From The President
By Vibiana Bowman

Dear Fellow LIRT-ers,

ALA Annual in Washington, D.C. is coming right up. As always, the LIRT Conference Planning Committee is hard at work finalizing plans for some excellent programming. This year is special since it is the LIRT’s 30th Birthday! We are planning a birthday bash (with cake) at the LIRT Program and we sincerely hope to see you there.

For specifics about ALA Annual in general, visit: http://www.al.org/ala/eventsandconferencesb/annual/2007a/home.htm

For information about LIRT at Annual go to: http://www3.baylor.edu/LIRT

One of the initiatives that LIRT is working on this year is “growing” our membership. All of our committees, in particular Public Relations/Membership and the Liaison Committees are looking at new ways to serve our members and expand our representation within different fields of librarianship.

If you are already active in the LIRT community, be a LIRT Ambassador. “Talk up” what you like about our organization to friends and colleagues who may be looking for a “home” in ALA where they can become active and involved. For me, the really amazing thing about LIRT is that new members are quickly integrated into the real work of the organization and have the opportunity to quickly assume leadership roles.

If you are not active in LIRT, think about joining a committee. Descriptions of the committees and contact people can be found at the LIRT home page (address above).

Finally, if you have questions, problems, or suggestions about LIRT—who we are, what we do, and how we can do it better, you are always welcome to contact me.

Thanks and see you in Washington!

Vibiana

LIRT President

From the Editor
by Jeff Knapp

It’s that LIRT Top 20 time of year . . . that magical time of year when librarians leave copies of their articles under their pillows in hopes that the LIRT Fairy will select them as part of this year’s LIRT Top 20. I don’t know what it is about this time of year—maybe it’s in the air . . . or just a side effect of my medications—that makes me feel all tingly inside.

Okay, okay . . . I might be going just a little over the top, but I do love reading the LIRT Top 20 (and I get to read it before all of you!). Why? Well, there are many reasons, but the main reason for me is just being able to browse some important articles in areas of library instruction that I’m not necessarily involved in. Being an academic librarian, I’m often researching very specific topics and concepts in the field. Of course, such focus is a necessary aspect of scholarly research, but sometimes it helps to take a step back, so to speak, in order to see your research focus in context. I always find a couple of articles in the Top 20 that give me a new perspective on an idea—a new perspective that I probably wouldn’t ever find myself searching for in a database.

So take a look at the LIRT Top 20 (my congratulations to the Top 20 Committee) and the other items we have for you in this issue. And be sure to check out the meeting schedule for Annual in D.C., because we’d really like to see you there!

Cheers,

Jeff

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Send Us Your Tutorials -
The Adult Learners Committee invites LIRT and ALA members to submit links and short annotations for online tutorials that they have created, which are geared toward Adult Learners. These include, but are not limited to, teaching methods, learning theory, adult literacy, or special populations within the adult community. Those selected will be added to the Adult Learners Resource Center Tutorials section. Send your links to Ted Chaffin, co-chair, at tchaffin@mailer.fsu.edu. Please include “LIRT Adult Learners – Tutorial” in the subject line.

http://www.baylor.edu/LIRT/lirtnews/

Send claims to Darlena Davis, HRDR, 800-545-2433, X4281, American Library Association, 50 E. Huron Street, Chicago, IL 60611.

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Production editor: Jeffrey Gutkin © American Library Association
Providing library instruction is certainly a demanding job. What do instruction librarians do to effectively manage large workloads and avoid burnout? What are the primary causes of burnout? The classroom environment, the overall work environment in a library organization, or the individual librarian who readily agrees to take on excessive amounts of work...? For answers to these questions, just check out these articles!


Barnett, Browne, and Harris provide background information on the symptoms and causes of burnout, and also list strategies for prevention. Because work overload causes burnout, consequently, library managers should have realistic and manageable goals and communicate them clearly to instruction librarians. Managers should also provide support for attending conferences, so that instruction librarians can learn new techniques and develop a strong support network. Suggestions for burnout prevention include: recording instruction experiences and new teaching techniques in a journal; using games and other active learning techniques; varying the order in which topics are presented during instruction sessions; and collaborative techniques, such as co-teaching and trading instruction responsibilities.


Dancik outlines two distinct primary causes of burnout: problems caused by the work environment (“situational engagement”), and the problem of the relationship one has with her or his work (“professional engagement”). She argues that librarians have a personal responsibility for maintaining high levels of engagement by actively cultivating a strong intellectual curiosity, and recognizing the impact of our work on the organization as a whole. Dancik also notes that engaged librarians develop creative ideas and opinions, which they share with others. She stresses the importance of seeking new challenges within an organization in order to remain engaged, and advises against depending on a job that does not provide opportunities for professional growth.


Jimenez outlines various strategies she has used to avoid burnout throughout her career. She emphasizes the importance of self-assessment and improvement, including reflecting on personal expectations for job performance; identifying and pursuing what is most exciting and fulfilling in work; being honest with yourself; being willing to take risks (including finding a new job, if necessary, to combat burnout); and maintaining a healthy balance between work, family responsibilities, and recreational pursuits.


Leiter and Maslach describe specific steps to solve excessive workload problems. The authors note the importance of defining the specific problem. Examples of specific problems include the willlingness to complete excessive amounts of work, not having enough time to effectively complete tasks and projects, or simply having too much work assigned. Leiter and Maslach offer specific objectives and strategies for solving such problems. For instance, if the specific problem involves a willingness to take on too much work, a possible objective for resolving the situation would be to cultivate solid periods of uninterrupted time free from additional demands. In order to meet the objective, they recommend requesting a more private workspace. Not enough time to effectively complete projects and daily tasks? Try employing time management techniques, such as setting priorities, and if possible, delegating some tasks. If the specific problem involves a truly unmanageable workload, Leiter and Maslach provide advice on how negotiate a reduced load: a more manageable load will improve the quality of work produced, and will also encourage and facilitate long-term retention in the job.


McCarthy, et al. investigate whether first-year teachers suffer from burnout in greater numbers, as well as whether teachers are more likely to experience burnout in the elementary as compared to the preschool environment. They also examine the relationship between “preventive coping resources” (e.g., support from colleagues, personality flexibility, ability to maintain perspective) and burnout symptoms. To examine burnout, the authors utilize the Maslach Burnout Inventory, which assesses levels of “emotional exhaustion,” “depersonalization” (i.e., distancing oneself from students, and, consequently, treating them impersonally), and reduced feelings of personal accomplishment. In order to examine coping resources, the researchers use the Preventive Resources Inventory, which assesses individual habits specific to stress.
LIRT Meeting Schedule
ALA Annual Conference, Washington, DC
June 2007

Saturday, June 23
Capital Hilton, Presidential Ballroom
- Executive Board I (Officers) 8–9:30 a.m.
- Steering Committee I (Officers & Committee Chairs) 9:30–11 a.m.
- All Committees I (Chairs & Committee Members) 11 a.m.–12:30 p.m.

Sunday, June 24
Washington Convention Center, Room 206
- Membership Fair & Birthday Bash 8–10:30 a.m.
- It's Showtime for Instruction Librarians: The Making of Short Films for Marketing and Instruction 10:30 a.m.–12 p.m.

Monday, June 25
Embassy Suites Washington Convention Center, Capital A/B
- All Committees II (Chairs & Committee Members) 8:30–9:30 a.m.
- Steering Committee II (Officers & Committee Chairs) 9:30 a.m.–12 p.m.
- Steering Committee Lunch (Optional) 12–2 p.m.

Tuesday, June 26
Washington Convention Center, Room 209B
- Executive Board II (Officers) 9–10:30 a.m.
- Meeting with ALA Liaisons (Officers) TBA

Alicia Salaz describes job burnout prevention techniques that she employs while working at the Multnomah County Library, and simultaneously completing her MLIS degree, as well as strategies that her mother who has worked at the Multnomah County Library for more than fourteen years uses to prevent long-term burnout. Salaz and her mother also pursue opportunities to do committee work and team projects, in order to diversify their routines, to utilize and enhance different skills, and to make a significant impact on the library as a whole.


Sheesley summarizes the literature on burnout in librarianship and other public service professions, and identifies several causes of library instruction burnout. Such causes of burnout include the repetitive nature of some instruction activities, the steep learning curve for librarians without prior teaching experience, a lack of motivation among students who resent research assignments, and staff shortages. She reviews and summarizes various ways to combat burnout within the classroom, including using engaging, student-centered teaching techniques that promote active learning, collaborating with other library instruction colleagues, and regularly trying new instruction approaches. Burnout is also caused by work environment factors outside of the classroom, and, consequently Sheesley lists additional solutions, such as setting clear and focused goals and objectives for library instruction programs; providing instruction librarians with effective recognition and support including appropriate financial compensation, and sufficient work time to prepare thoroughly for teaching activities; attending professional development workshops to enhance teaching skills; and working on group projects with other instruction librarians.

Check These Out! (cont.) Sharon Ladenson, ladenson@msu.edu

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LIRT News, June 2007

Selected and reviewed by the LIRT Top 20 Committee: Laura Dale Bischof; Dr. Linda Colding; Susanna Cowan; Kate Gronemeyer; Tiffany Anderson Hebb; Corliss Lee; Mary Jo Lyons; Camille McCutcheon (Chair); James Rhoades; Leslie Sult; Esteban Valdez; and Teri B. Well.

Committee members reviewed over 150 articles relating to library instruction and information literacy. At ALA Midwinter, seven members met to select the top twenty articles which provide a mixture of practical and theoretical perspectives from a variety of library environments.


The librarians at Abilene Christian University were looking at ways to improve their library instruction efforts aimed at students enrolled in the freshman seminar course. Baker describes how, over eight years, they continued to examine the course and alter the information literacy unit, using evidence-based methods. She describes three approaches they tried—a scavenger hunt, a simulated research model, and a course-integrated mini-research project—and talks about what they learned, including successes and failures. After each analysis, they look at how this new knowledge should impact their future decisions with regard to library instruction for these students.


This article analyzes IM reference in the context of information literacy instruction. Following a study of the presence of “instruction” in IM reference interactions, the authors argue that instruction should remain a key element of reference help even when offered virtually. This article asks and answers some important questions about IM reference and will contribute to the ongoing debates about IM reference as an effective tool for researchers and librarians.


Dickinson compares the American Association of School Librarians’ (AASL) information literacy standards to the theories of John Dewey. This comparison is useful because Dewey’s theories are likely to resonate with classroom teachers and can provide a theoretical platform for information literacy. Dickinson begins with a concise overview of Dewey’s theories and briefly discusses some of the common misinterpretations. She then relates his theories to the general concept of information literacy and to the specific information literacy standards approved by the AASL. While the AASL standards are aimed at K-12 librarians/media specialists, Dickinson’s interpretation of Dewey will be useful to librarians at all levels who are interested in collaborative teaching and in the integration of information literacy into the curriculum.


This article places “information literacy” in the context of wider theoretical approaches to literacy theory. Although much has been written on both fields independently, little literature aligns the more specialized literacy with the general field—something Elmborg identifies as a missing and essential element in information literacy discussions. This is a very important contribution to information literacy efforts, one that will broaden future discussions and will prevent library instruction practitioners from simply continuing down the same much-worn paths in their teaching methods.


Harada describes a pilot project to help school librarians develop evidence folders. These folders focus on assessment of student performance and can be used to communicate to administrators what students learn through the library media center. They can also be used in exchanging ideas with other librarians and in critiquing each other’s work. Harada describes the reflective process of an outcome-focused examination of instruction and provides details concerning the contents of the folders.


Holliday and Fagerheim describe the process taken at their library to implement an organized information literacy plan for two sequential English courses. Their needs assessment to see what research skills really gave students the most trouble highlighted a gap between what librarians and faculty had previously emphasized (tools such as databases) and what students needed (skills such as focusing a topic and evaluating sources). Librarians and English faculty were surveyed concerning which of the

continued on page 6
ACRL Information Literacy standards were best suited to be taught in the two core English classes. Based on these surveys and a close working relationship with the English faculty, the librarians developed a curriculum with specific learning objectives and activities for each class. They built in some flexibility for the advanced class, since the general course is less structured. They also describe how they are assessing these changes in their program.


Islam and Murno share findings from a twenty question survey that they developed and distributed to high school librarians across the United States. The survey resulted from the authors’ desire to gain a greater understanding of the depth and breadth of the information literacy instructional activities being carried out in high schools across the country. The survey asked School Library Media Specialists (SLMS) to respond to questions in the following four categories: the ‘information literacy skills most and least addressed by SLMS; SLMS’ perceptions of students’ overall information literacy competency standards; hindrances to optimal school library media center environments to information literacy instruction.’ These survey results can help guide both academic librarians and SLMS in information literacy program planning.


Klusek and Bornstein suggest information literacy skills are highly valued and recruited in the corporate world, even though employers do not identify with the terminology. To illustrate this, they analyzed twenty-one business and finance occupation profiles included in the Department of Labor’s Occupation Information Network (O’Net) for evidence of information literacy skills. O’Net’s profiles outline all facets of an occupation, including basic skills and abilities required for job success. Up to forty-six skills in each profile can be rated on a five-point scale from “Not Important” to “Extremely Important.” Using only the skills rated with an “Important,” “Very Important,” or “Extremely Important,” the authors mapped each profile’s essential job skills to analogous Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education. She assigned three levels of performance (Beginning, Proficient, and Advanced) to each learning objective. While students scored well overall and met the objectives, evidence pointed to deficiencies in critical evaluation and in consistent documentation. These results generated several critical revisions to the library’s information literacy tutorial. Knight concluded that her rubric worked well as a tool for authentic assessment of information literacy and helped to articulate clear performance expectations with students. It also served as a technique for evaluating instructional methods and as a bridge linking her to the faculty.


Matoush describes current and future “innovative” information literacy programs at the King Library, a joint academic (San Jose State University, SJSU) and public library (San Jose Public Library) in California. Public and academic librarians work together in the merged departments of reference, access services, technical services, and information technology. Aided by grants from the California State University system, the SJSU instructional staff has developed new information literacy tools. In addition to classroom instruction, the library offers general and subject-specific online tutorials. The information literacy skills of incoming students are assessed using the “Stairway to Success” online tutorial, and students taking part in freshman learning communities are urged to

information literacy as a highly valued competency in business. The results also hinted that higher order information literacy skills, such as critical thinking and evaluating information, may carry greater weight for employers than lower order information literacy skills. Klusek and Bornstein conclude that a successful college curriculum must go beyond course content and address the information skills necessary to succeed in the workplace.


Knight discusses an assessment project that uses a scoring rubric to evaluate first-year students’ mastery of course and information literacy objectives. Knight’s own participation in an assessment workshop for librarians that is funded by an Institute of Museum and Library Science (IMLS) grant led to the article. Using rubrics to assess student learning was part of the workshop curriculum and ultimately became the inspiration for the project. Building on lessons learned from an earlier pilot project, Knight worked with first-year seminar faculty to finalize the goals of the assessment project: to measure student achievement of course objectives; to analyze use of web sites and scholarly sources; to correlate scores with learning environment; and to flesh out opportunities for instructional improvement. To create the rubric, Knight correlated course learning objectives with the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education. She assigned three levels of performance (Beginning, Proficient, and Advanced) to each learning objective. While students scored well overall and met the objectives, evidence pointed to deficiencies in critical evaluation and in consistent documentation. These results generated several critical revisions to the library’s information literacy tutorial. Knight concluded that her rubric worked well as a tool for authentic assessment of information literacy and helped to articulate clear performance expectations with students. It also served as a technique for evaluating instructional methods and as a bridge linking her to the faculty.
complete tutorials on plagiarism and basic research skills. Future information initiatives include the integration of information literacy activities in the new dormitories at SJSU and active outreach to local community colleges whose students benefit from the joint public/academic library environment at the King Library.


This article provides practical guidelines and strategies for implementing an embedded librarian program. Matthew, an online instructor, and Schroeder, a librarian, discuss how such a program was established at the Community College of Vermont (CCV). With the rapid growth of online courses, twelve campuses in the CCV system, and only five full-time librarians, the authors collaborated to determine how library instruction could be provided. Working with faculty, a librarian was integrated into online courses through discussion forums in which students’ research questions were answered. Advertising and word of mouth among faculty helped the program grow from two courses in spring semester 2004 to forty-three courses in spring semester 2006. While challenges were encountered, the program worked best when a librarian worked with students on specific research assignments and when faculty reiterated to students the importance of asking a librarian for assistance. A combination of IP videoconferencing and NetMeeting software was another approach to providing library instruction to students at remote sites. Once again, when librarians and teaching faculty work together, students can only benefit.


Maybee uses a phenomenographical approach to investigate how undergraduate students conceptualize information use. The results of this study indicate that undergraduates conceptualize information use in three ways: sources, in which “information use is seen as finding information located in information sources;” processes, in which “information use is seen as initiating a process;” and knowledge base, in which “information use is seen as building a personal knowledge base for various purposes.” The author suggests that recognizing how students experience information use will aid librarians in planning future information literacy instruction sessions.


This article examines a cross-section of the resources from a larger study of the impediments to faculty-librarian collaboration for information literacy development (ILD) in post-secondary education conducted in the Republic of Ireland from 1999–2004. McGuinness uses qualitative analysis of comments made by faculty members in sociology and in civil engineering to provide “insight into the perceptions and beliefs of academic faculty with regard to the facilitation of ILD within undergraduate curricula.” She concludes that faculty members do not currently perceive information literacy as a priority and offers suggestions to address this issue.


Moore provides a thorough examination of the use of information literacy in New Zealand through utilizing the Bruce information literacy relational model. She uses seven concepts to consider how the implementation of information literacy on a national scale has impacted policies, teacher education, and teaching. After examining each facet, she provides an assessment of information literacy in specific areas. The article demonstrates how, if pursued properly, lifelong learning among students can be achieved with the cooperation of multiple agencies. It also provides a template on how information literacy can be integrated across a wide spectrum, e.g., across a university community and campus.


The authors provide an overview of a study regarding the effectiveness of library instruction in relation to online catalog searching. By analyzing student learning experiences, search strategies, and attention spans, Novotny and Cahoy provide teaching strategies in an effort to assess effective library instruction. They conclude that library instruction does have an impact if implemented properly. The article provides interesting ideas on assessing student perspectives and learning styles in relation to library instruction.

Written by two literature professors, this article offers an interesting philosophical look at teaching information literacy as an integrated part of literature classes. Throughout the article, the authors construct a coherent and engaging argument for “teaching information literacy as [they] teach writing—as a way of thinking through the problems and questions which students encounter in their lives.” Along with addressing philosophical issues, the authors provide sample assignments that can be adapted for other courses or assignments.


Your resources for instruction are dwindling; at the same time, the phone is ringing off the hook with new requests for instruction. Sound familiar? The authors describe a similar situation they faced, and the strategies they used to develop more effective integrated methods for information literacy. These strategies include true collaborative efforts with in-class instructors to the point of giving the instructors increasing responsibility for incorporating information literacy into their classes. In these cases, librarians train the trainers to instill a modicum of confidence in their abilities to teach the basic tenets of information literacy in their classrooms. An assessment of the model is also discussed.


The use of primary sources in research can not be understated, yet many undergraduate students are unaware of primary sources and do not understand the relationship between secondary and primary sources. The authors rectified this situation by developing a model of collaboration between an instruction librarian and a Special Collections librarian. The Special Collections librarian opens a general library instruction session by defining primary sources and by showing how they relate to secondary sources. The instruction librarian demonstrates how to find and evaluate secondary sources. Students are encouraged to handle materials from Special Collections to reinforce the lessons. An assessment of the model is discussed along with future directions. Guides used in the instruction sessions along with student evaluation forms are appended.


This article explores the possibility of a holistic pedagogy of information literacy to develop student learning and thereby develop lifelong learning skills. Ward emphasizes the need to go beyond teaching critical thinking skills as a major component of the information literacy program. Further discussed in this article are approaches to collaboration and the librarian’s place in curricular activities.


This article raises critical factors concerning library instruction that need to be included in the planning and implementation of the instruction session. These factors include but are not limited to the background of the student attending the session and the facility that is used to house the library instruction session. Of particular interest are the survey that is used to identify information about students who are attending instruction sessions and the survey results which will have an impact on planning future instruction sessions. Additionally, the pedagogy used to address the learning styles of the students is crucial in the ever-developing library instruction program.

Top 20 (continued from page 7)

Have you created an instruction program or developed a unique classroom strategy?

Please share your experiences with LIRT.

Send your articles to Jeff Knapp (jeff.knapp@psu.edu)
Dear MMM: Interestingly enough, the concept of metadata has been around for a while in the computer science field, and has many definitions. Priscilla Caplan provides an excellent summary of the history and definitions in Metadata Fundamentals for Librarians, with definitions being as generic as “data about data” to those that are highly detailed. Ultimately, she defines metadata as “structured information about an information resource of any media type or format.” The information resource may or may not be digital, may or may not be accessible electronically, and the information may be “intended for human or machine consumption”. (Caplan, 3)

Examples of metadata that most people would recognize, even if unfamiliar with the term, include: the user-defined tags found on sites like del.icio.us or flickr; the information that displays in a list of Google search results (unstructured metadata); the FDA information that appears on food and beverage items in grocery stores; or the information found for books at Amazon.com or in online catalogs (structured metadata).

To go further, the metadata breaks down into 3 specific types:

- **Descriptive Metadata**: Sometimes referred to as “intellectual” metadata, this is information associated with an information resource and enables “discovery.” This is the type of metadata most librarians know because it’s used in online catalogs and other databases.

- **Administrative Metadata**: The information associated with the management of information resources. Some specific types of administrative metadata include (but are not limited to): preservation metadata (information essential for the long-term care of digital objects); technical metadata (information that details the creation of digital objects); and rights metadata (information on usage rights).

- **Structural Metadata**: The information associated with relationships between different information resources. A simple example is that of a book in which each of the pages is digitized as an individual object. Structure must be in place to allow the individual objects (pages) to be assembled and viewed sequentially. Additionally, specific sequentially-ordered pages are associated with chapters. All of the structured files comprise the complete digital object (compound object) and this “structure” is used by the end-user to view the digital book in the same way she views the physical book.

An object from the Baylor University Library Digital Collections illustrates these different types of metadata. This example is a 3-page pamphlet titled, “A Hole in the Wall” (http://tinyurl.com/yugg94). Descriptive metadata for the entire pamphlet entails:

<table>
<thead>
<tr>
<th>Title</th>
<th>A Hole in the Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>a4520</td>
</tr>
<tr>
<td>Creator Name</td>
<td>Americans United for Separation of Church and State</td>
</tr>
<tr>
<td>Creator Information</td>
<td>1633 Massachusetts Ave., NW, Washington, DC 20036</td>
</tr>
<tr>
<td>Subject</td>
<td>Americans United</td>
</tr>
<tr>
<td>Physical Description</td>
<td>two-color multi-fold mailer on card stock - [3 page]</td>
</tr>
<tr>
<td>Content Description</td>
<td>Funds solicitation mailer issued by POAU</td>
</tr>
<tr>
<td>Place of Publication</td>
<td>Americans United for Separation of Church and State</td>
</tr>
<tr>
<td>Note</td>
<td>No date specified</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
</tbody>
</table>

Along with administrative metadata for a specific “page” in this compound object:

<table>
<thead>
<tr>
<th>Title</th>
<th>page 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier</td>
<td>a4520001</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
<tr>
<td>Fulltext</td>
<td>keep church and state separate</td>
</tr>
<tr>
<td>File Name</td>
<td>01.tif</td>
</tr>
<tr>
<td>Media Type</td>
<td>JP2</td>
</tr>
<tr>
<td>File Size</td>
<td>1002.59 KB</td>
</tr>
<tr>
<td>Height</td>
<td>1100</td>
</tr>
<tr>
<td>Width</td>
<td>2150</td>
</tr>
<tr>
<td>Checksum</td>
<td>0x99D8DCFA</td>
</tr>
<tr>
<td>Date Imported</td>
<td>2007-02-02</td>
</tr>
<tr>
<td>Full resolution</td>
<td>wood_collection-22-36_01.tif</td>
</tr>
</tbody>
</table>

And the compound object is “glued” together with structural metadata which looks like page links to the user, but the structure is created through the corresponding XML document:

```
<?xml version="1.0"?>
<cpd>
<type>Document</type>
<page>
<pageTitle>Page 1</pageTitle>
<pageFile>919_g2</pageFile>
</page>
...</cpd>
```

continued on page 10

By Billie Peterson, Baylor University
Billie_Peterson@baylor.edu

TECH TALK "Metadata"
TECH TALK

"Metadata"

Note that some administrative metadata (identifiers) is found in the descriptive metadata and some descriptive metadata (language and full text) is found in the administrative metadata. This conflation of metadata from one type of scheme to another is not uncommon. Also note the implied relationship among the identifiers for this compound object: a4520; a452001 (page 1); a452002 (page 2); a452003 (page 3). Even the naming convention for the identifier is structural metadata in that it facilitates the assembly of a single compound object.

The metadata for the pamphlet collection uses the “Dublin Core” standard, one of many existing metadata standards. Specifically, the unqualified (bare minimum) Dublin Core standard consists of 15 elements that are categorized in three areas (Library Technology Reports 2002, 20):

<table>
<thead>
<tr>
<th>Content</th>
<th>Intellectual Property</th>
<th>Instantiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Creator</td>
<td>Type</td>
</tr>
<tr>
<td>Description</td>
<td>Publisher</td>
<td>Format</td>
</tr>
<tr>
<td>Source</td>
<td>Contributor</td>
<td>Identifier</td>
</tr>
<tr>
<td>Relation</td>
<td>Rights</td>
<td></td>
</tr>
<tr>
<td>Coverage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All metadata schemes consist of defined elements (semantics) and the values assigned to the elements (content). Using the pamphlet example, one element is “title” and the content is “a hole in the wall”. Metadata schemes may specify whether an element is repeatable and whether it is mandatory, mandatory under specified circumstances, or optional. Additionally, metadata schemes may “specify content rules for how the content must be formulated (for example how to identify the main title) and/or representation rules for how content must be represented (for example capitalization rules). There may also be syntax rules for how the elements and their content should be encoded.” (Hodge, 3) The syntax rules are often in place for computers to process the scheme effectively. The actual encoding of metadata can take place in a variety of environments: HTML; SGML; XML; and RDF (Resource Description Framework), to name a few.

There are many metadata standards and schemes affiliated with libraries and archives:
- EAD: http://lcweb.loc.gov/ead/  
- MARC: http://www.loc.gov/marc/  
- MODS: http://www.loc.gov/mods  
- TEI: http://www.tei-c.org/  

And there are many standards outside of the traditional information professions:

- Cultural and Heritage Organization Initiatives  
  - Categories for the Description of Works of Art (CDWA): http://www.getty.edu/research/conducting_research/standards/cdwa/  

- Government Initiatives  
  - Federal Geographic Data Committee (FGDC): http://www.fgdc.gov/metadata/ (geospatial resources)  
  - Global Information Locator Service (GILS): http://www.gils.net/ (government resources)

- Learning Objects Initiatives  
  - Gateway to Educational Materials (GEM): http://www.thegateway.org/about/documentation  
  - Shareable Courseware Object Reference Model (SCORM): http://www.adlnet.org/scorm/  

- Publisher Initiatives  
  - Online Information Exchange (ONIX): http://www.bisg.org/onix/  

There are also metadata standards that focus on administrative metadata . . .
- Administrative Metadata for Digital Audio Files: http://preserve.harvard.edu/resources/audiometadata.pdf  
- Dublin Core DCMI Administrative Metadata: http://www.bs.dk/standards/AdministrativeComponents.htm  

. . . and preservation metadata:
- The Cedars Project (CURL Exemplars in Digital Archives): http://www.leeds.ac.uk/cedars/metadata.html  

Metadata registries, such as the Dublin Core Metadata Registry (http://dublincore.org/dcregistry/) or SCHEMAS Metadata Registry (http://www.schemas-forum.org/registry), are useful databases that "promote the discovery and reuse of existing metadata definitions," which furthers the standardization of the existing schemes. Additionally, the Metadata Map (http://mapageweb.umontreal.ca/turner/meta/english/) provides a unique visual presentation of metadata schemes.

To keep up with metadata standards, you can monitor a categorized list of "Current Operational and Proposed Metadata Standards," maintained by Marcia Lei Zeng at: http://www.slis.kent.edu/~lzeng/metadatabasics/completelist.htm, as well as a list of tools that assist in the
Perhaps the most important function of metadata schemes and standards is their support of interoperability. Chan and Zeng state, “interoperability is one of the most important principles in metadata implementation” (Metadata Interoperability, Part I). As with metadata, there are many definitions for “interoperability,” but I’ll use Caplan’s definition: “search interoperability, or the ability to perform a search over diverse sets of metadata records and obtain meaningful results” (Caplan, 33). Not surprisingly, interoperability is one the most complex functions associated with metadata standards.

Hodge identifies two techniques to achieve interoperability:
- A cross-system search: Map search elements from different metadata schemes to a common set of search elements, and use that common set of elements to search across repositories. For example, the use of the Z39.50 standard to search across different databases that have many of the same elements (author, title, abstract, subject headings) but use different labels for those elements;
- Metadata harvesting: Have each repository translate the native metadata to a common set of core elements, and expose this metadata for harvesting. The user searches across multiple repositories using the harvester’s search interface, a technique used with the Open Archives Initiative (http://www.openarchives.org) (Hodge, 4).

No matter which of these techniques is used, interoperability is enabled through crosswalks. Crosswalks attempt to map the elements from one metadata scheme to another and can be used to implement either of the two options listed above. Additionally, crosswalks can be used to take data from one system and convert it for use in another system. For example, the metadata in a repository for theses/dissertations is mapped from Dublin Core to MARC, thereby automatically creating a MARC record for the online catalog. Crosswalks being made for very dissimilar standards generally take more time to implement. Therefore, many organizations “publish” their crosswalks for use by others. OCLC offers a collection of such crosswalks at: http://www.oclc.org/research/projects/mswitch/1_crossovals.htm.

One last, highly significant, metadata standard needs to be considered separately: the Metadata Encoding and Transmission Standard (METS), currently maintained by the Library of Congress (http://www.loc.gov/standards/mets/). Simply put, METS uses XML to wrap all of the standards (descriptive, administrative, and structural) associated with a digital object into a single “package.” A METS document can actually contain the XML coding for other metadata standards, such as MODS, or it can point to the location of the appropriate metadata. The significance of METS is that it makes it easier to manage of all the metadata used in a single institution’s different digital collections. It also improves the efficiency of sharing and transferring metadata among dissimilar repositories and facilitates the migration of digital objects from one environment to another as digital environments change over time, making preservation easier.

The value of metadata—especially for digital objects—is obvious. But there are also some significant problems associated with metadata: the production of good metadata is the most costly part of a digital project (both time and financial costs); and if the metadata is poor, not only is “findability” compromised, but the long-term survival of the digital collection may be at risk.

Is a “metadata librarian” just an upscale term for cataloger? Not really. While a traditional cataloger uses certain specific metadata schemes (MARC, AACR2, and Library of Congress Subject Headings) to describe information resources, a metadata librarian needs to be able to work with many more. A metadata librarian must be able to work with many other types of metadata schemes and modify and implement them for specific digital collections. You could say that a metadata librarian is a traditional cataloger on steroids!


Other resources that are helpful in keeping up to date include:
- Catalogablog – http://catalogablog.blogspot.com/
- Current Cites – http://tinyurl.com/2k7jd
Additional Resources


Library Technology Reports 38.5 (2002). Entire issue devoted to metadata topics.

Library Technology Reports 41.6 (2005). Entire issue devoted to metadata topics; an update of the 2002 issue.
"Metadata"

By Billie Peterson, Baylor University
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“Technology Left Behind - Where have all the Catalogers Gone?” Against the Grain 17.3 (2005): 92-3.

As always, send questions and comments to: Billie Peterson-Lugo at: Billie_Peterson@baylor.edu
STANDING COMMITTEES

Adult Learners - Assists library professionals to understand, find information or promote ideas on learning styles, teaching methods, and training resources most often associated with adult learners.

Conference Program - Plans the LIRT program for the ALA Annual Conference. Makes arrangements for speakers, room, handouts, and activities during the program.

Liaison - This committee shall initiate and maintain communication with groups within the American Library Association dealing with issues relevant to library instruction and shall disseminate information about these groups’ activities.

Newsletter - Solicits articles, prepares and distributes the LIRT newsletter. The Executive Board of LIRT serves as the Editorial Board for the LIRT newsletter.

Organization & Planning - Is responsible for long range planning and making recommendations to guide the future direction of LIRT. Reviews, revises, and updates the organization manual of LIRT. Recommends to the Executive Board, and through it to LIRT members, the establishment, functions, and discontinuance of committees and task-forces. Maintains the Constitution and Bylaws of LIRT and recommends amendments to those documents. Prepares a slate of candidates for LIRT offices and maintains records on procedures, candidates, and election results. Solicits volunteers for LIRT committees and maintains files of prospective committee appointees dates, and election results. Solicits volunteers for LIRT committees and maintains files of prospective committee appointees.

Public Relations/Membership - Publicizes LIRT purposes, activities, and promotes membership in LIRT. Develops brochures and news releases to inform members, prospective members, and the library profession about LIRT activities. Sponsors an exhibit booth at the Annual Conference. Organizes BITES (meals for instruction librarians to meet for food and discussion) at conferences.

Library Instruction Round Table News

c/o Lorelle Swader
American Library Association
50 E. Huron Street
Chicago, IL 60611

Publications - Establishes, maintains, and disseminates LIRT Publication Guidelines. Solicits ideas for publications and advises as to the appropriate means for publication.

Research - Identifies, reviews, and disseminates information about in-depth, state-of-the-art research concerning library instruction for all types of libraries. Pinpoints areas where further investigation about library instruction is needed.

Teaching, Learning, & Technology - Identifies and promotes use of technology in library instruction, with special attention given to technologies that enhance learning and can be easily adapted to a variety of different learning environments.

Transition from High School to College - This committee builds and supports partnerships between school, public, and academic librarians to assist students in their transitions to the academic library environment.

Please see our online committee volunteer form at http://www3.baylor.edu/LIRT/volform.html