the lab sections to teach the basics of information literacy such as effectively searching the catalog and using the journal finder. In practice, this will be similar to the “short labs” the pharmacy/science librarian teaches. Law librarians hope this will allow students to perform better in law school as well as foster stronger relationships between students and librarians.

**Orientation.** While not technically information literacy, orientation is an excellent time to begin to indoctrinate students into the benefits of research proficiency. Most academic librarians

![Figure 5: Flyer for Research Reality Check](image1)

![Figure 6: “Research Bites” Web page](image2)
try to have some presence, however small, in new student orientation. Orientation for incoming law students at Drake has been a grueling week-long affair (although that will be reduced drastically this fall). The library has regularly participated in orientation activities but students do not always remember the thirty-minute presentation among all the other sessions. In addition, in the past these precious minutes were focused on the basics: location; circulation and food and drink policies; introduction of the librarians.

Although students are overwhelmed by all the information being thrown at them, it is also a time when they are still enthusiastic and eager to learn as much as possible. Therefore, this fall, the library is going to attempt a more integrated orientation. Librarians will still meet with the entering class as a whole during the official orientation but throughout the first couple of weeks of classes all new students sign up for small group tours to make them more familiar with the library. This, combined with the integration into the legal research course as discussed above, should give students a solid base on which to begin their law school experience as well as give them extensive exposure to the librarians.

Additional Outreach. In the fall, law librarians will implement weekly “office hours,” similar to the pharmacy librarians. Although librarians are currently available any time, it is hoped that regular office hours will fill several roles. One, they will expose seminar students whose professors do not take advantage of in-class library instruction sessions to materials. Two, librarians will go to the students, instead of making the students always come to the library. Three, office hours can be publicized highlighting the services the library provides.

Information Literacy Plan. The law library is currently in the planning stages of developing an information literacy plan to better highlight its importance to students and faculty and to show the law school’s commitment to information literacy to the university as a whole, colleagues, and prospective students. It is simply easier to get people to pay attention to something if the institution has an approved program behind it. The creation of this plan will place the Drake Law School into a mere handful of law schools that have written information literacy plans.11

While this is still in the early planning stages, librarians envision that it would include multiple layers which take law students from their first year legal research classes, through advanced research in their second and third years. Along the way, a commitment to information literacy in more traditional, non-research classes would make this an all encompassing reality which would allow graduates to enter law practice with a much stronger research foundation.12

RESULTS

Pharmacy
The implementation of integrated information literacy in the pharmacy program has addressed many of the concerns and shortcomings of the previous, more traditional, model of instruction. In theory, the key to getting students to become information literate is to give them gradual and continuous exposure to resources they are forced to use on a regular basis in situations that are practical and are perceived to have value by the students themselves. This is exactly what has been happening in the pharmacy program.

By the time students enter the PharmD program, they have had multiple exposures to library instruction at a variety of levels and in a variety of subjects including integrated instruction in the sciences. Once in the pharmacy program, they are exposed to key resources early on, but these are not simply put away once discussed but rather are revisited with regular frequency and increasing complexity as students progress through the program. Fundamental skills are recapitulated frequently enough that students should have mastered a number of basic skills that are often traditionally seen as common deficiencies in students that are graduating or going on rotations. Their information literacy skills are regularly assessed specifically as part of the drug information competency as well as being integrated in other skills.

A physical presence in pharmacy with regular class time and on-site office hours has led to better student relations as well as greatly enhanced relationships with pharmacy faculty including faculty outside the PSA series. This is additionally improved by the librarian’s regular attendance at pharmacy faculty meetings and other related events. Any success in this program can also be attributed to an extreme openness and willingness on the part of the pharmacy administration and faculty to encourage and support the librarian. The very nature of the PSA series with an ensemble of faculty has allowed for the opportunity to team-teach in a variety of classroom environments.

There have been problems and challenges with the PSA series that have been addressed and will continue to be developed over time. The first year PSA class of 2009 is very different from the one of 2007. Establishing an integrated course series like this is a huge undertaking and problems must be continually addressed in a flexible and timely manner. The first students to go through the program will go on rotations in summer 2010 and only then, once they are challenged with real-world situations, will it become apparent what is really working and what needs to be changed to continue to address shortcomings in the program. What is certain is that these students have had a very different information literacy experience than their predecessors that is hopefully richer, deeper and more integrated.

A quantifiable result of increased instruction and outreach is apparent in an increase in database usage. A prime example of this is increased usage of the general science database Scopus. Usage before and after integration increased significantly: up 420% from September 2007 to September 2008 and 450% from February 2007 to February 2008.

Law
The new more aggressive information literacy campaign at the Law School is about a year and a half old and so far has
reaped excellent results. For example, prior to its implementa-
tion, librarians taught in about 35% of seminar classes, that
has risen to about 70% of classes. While it is doubtful that
total cooperation will ever be reached, librarians’ willingness to
play a greater role in pedagogy has led to better relationships
with law faculty and students.

Because of librarians’ increased visibility throughout the
law school curriculum, students are more familiar with the
librarians and are more willing to come and ask questions.
Foot traffic during reference hours has risen as exposure has
increased. In addition, usage statistics of web guides, which
jump after a presentation and remain strong all semester,
illustrate that the students are in fact using what has been
created for them.

Catching students at the “teachable moment” has been a
big reason for the success of some programs and the failure
of others. Although the Research Bites sessions contained
a lot of relevant information that would have given students
knowledge they would apply throughout their tenure in law
school, sessions were not very well attended. Librarians
believe this failure is due to the fact that if a goal or objective
cannot be tied to the instruction, students are much less likely
to care. Conversely, this is precisely the reason the pharmacy
integration has been so successful. This is also why faculty
interest is so vital for the effectiveness of information literacy.
If the faculty member does not care, that is a message to the
students that the information is not valuable or worthwhile.
Unfortunately, nothing could be further from the truth.

CONCLUSION

Everyone has a different learning style. By incorporating as
many teaching methods as possible (e.g., in-class presenta-
tions, web pages, one-on-one instruction sessions, short and
long sessions, office hours, handouts), librarians with the law
and pharmacy programs at Drake University have been able
to make deep and lasting inroads with faculty and students.
Librarian participation in classes and their visibility and inte-
gration into the fabric of the university is increasing, resulting
in improvements in information literacy.

The librarians realize that the “teachable moment” is a very
relevant factor which must be taken into account when devel-
oping information literacy programs. Presence in a class is
not enough to create competent researchers or library users.
Thought must be given to: when to come to a class; what to
cover (less may be more); why the library wants to be a part
of a class (“just because” is not reason enough); and how
best to cover the materials. Getting into a class is only the first
step in a long journey which may be cut short if the librarian
does not immediately bring something of value in the eyes of
faculty and students.

The pharmacy and law librarians have also not let failures
discourage them or allow obstacles to stand in the way of the
end goal—making students more information literate. For
example, the “Research Bites” program discussed above was
not a great success. However, instead of using this misstep
as a reason to pull back, the law librarian evaluated why the
program was ineffective, integrated this information into the
larger context of the law school, and is working to reconfigure
the program so that it can be more successful. This process
of evaluation and adjusting instruction is ongoing in both pro-
grams, and applied to both good and bad classes. Past suc-
cess is not a guarantee of future success and tweaks should
be a normal part of teaching.

Finally, it is important to stress that neither library has a
dedicated budget for instruction and promotion of the
information literacy efforts discussed in this paper. Only the
bookmarks required more than a photocopier, a printer, and
access to the web. It is easy to let economic and personnel
hurdles discourage librarians from aggressively promoting
themselves and the skills they can teach students. However
 cliché the saying, in this case it is true, “Where there’s a will,
there’s a way.”

END NOTES

1 Acknowledgements: Sara Lowe would like to thank Karen Wallace
(Circulation/Reference Librarian, Drake Law Library) for her ideas,
advice and recommendations.
2 Accreditation Council for Pharmacy Education (ACPE), Accreditation
Standards and Guidelines for the Professional Program in Pharmacy
www.acpe-accredit.org/pdf/ACPE_Revised_PharmD_Standards_
Adopted_Jan152006.pdf (accessed 17 February 2010).
3 American Bar Association (ABA), 2009-2010 Standards and Rules of
Procedure for Approval of Law Schools, Chapter Three: Program of Legal
4 The situation at another pharmacy program was detailed by Richard
B. Kaplan and Julia S. Whelan, “Buoyed by a Rising Tide,” Journal of
5 For an assessment of the situation in a different health care field,
specifically public health, see Laura Cobus, “Integrating information
literacy into the education of public health professionals: roles for
librarians and the library,” Journal of the Medical Library Association
6 Robyn Carroll and Helen Wallace, “An Integrated Approach to
Information Literacy in Legal Education,” Legal Education Review 13
7 For an example of how active learning can be integrated into one-
shot classes see: Barbara Ferrer Kenney, “Revitalizing the One-Shot
Instruction Session Using Problem-Based Learning,” Reference &
8 Diane Murley, “Innovative Instructional Methods,” Legal Reference
9 Kelly Browne, “The Top 10 Things Firm Librarians wish Summer
11 Matthew Jenks, “Library Success = Student Success = Research
12 For a different, more detailed example, Carroll and Wallace, “Integrated
Approach to Information Literacy,” discuss the integrated program that
was developed at the University of Western Australia.
Why, exactly, are librarians needed for electronic resources? The answer is that e-resources are overwhelming in their number and complicated to organize. But whether these resources are Web sites, e-books, e-documents, e-journals, e-reserves, or something else entirely, one overarching principle is involved: a method is needed to make sense of the madness.

At the Houston Cole Library (HCL) at Jacksonville State University, we like to think of our e-resources mission in the simplest of terms: How can we provide the easiest access to these resources so our end users have the best possible experience? This is the single driving precept behind our e-resources management workflow, and it’s the yardstick we use to measure our success. But while this concept is simple, the challenges that spring from it are myriad.

For example, given the proliferation of e-resources and the various issues each type engenders, is it possible to have a one-size-fits-all model for managing them? Some (Bergman 2005) argue that responsibility for managing electronic resources cannot be shoehorned into one distinct area of the library, such as technical or public services; instead, the workflow for these resources is a process that, to be successful, must involve all areas of the library in a collaboration that melds organization with service. We’ve taken this approach at HCL, and it predates even the acquisition stage—collaboration begins during the review process.

**Getting More Value**

HCL conducts trial reviews of databases throughout the year. Technical services librarians set up the trials, and public services librarians are tasked with reviewing all databases, especially those that have a direct impact on their subject areas. Additionally, the public services librarians are encouraged to review free materials such as Web sites and open access journals. The ball is then tossed back to technical services for the acquisition, activation, cataloging, administration, and maintenance of the resources.

**KIMBERLY STEVENS** is the senior catalog librarian at the Houston Cole Library at Jacksonville State University. **MARY BEVIS** is the library’s head of serials and acquisitions, **BETHANY LATHAM** is the electronic resources/documents librarian, and **JODI POE** is head of technical services.
All resources, regardless of their format, are identified through similar means, but additional factors are considered before acquiring electronic materials: type of ownership (subscription or one-time purchase), perpetual access rights, annual maintenance and access fees, licensing agreements, level of technical support provided by the publisher, extent of in-house technical support, and vendor reputation for content integrity. Pricing models vary widely among products and vendors because they’re based on an array of factors, including full-time enrollment (FTE), highest institutional degree offered, level of database access (full database or product/title specific), multi-year discounts, and archival rights. Database vendors frequently offer discounts for group subscriptions, and participating in a state or regional consortium (which HCL does) is an excellent way to receive these discounts. We get more bang for our buck this way, but we also get some added complications—product choices, trial periods, license agreements, and cost divisions are determined at the consortium level, while review processes and decisions to purchase are determined at the institutional level. Licensing and invoice decisions vary according to vendor policy and can usually be negotiated centrally at the consortium level.

Once money has changed hands, the e-books and e-journals are activated by our team or our subscription agent, and then the linking process begins. We prefer access to e-resources through IP authentication (since it’s easier for the end user), but not all vendors allow this. In instances where IP authentication is not an option, users must be validated with a unique user name and password.

After the registration process has been completed, the e-resource’s access point is added to our proxy information, thereby guaranteeing that remote users have access to it as well. The e-resources that require a user name and password have a note page created on a restricted section of the library’s Web site that verifies users before allowing them access. We then provide multiple access points: through the catalog, through appropriate subject-related Web pages, and through the Serials Solutions e-journal portal (more on this later).

Providing a Consistent Feel

No matter where they start their search, library users need to be able to find what they’re looking for. To further this objective, we do our best to provide a consistent look and feel for our e-resources. Although vendor interfaces vary, we tailor the interfaces where possible, using the same terminologies and basic default search settings.

Access points through the library’s Web site require page updates in the university’s content management system, but access through the library’s catalog is more involved. HCL has been cataloging e-resources since the mid-1980s, and our procedures have evolved as our electronic collections have grown. The workflow includes creating and maintaining the records associated with the e-resources, the majority of which are copy cataloging records obtained through OCLC (Online Computer Library Center, Inc.). Many database and e-book vendors also offer free catalog records with the purchase of their e-resources, but these records usually contain minimal information and require so much editing that many libraries use copy catalog records from a source such as OCLC or a similar bibliographic utility. Original cataloging is also necessary for some of our items.

E-resource records have to be touched on a fairly regular basis, and we keep this in mind when cataloging so we can find them later. We add uniform access points, or “hooks,” to the records—a code in an added title field, for example, or the designation “e-book” in a genre heading. These access points are helpful if batch updating needs to be performed or if we pull large sets (e.g., all e-books from a particular vendor) out of the collection.

Since our mantra is to keep things as simple as possible, HCL uses the single record approach to cataloging e-resources. A single bibliographic record is entered into the catalog; multiple holdings records are attached for the tangible iterations of the resource. The electronic version appears as a masked hyperlink in the holdings records as well as in the bibliographic record.

Some libraries opt for the multiple record approach, which involves entering a bibliographic record for each iteration of a resource: one for the printed version, one for the online, one for the microform version, and so on. Since this approach creates multiple records for the same resource, it results in a great deal of catalog clutter and con-
fuses the end user—which is the single most important reason we don’t employ it. Of course, using a single record approach means we have to de-dupe batch-loaded records to ensure duplicates aren’t being added to the catalog. Fortunately, most library automation software can de-dupe records based on selected bibliographic record fields.

Once the records are in the system, the need for maintenance is immediate. Importing large numbers of e-resource records through vendor batch loads can result in massive authority clean-up work, which we learned to our horror—one batch import of 10,000 e-books resulted in thousands of unauthorized headings, requiring months of work. We use system reports to clean up authority problems resulting from batch loading and everyday cataloging, but e-resources also require ongoing maintenance for other reasons: URL changes/updates, title changes, and dropped titles. Content providers will often inform libraries about such changes, but the person responsible for licensing or acquisition—not the person in charge of cataloging—will usually receive this information, so good internal communication is critical (Mitchell and Surratt 2005).

**Viewing E-Resources Equally**

Good communication is also vital to managing e-resources. Automation has made this task simpler for libraries that can afford it, but HCL isn’t in this category—we can afford an electronic resources manager or an electronic resource management system (ERMS), but not both. An ERMS simplifies workflows, gathering all relevant information about a particular e-resource, from collection parameters to license info, in a single, easily accessed location for editing and maintenance. But an ERMS can be expensive, so HCL relies instead on manpower. We do, however, have access to tools that simplify things for our end users, providing a one-stop e-journal environment for them.

Our use of the Access and Management Suite from Serials Solutions (mentioned previously) allows us to track all available e-journals through one portal. All journals, regardless of format, are funneled through this single outlet, allowing library users to see if we have a title in electronic format, identify the database that offers it, and link directly to the journal within that database. The suite also helps provide more permanence for the URLs in the library’s catalog—if a URL changes, we change it through Serials Solutions and don’t have to touch the catalog record. Titles that are not available for linking through Serials Solutions, though relatively few in number, must be submitted to the library’s Client Support Center for research and possible tracking.

Because e-resources are now commonplace purchases that have been incorporated into our traditional workflows, we view them equally within the confines of institutional collection development policies to satisfy stated goals. This isn’t to say that e-resources don’t require additional considerations during their journey through the collection development process, but rather that established library policies and procedures ensure that acquisition decisions and statistical applications for reporting and assessment purposes are not biased depending on material format. This is where HCL technical services tosses the ball back to public services. Technical services gathers and keeps the statistics, but the public services librarians are tasked with interpreting them and assessing their collections at regular intervals.

Yet another hurdle in the process is that e-resources must be re-evaluated more frequently than an entire collection—every year as opposed to (approximately) every five years. We start with usage statistics. If a resource isn’t being used frequently, is it worth the expense? Would those funds be better spent on another resource? But usage is not the only factor used during the evaluation process. There’s also duplication—we may have the same content in more than one database. If so, we usually mark it for possible cancellation. By using the overlap analysis option in Serials Solutions, we can run regular reports on this type of information.

**Using Their Ears**

Our public services librarians use these and other tools to determine what to keep, what to modify, and what to eliminate. But they also use another very important tool—their ears. They listen to what library users are saying about the resources. Listening can help us ascertain if an electronic resource is worth the expense or if something isn’t being used because people simply don’t know about it. Public services librarians provide the last link in the management of e-resources—marketing the resources to the users, providing training so they get the most out of them, and reporting back to the technical services librarians, who modify our acquisitions, workflows, and procedures accordingly.

Is this collaborative workflow process for e-resources management complicated? A little. Do you need a flow chart to follow it? Probably not (but we like to color, so we gave you one anyway). Is it possible to have a one-size-fits-all model for managing e-resources? Well, maybe—as long as you’re willing to change certain aspects of that model or scrap it altogether if you learn that your users aren’t happy with the end result. Our goal is to make e-resources easy for the user, not for us. If that means more work for us, then three cheers for job security. 

**REFERENCES**


10 Questions: Maqsood Ahmad Shaheen

THE PAST PRESIDENT OF SLA’S ASIAN CHAPTER SERVES NOT ONLY HIS EMPLOYER BUT ALSO THE LIBRARY COMMUNITY IN PAKISTAN.

BY FORREST GLENN SPENCER

Within U.S. embassies around the world, American Information Resource Centers (AIRCs) play an integral role—conducting activities that, in the words of the U.S. State Department, “promote a better understanding of the policies, values, institutions, and culture of the United States.” For example, at the U.S. embassy in Islamabad, Pakistan, the AIRC strives to “build bridges of understanding” between Pakistan and the United States and, in so doing, increase each nation’s perception of the heritage, customs and culture of the other.

Maqsood Ahmad Shaheen, past president of the SLA Asian Chapter, is a reference and research specialist at the U.S. embassy in Islamabad. For more than a decade, this award-winning information specialist has worked with government officials, academics, journalists, researchers and non-governmental organizations on behalf of the governments of Pakistan and the United States. Shaheen’s work these days includes serving as a volunteer editor for the E-LIS online repository and coordinating Pakistani LIS literature on the Web.

Information Outlook spoke to Shaheen earlier this year to learn more about his work and the challenges he and other librarians in Asia are facing.

Q: What’s your role at the U.S. embassy in Islamabad?
As a reference and research specialist, my job is to coordinate two Lincoln Corners and Lincoln Reading Rooms in Pakistan. Being part of the American Information Resource Center, I have the responsibility to provide research and reference services for Pakistani government officials, journalists, researchers, students and others with an interest in the United States. I also frequently organize U.S. mission speaker programs, workshops, seminars, roundtables, and book and poster exhibitions. I also have the responsibility to update and monitor the mission’s social media presence, including the embassy’s Facebook page.

Q: What are “Lincoln Corners,” and what is the nature of your involvement with them?
The Lincoln Corners (elsewhere known as American Corners) and Lincoln Reading Rooms offer a “window on America” and its people, history, society, geography, government, and popu-
lar culture to the people of Pakistan. They accomplish this through books, periodicals and audio-visual materials. As the liaison person, I program all the activities of the Lincoln Corners.

Q: What are some of the themes you touch upon at workshops and seminars that you host?

The AIRC libraries have always been considered pioneers in bringing new technologies to their host countries, and the library staff at the AIRC in Pakistan are unique in this country in terms of their speaking and presentation abilities. The AIRC staff frequently conduct Internet search workshops for students, academicians, civil society and government officials. These workshops highlight the Web sites and electronic resources available through the AIRC on topics of interest to both the U.S. government and Pakistani audiences.

For example, last month we organized two workshops: one titled “Research Skills for Media Professionals” for female journalism students at a local college, and another one titled “Use of Social Networks in the Libraries” for librarians in different institutions in Islamabad. Through these presentations, AIRC staff members introduce Pakistani audiences to the latest developments in emerging fields and persuade them to adopt these innovations in their organizations.

Q: Last year was the 10th anniversary of the SLA Asian Chapter, which you served as president. Tell us a little bit about the chapter and some of the goals it hopes to achieve (or has already achieved).

In 2009, the Asian Chapter was among the top 15 chapters in SLA with respect to the number of members. The chapter co-hosted many seminars and lectures for LIS professionals in India, Pakistan and other Asian countries. The chapter also organized many events as part of the 100-year celebration of SLA and the 10th anniversary of the Asian Chapter. With the visit of SLA President Anne Caputo to India and the region, we hope to get more and more members into SLA, thus giving it really a global reach.

Q: What are some of your activities for Pakistani information professionals? What networking opportunities are you involved with, and what are some of the technological advancements that have been beneficial for professionals in your part of the world?

The Asian Chapter regularly organizes free seminars and workshops for library and information science professionals in Pakistan. The chapter was the first to hold seminars and workshops on the use of social networking applications in libraries, and we widely promoted SLA’s 23 Things to the library community in Pakistan. As a result, we now see that many libraries in Pakistan have started their own blogs and Facebook pages to interact with their communities.

The Asian Chapter has also collaborated with library organizations in Pakistan to organize conferences, seminars and workshops. This partnership has helped us make connections with new members and share SLA’s knowledge base with them.

Q: What challenges are facing your colleagues and contemporaries in Pakistan and throughout your chapter?

One of the challenges in Pakistan is the issue of professional behavior. There has been an improvement in the technology skills of young librarians in Pakistan; however, we need to educate them about professional behavior, including time management, interpersonal skills, and professional ethics.

The common challenge I see for Asian librarians is the lack of an entrepreneurial mindset. It all requires preparing librarians for the changes and innovations they face at work. Also, librarians need to work collaboratively with people of other professions.

Q: What are the Asian Chapter’s membership retention and recruitment efforts? What have been the successes, and what have been the headaches?

The visits by the SLA leadership from headquarters helped greatly to gain new members. My experience is that gaining a member is easier than retaining one. The big problem I see in retaining SLA members in developing countries is their weak currencies against the U.S. dollar. When converted into dollars, SLA costs the members in developing countries [more].

During the last two years, we in Pakistan have regularly been holding meetings for members to discuss issues for their professional development and make them aware of the benefits available to them. I think the country representatives and other leaders of the chapter should frequently arrange such gatherings so that members [take] full advantage of their membership and ultimately renew their membership for the next year. To retain members, chap-
**Name:** Maqsood Ahmad Shaheen  
**Joined SLA:** 2006  
**Current job:** Reference and Research Specialist, American Information Resource Center, U.S. Embassy, Islamabad, Pakistan  
**Years in the Profession:** 13  
**Education:** MA in Library Science, University of the Punjab, Lahore, Pakistan; MA in Mass Communication from the National University of Modern Languages, Islamabad, Pakistan  
**First job:** Librarian  
**Biggest challenges today:** Keeping up to date with rapidly changing technological innovations  

A “twinning membership” initiative may also be introduced for LIS professionals in developing countries in collaboration with other SLA chapters. Under this initiative, one chapter or member bears the cost of membership of another information professional in a developing country.

**Q:** Describe your career and your professional development since leaving school.

My career started with the traditional education and mindset of a librarian. However, three changes in my professional life brought a 180-degree change: my job at the American Information Resource Center, my affiliation with SLA, and my habit of reading literature.

When I see myself 12 years back as a student of library and information science, I was more inclined toward a job protecting books in a library, with services to a limited community. But now, I have a broader and different vision. I think globally and act locally; I have a corporate mindset. I intend to work with people in other professions and across boundaries.

**Q:** You are a Salzburg seminar fellow. Describe that experience and your involvement.

I attended a session of the 2006 Salzburg Global Seminar titled “Libraries in the 21st Century.” It brought a real change to my mindset about the role of libraries in the present era.

The seminar covered the emerging challenges to the library and information science profession and the role of libraries in the 21st century. It addressed several questions: How are libraries around the world adapting to changed circumstances and to a renewed sense of their responsibilities? How can librarians around the world learn from the experiences of librarians in different countries, and how can their institutions be strengthened, sustained and created in areas where their existence cannot and should not be taken for granted? What challenges do libraries continue to face, and what strategies exist for confronting the demands that the 21st century is likely to place on these important cultural institutions?

The group of 60 library and information science professionals attending the session adopted a resolution, “Vision of the Communal Role of Libraries.” The resolution aims to counter perceptions of libraries as obsolete resources and emphasizes the role of libraries as cultural institutions. The full text of the resolution is located at http://www1.law.umkc.edu/faculty/callister/Session422/statement.pdf.

**Q:** What areas of the profession are you most interested in learning more about?

I have a vision that a majority of librarians in Pakistan use Web 2.0 applications to serve their library communities. It has been observed that people in Pakistan are not regular visitors to libraries, but they are on the Internet, on social media, and on e-mail. The librarians with the 23 skills can catch them on the Internet. I am learning to use Web 2.0 applications in libraries and, over the next five years, I want to excel in using these technologies to reach my audience and fulfill their information needs, even if they are distant. SLA
P-Books vs. E-Books: Death Match?

The 'battle' between printed and electronic books is revitalizing interest in reading and learning and creating new challenges and opportunities for librarians.

BY STEPHEN ABRAM, MLS

In other columns this year, I have explored the nature of the e-book in libraries. Looking back, I realized I hadn't actually discussed the pros and cons of print and electronic formats for books. So, this month, I'm providing a simple list of pros and cons. This list could become outdated very quickly due to rapid changes in technology, regulatory environments and laws, but this is how it looks to me in August 2010.

Advantages of Printed Books

Printed books (p-books) are still favored by many readers, for several reasons:

Look and feel. I've never experienced this benefit to the extent many others have, but I can't deny it when people say that the "feel" and heft of a book in their hands are like an aphrodisiac to them.

Packaging. Gold foil or embossing rarely translates well into electronic images. Also, since most e-readers wrap text to accommodate the standard screen size, the beauty and intention of a book's design can be lost. This can be particularly egregious when pictures and illustrations are embedded in text at a specific place, or when the form of a written work (say, haiku or poetry) is an essential element of its artistic merit. Some e-readers allow users to change the font and design, which can further corrupt the author's or artist's original intent. Some e-books do not include such p-book expectations as a fly-leaf, back cover, author's bio, and so on. Many free, out-of-copyright works provided in e-book packages often degrade the cover art to mere title and author type-script—another cultural and historical degradation. Perhaps this drawback will be surmounted by a new generation of visual artists using animation, three-dimensional rendering, and brighter color palettes. We'll see.

Sharing. You own your copy of a p-book and can do with it as you choose. One of the joys in life is giving books that you enjoyed to a friend with your comments and hearty recommendation. The acronym "DRM" (digital rights management) is becoming a curse word in the technological culture that is emerging around reading and e-books.

Advertising. Just about every communication medium—magazines, television, newspapers, radio, etc.—is liberally sprinkled with ads. Printed books have largely escaped this due to their narrow market niche and long life cycle. With e-books, on the other hand, ads can be timed to the purchase rather than the publication cycle.

Second-hand use. You can lend your p-book to a friend, sell it, donate it to a hospital, or place it in your personal library for future use. Few e-readers support lending or re-selling e-books.

Safety. You can't contract an electronic virus from a paper book (I won't comment on the regular kinds of germs!).

Privacy. With a p-book, you won't leave a permanent digital trail of your personal reading habits online for commercial entities to mine and exploit (as long as you purchase it with cash).

Ease of reading. High-contrast type set on good paper continues to rank higher in readability than e-reader screens. This may change quickly, but e-paper readers have less contrast, and LCD readers like the iPad are brighter than necessary for reading so they can display videos and Web sites.

Maintenance. You don't have to update any software or charge any batteries to read printed books, but you do have to store and dust them occasionally.

Technology. You are born with all of the "equipment" you need to read a book, and your education builds on that. You are technologically independent and can read anywhere there is light.

Collecting. Most book lovers I know (I include myself in this category) collect books in a manner that resembles an
illness, like hoarding—though in our profession, it's a beautiful disease. In your home, a collection of printed books can be a visible indication of your taste, culture, education and status (as well as your decorating sensibilities). How does one accomplish this with a huge e-book collection?

**Advantages of Electronic Books**

Now let's turn our attention to e-books and the benefits they offer.

**Customizable displays.** Is the print too small? Make it bigger. Don't like the font? Choose a different one. Since an e-book is not in fixed form, it can be altered to support your reading needs.

**Audio translation.** Some e-readers can read a book aloud, enabling the reader to listen privately through headphones or in a communal setting, as with a parent, child, teacher, or pupil. This removes boundaries for visually challenged readers.

**Interactivity.** The interactive nature of an e-book allows it to support different learning styles. For example, some reading disabilities may be overcome through page design and font changes or by combining text reading with auditory stimuli.

**Ease of transport.** An e-reader can carry hundreds or even thousands of books in a package that weighs mere ounces. This is a considerable advantage for those traveling on trains or planes or taking books to read on the beach.

**Choice and access.** No bricks-and-mortar bookseller can have as many books in stock as an online e-book retailer. Having said that, I urge you to remain mindful of the different types of books and their applicability to e-readers. As I have noted in the past, there are different concerns, issues and opportunities related to works of fiction, reference books, textbooks, scholarly works, children's books, and so on.

**Window into the past.** Efforts to digitize historical collections will result in the creation of a transformational knowledge base and the restoration of many cultures and movements. E-books are leading us into a new era of discovery.

**Reinventing the book.** Whether we ultimately call them books at all, we are seeing video, animation and sound integrated into the reading experience. Some of these experiments may not succeed, but something innovative is happening here. In addition, the publishing and dissemination ecosystem is evolving, with the addition of new players and lower barriers to entry for authors, intellectuals and propagandists.

**Environmental impact.** This might be overrated, but it probably isn't. Over time you'll save hundreds of trees and acres of forests by switching to e-books, and more if you do the same for newspapers and magazines.

**Privacy.** It's much more difficult for someone to see what you're reading when you're using an e-reader. While you'll lose those serendipitous connections you make with other book readers, you'll probably develop some with people who are interested in chatting about your e-reader.

**Social highlighting.** E-books are just beginning to explore the potential of socially sharing highlighted quotes and passages. Highlighting is a useful activity, especially when reading non-fiction and studying. Finding highlighted passages and bookmarks can allow students and researchers to save time and perform better. This activity can also be social, as with the Amazon Kindle page featuring the most highlighted passages of all time (http://kindle.amazon.com/popular_highlights).

**Making and taking notes.** This advantage provides the serious scholar with an opportunity to engage in the reading process while leaving (potentially) a digital trail for future scholars and students. For the recreational reader and for book clubs, it adds a dimension that rises above the print experience.

**Dictionary function.** By tapping on a word, you'll learn its definition and understand the author's intent—all without interrupting the process of reading.

**Integration with Twitter and Facebook.** Some e-book readers allow you to share quotes from your reading experience with your Twitter followers and Facebook friends. The opportunity also exists to share your insights, opinions and reviews about what you have just read or to integrate with Amazon or your e-book retailer—or with your library, club or tribe.

**Searching.** You can't make a list of what e-books do better than p-books without considering search—on many dimensions. You can search inside your work for characters, back stories, contents entries, and more. As a study aid or as part of your investigation of themes in a series (like Harry Potter), the search function allows you to explore e-books to an extent not possible in their printed counterparts.

**Ease of navigation.** Flipping through a printed book feels intuitive to us...
because we’ve grown up with print. Our comfort level with e-books will change with experience. The clumsy feeling of e-books today will gradually subside for most of us, just as it did when other technologies entered the mainstream.

**Citation support.** A wonderful advantage of e-readers is that they can support the consistent collection of citations in proper format as you progress through your research. Soon, those little stacks of 3x5 note cards could be history.

**Educational support.** I can tell if you’ve read your e-book or e-textbook. Your teacher, professor, teaching assistant, or lecturer can, too. They can also find out how much you’ve read and whether you’ve read any of the extended readings or visited the recommended Web sites. Test questions, exercises, journals, surveys, collaboration software, and more can be inserted into an e-book. The next generation of learners may be the best—and most scrutinized—yet. You can insert your own concerns and excitement here.

**Revitalization of librarianship.** As more e-books appear online, identifying and acquiring an e-book that matches a user’s needs is becoming a major challenge. Librarians, with our metadata skills, have a few clues about how to do that—from relying on OCLC’s WorldCat alliance with Google Books and Amazon to using our own intranet architecture, ontology and taxonomy skills.

**A Great Time to Be a Librarian** The e-book versus p-book debate is certainly running apace, and amok. I am amused at how many times I was asked this summer about the death of print, books, reading, libraries, and what have you. I try not to look appalled and just ask people what evidence they see of this. My view is that the research and statistics seem to show an increase in reading across all generations, an increase in book sales (especially when all formats are considered), and an increase in populations of college and university students and researchers.

We’re also seeing some big global players investing very heavily in the ing place about the future of learning, libraries and content, involving more stakeholders than ever before. It’s a great time to be a librarian, participating in the creation of new plateaus for reading, books, education, culture, entertainment, enjoyment, and more. And it’s going to get even more exciting in the coming years.

**REFERENCES**


Internalizing the Love of Learning

Acquiring knowledge and information on a constant basis can help you stay ahead of new technologies and business practices or even point you in a new career direction.

BY DEBBIE SCHACHTER, MLS, MBA

This month’s theme is one of my favorites, as I myself am interested in lifelong learning. Lifelong learning isn’t just about taking courses or programs—it’s about wanting to develop your knowledge base on a continuous basis, to seek new skills and expertise to further your career. It is an ongoing behavior of inquiry that can be satisfied in many ways, such as through formal courses, training, teaching and reading.

While information professionals certainly become experts in a variety of subject areas, changes in technology, business practices, areas of knowledge, and more require us to continue learning. As we muddle through another year of difficult economic times, we may come to perceive lifelong learning as more or less essential, whether we are downsizing or trying to maintain staff and services with reduced budgets. For those who are unemployed or underemployed, now may be an opportunity to seek courses or programs that complement professional credentials or develop specialized knowledge through continuing education within a particular industry, such as the legal, medical or management fields.

Not surprisingly, enrollment in post-secondary institutions tends to increase during economic recessions. People can’t find work, so they go back to school. If that is your situation, what can you do that will build on your expertise and experience to make you more marketable? Management, project management and other administrative programs offer alternative career paths for information professionals.

Lifelong learning is both formal and informal and can range from the theoretical to the practical in nature. For example, volunteering to participate in workplace project teams in areas outside of your subject expertise can open doors to a wealth of opportunities and potential lateral career opportunities. Helping clients explore new processes or fields of study may also lead you to pursue formal coursework in those areas, if they interest you.

**Leveraging Your Expertise**

If you are transitioning into a new role, lifelong learning now becomes a matter of finding your next career—leveraging your professional skills in settings that are not libraries or information centers or in positions that go by non-traditional names. For example, many information professionals have the opportunity to teach in library or library technician programs, and there is no better way to share your expertise as well as develop the skill of instruction than in a formal educational setting.

Teaching offers you the ability to test a new career option while you continue to work in your career position. Teaching may appear daunting, but students are eager to benefit from your expertise, making it easy for you to provide a practical angle to an otherwise academic subject area. Students also appreciate the practical knowledge that working practitioners bring as instructors.

If you are not ready or able to explore a formal instructional option, you may want to contribute to the learning of other information professionals by offering a workshop or small seminar in your area of expertise. For example, you may offer to present a workshop for your local SLA chapter or at the SLA Annual Conference, thereby enabling you to share your expertise and promote yourself. Working on programming committees within a chapter also provides opportunities to bring knowledgeable speakers to your area for the benefit of many information professionals.

Finally, it’s important to remember that learning doesn’t have to be directly related to your work. If you are learning a new language, developing a hobby or spending time at a local museum or art gallery, you are learning. Although working on practical skills always seems to take precedence, particularly when time and money are limited, you can often make connections between different fields of knowledge when you engage in personal activities.

Lifelong learning means internalizing the love of learning. It helps us to see how or where we must change, even to the point of re-examining our core principles. It means flourishing and continuing to be relevant as the world changes around us. **SLA**

**DEBBIE SCHACHTER** is director of technology and collection management for the Vancouver Public Library, where she has responsibility for library information technology systems, technical services, and collection management for a 22-branch library system. She has more than 20 years of experience in a variety of nonprofit and for-profit settings, including news, legal and social services organizations. She can be reached at debbie.schachter@vpl.ca.
SLA 2010 Conference: Ask the Copyright Expert

The number and range of questions I fielded at the 2010 SLA Annual Conference proves that librarians’ interest in copyright law is as strong as ever.

BY LESLEY ELLEN HARRIS

What copyright and licensing questions are on the minds of special librarians? At the 2010 SLA Annual Conference in New Orleans, I acted like Lucy from the “Peanuts” comic strip—I sat behind a booth and answered questions. For nearly three hours, I remained in my booth to ensure that everyone waiting in line had an opportunity to ask their question.

Following are some of the questions I was asked:

Q: I bought an electronic version of an article directly from a publisher. I bought the article online, and the terms governing the use of the article state that it is for “individual use.” Is it considered individual use if I obtained the article on behalf of a fellow employee who is the end user?

Use of an electronic article is governed by the agreement that allows you access to that article. What does “individual use” mean in the context of the agreement? Does it exclude a third person from obtaining a copy of the article? Review all portions of the agreement to ensure that obtaining the article on behalf of another person is not prohibited. Bottom line: read all agreements carefully.

Q: Is it acceptable to link to an internal page of a Web site?

Cases settled out of court imply that linking to the home page of a site is permitted, but linking to an internal page of a site may require permission. This is a copyright risk management issue, and each organization should have its own policy governing linking to an internal page of a Web site.

Q: We hired a consultant to prepare a research document for us. The research document contains several tables and charts that were created by a third party. Is this legal?

You must examine the circumstances to determine this answer. It’s best to assume that the tables and charts are protected by copyright (unless you learn otherwise.) Ask the researcher/consultant whether he received permission from the copyright owners of the tables and charts; if so, you may want to obtain a copy of the permission forms.

Whenever you hire a consultant, include a clause in your agreement to the effect that the consultant warrants that all of his work is original and does not infringe copyright protections. The clause should state that if the consultant’s warranty is false, the consultant will indemnify you for any costs arising out of this false warranty. Also, add a clause stating that for any use of third party material, the consultant will obtain written permission and provide you with copies of the permission forms.

Q: May I embed a YouTube video on our Web site? May I show a YouTube video in a classroom at a for-profit institution or an educational seminar in my company?

Most Web sites have copyright and terms-of-use provisions. You need to examine the permitted uses set out by the copyright owner or third party site/host that posts copyright-protected content.

Q: Is it legal to keep an e-file of interesting electronic articles found various places online, such as on newspaper and magazine sites?

You should always assume that online content is protected by copyright until and unless you determine otherwise. Each copyright owner can set its own terms of use, so you should read the copyright and terms-of-use notices on each site from which you obtain articles.

For example, the New York Times’ copyright notice states the following: “All materials contained on this site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior written permission of the New York Times Company or, in the case of third party materials, the owner of that content.

LESLEY ELLEN HARRIS is a copyright lawyer who consults on legal, business and strategic issues. She is editor of a print newsletter, The Copyright & New Media Law Newsletter (Issue 2 of 2010 is devoted to jobs for non-lawyers in copyright and licensing), which is available at www.copyrightlaws.com. She also teaches the SLA certificate program on copyright management and maintains a blog on copyright questions and answers. The second edition of her book, Licensing Digital Content: A Practical Guide for Librarians, was just published.
Q: Can I make a copy of a printed book so that I can change the format of the book to make it easier to read and carry with me?
Reproducing an entire book generally requires the permission of the copyright owner of the book. Section 108 of the U.S. Copyright Act is an exception to this general rule, but it only applies to qualifying libraries “if the format of a work has become obsolete.”

Q: Should we post signs near our photocopiers warning patrons about copyright laws?
Yes, posting signs, posters, copyright warnings and the like near any sort of machinery that can reproduce copyright-protected materials—such as photocopiers, printers, computers, and scanners—is a good idea. Section 108(f)(1) of the U.S. Copyright Act protects libraries from infringements by patrons using unsupervised copier machines in the library, provided the library displays a notice informing users that making copies may be governed by copyright law. The patron is responsible for any infringing acts. Note that section 108 applies to most academic and public libraries and also some private or corporate libraries if outside researchers are permitted to use the library.

If you have a copyright question, check “Copyright Questions & Answers” at www.copyrightlaws.com. There are 16 categories in which you can ask questions, including permission to use copyright materials, fair use/dealing and limitations on copyright, and international copyright issues. If you would prefer an in-person consultation, I am scheduled to offer another “Ask the Copyright Expert” session at the SLA 2011 conference in Philadelphia.
OTHER EVENTS

OCTOBER
13-15  
Internet Librarian International  
Information Today  
London, England, UK  

13-15  
MAC-MLA 2010 Annual Meeting  
Mid-Atlantic Chapter of Military Libraries Association  
Chapel Hill, N.C., USA  
www.ecu.edu/formateScripts/dlhs/  
macmla2010/index.html  

20-22  
Conference on Enterprise Information Systems (CENTERIS 2010)  
University of Trás-os-Montes e Alto Douro and the Polytechnic Institute of Cávado and Ave  
Viana do Castelo, Portugal  
www.eiswatch.org/centeris2010/  

22-27  
ASIS&T Annual Meeting  
American Society for Information Science & Technology  
Pittsburgh, Pa., USA  
www.asis.org/conferences  

25-27  
Internet Librarian 2010  
Information Today  
Monterey, Calif., USA  
www.inteloday.com/i2010/  

27-30  
MCN 2010 Conference  
Museum Computer Network  
Austin, Texas, USA  
hhttp://mcn2010.pbworks.com/  

NOVEMBER
7-10  
Pharma-Bio-Med 2010  
International Institute for Information Professionals  
Seville, Spain  
www.pharma-bio-med.com/  

13-15  
INEX 2010  
Initiative for the Evaluation of XML Retrieval  
Amsterdam, Netherlands  
www.inex.tago.ac.nz/  

15-16  
Taxonomy Boot Camp  
Information Today  
Washington, D.C., USA  
www.taxonmbootcamp.com/2010/  

16-18  
Enterprise Search Summit  
Information Today  
Washington, D.C., USA  
www.enterprisearchsummit.com/fall2010/  

16-18  
KMWorld  
Information Today  
Washington, D.C., USA  
www.kmworld.com/km2010/  

28-1 December  
LIANZA 2010  
New Zealand Library Association  
Dunedin, New Zealand  
www.lianza.org.nz/events/conference2010  

30-2 December  
Online Information 2010  
London, England, UK  
www.online-information.co.uk/index.html  

JANUARY 2011
11-13  
International Conference on Digital Library Management  
The Energy Resources Institute (TERI)  
Kolkata, India  
www.teriin.org/events/cdlim  

19-22  
SLA Leadership Summit  
Special Libraries Association  
Washington, D.C., USA  
www.sla.org  

28  
Third Annual Symposium on Scholarship and Practice  
Catholic University of America  
School of Library and Information Science  
Washington, D.C., USA  
slis.cua.edu/symposium/2011.cfm  

FEBRUARY 2011
14-16  
International Conference on Digital Libraries and Knowledge Organization  
Management Development Institute/Indian Association for Special Libraries & Information Centres  
Gurugram, India  
www.mdi.ac.in/ICDK/Home.html  

LIVE WEBINARS:

6 October  
Patents (1)  

23 October  
Strategic Marketing for Corporate & Government Libraries (2)  

27 October  
Patents (2)  

4 November  
Ask the Copyright Experts: The Year in Copyright Law  

1 December  
Moving into Management & Team Leadership Roles (1)  

8 December  
Moving into Management & Team Leadership Roles (2)  

16 December  
Creating Your Own ROI Dashboard  

ADVERTISING INDEX

ACE .......................... 16
Elsevier ................................ 7
IEEE ................................ C4
SPIE ............................. C3

SLA PRODUCTS AND SERVICES

Alignment Project ... 2
Click U Certificate Programs ... 35
Click U Webinars ................................ 16
SLA Career Center .......................... 16

19-22 JANUARY 2011  
SLA Leadership Summit  
Washington, D.C., USA

JULY 2011

4-8  
International Society of Scientometrics and Informetrics Conference  
International Society for Scientometrics and Informetrics  
Durban, South Africa  
www.issi2011.uzulu.ac.za/
Delivering Answers

The SPIE Digital Library offers your engineers, faculty, and students the tools they need to learn and innovate – providing immediate access to cutting-edge research in today’s most exciting and fast-moving technologies.

The SPIE Digital Library is your gateway to a rich, multidisciplinary collection of optics and photonics research.

- Astronomy
- Biomedical Optics
- Communications
- Defense and Security
- Imaging
- Lighting and Energy
- Micro/Nanophotonics
- Sensors

Request a Free Trial Today!

Contact Robert Dentel
roberd@spie.org · +1 360 756 6524
Open to accelerate science

Put your researchers ahead of the curve

Experience **SciVerse** - the new platform for **ScienceDirect** and **Scopus** users - with:

- Integrated search across ScienceDirect, Scopus and the scientific web, ranked by relevance and without duplication
- New applications that enhance search and discovery, allowing you to search methodologies and protocols, view search terms highlighted in full sentences and see the most prolific authors for search results

Experience it for yourself at [www.info.sciverse.com/preview](http://www.info.sciverse.com/preview)