LIBRARY INSTRUCTION ROUND TABLE NEWS

From The President

By Lisa Williams

I want to begin begin my last newsletter post as president of LIRT by thanking all LIRT members for helping continue the commitment to represent all types of libraries (academic, public, school, and special) in advocating library instruction. As I read through the LIRT conference committee reports it warms my heart to see the interest and excitement for library instruction our members bring to this organization. This excitement is reflected in the 2010 ALA Annual Program entitled "Capitalizing on Technology: A Teaching Technology Fair" in Washington, D.C.   A technology fair is a wonderful opportunity for anyone interested in learning new tips, tricks, or technology for instruction. I hope you all will stop by and visit with our presenters and take away something rewarding.

I am leaving the position as President of LIRT in good hands. Our incoming President is Kawanna Bright, whom I've really enjoyed working with both in her role as Vice President and as Chair of the Membership Committee. I believe that with her energy and passion, and with an enlightening LIRT retreat, we will continue to thrive and grow in ALA.

I do have one challenge for LIRT members attending ALA Annual 2010: Please encourage a friend who isn't a member of LIRT to join you at the membership fair on Sunday, June 27th.

Lisa

Inside the Web edition

The purpose of LIRT is to advocate library instruction as a means for developing competent library and information use as a part of life-long learning.

ALA ANNUAL CONFERENCE & EXHIBITION

DC 2010

JUNE 24-29

Preliminary Schedule for ALA Annual, Washington, D.C.

Friday, June 25
LIRT Retreat: 8:00 A.M.–4:30 P.M. (BY INVITATION ONLY)
Grand Hyatt Washington, Burnham

Saturday, June 26
Executive Committee I: 8:00–9:00 a.m.
Grand Hyatt Washington, Constitution A

Steering Committee I: 9:00–10:30 a.m.
Grand Hyatt Washington, Constitution A

All Committees I: 10:30 a.m.–12:00 p.m.
Grand Hyatt Washington, Constitution A

Sunday, June 27
Membership Fair, "LIRT 101:" 8:00–10:00 a.m.
Washington Convention Center, 144A-C

Program: "Capitalizing on Technology:
A Teaching Technology Fair:" 10:30 a.m.–12:00 p.m.
Washington Convention Center, 144A-C

Monday, June 28
All Committees II: 8:00–9:00 a.m.
Renaissance Washington, Grand BR North

Steering Committee II: 9:00–10:30 a.m.
Renaissance Washington, Grand BR North

Executive Committee II: 10:30 a.m.–12:00 p.m.
Renaissance Washington, Grand BR North

by Jeff Knapp
jeff.knapp@psu.edu

From The Editor

I can't believe it's been five years! That's right: this issue marks the end of my fifth, and last, year as editor of *LIRT News*. It has been a very satisfying experience, being able to work and communicate with librarians all around the country, in all kinds of libraries. I hope I have done LIRT justice in putting the newsletter together over these years.

There are some folks I'd like to thank for their help during my time as editor: Caryl Gray, who got me started in the position; Carol Schuetz, who soldiered on as Production Editor when it was hard to find someone with the software experience to take on the job; Jeff Gutkin, who accepted the Production Editor job at his very first LIRT meeting; Susan Gangl, for taking on the Production Editor job and creating a new design for *LIRT News* that looks wonderful; Rebecca Martin, who will be succeeding me as editor and will surely deliver a great publication; all those who served on the Newsletter Committee, who made my job easy; and finally, everyone in LIRT who provided articles for the newsletter who made it easier to fill these pages.

I will be working with Rebecca Martin and Susan Gangl to make sure the transition is a smooth one, because *LIRT News* is going through more than just a personnel transition. As I have mentioned in the past few issues, LIRT is considering moving *LIRT News* to an electronic-only publication. It is planned that this question will be addressed at the LIRT Retreat, to take place in Washington, D.C. during ALA Annual 2010. At this retreat, LIRT officers, past officers, and other invited guests will decide on the future of *LIRT News*. Do we want to continue printing and mailing, or do we want to go online only? Do we want to email a PDF file, or deliver the content in another format? What should LIRT do with any financial savings that we see if we do this? These are just some of the questions we'll be considering.

I invite you to send me your thoughts and feelings about the future of *LIRT News*. Have a great spring, and I hope to see many of you in D.C. in June!

Jeff

LIRT Retreat Update:

The Organization and Planning Committee is pleased to announce the LIRT Retreat will be facilitated by Shelley Phipps, Assistant Dean Emerita from the University of Arizona Library. Shelley brings with her many years of experience in team and organization development as well as ALA and ACRL service. The Retreat will be held on June 25, 2010 in Washington D.C. The facility will be announced in May. Invitations have been emailed to selected LIRT leaders. If you received an invitation, please member to RSVP by May 1.

The purpose of the LIRT Strategic Planning Retreat is to enhance, increase, and expand communication to School, Public, Special, and Academic instruction librarians. At the conclusion of the retreat, we want to take away plans to enhance and expand communication and increase the value of LIRT activities to instruction librarians.

Request for Nominations: LIRT Officers 2010–2011

The LIRT Organization and Planning Committee seeks nominations for three offices:

Vice-President/President-Elect:
This is three year commitment and the Vice-President/President-Elect serves on the Executive Board as Vice-President/President-elect, President, and Past President. As Past President, you also chair the Organization and Planning Committee.

Vice Treasurer/Treasurer-Elect:
This is a two year commitment and the Vice Treasurer/Treasurer-Elect serves on the Executive Board as Vice Treasurer and Treasurer.

Secretary:
 This is a two year commitment. During the second year of the Secretary's term, the Secretary becomes the Archivist. The Secretary is also a member of the Executive Board.

Please look at the *LIRT Manual* for more information about each position. Nomination forms are available online at http://fleetwood.baylor.edu/LIRT/nomination.php . You may self-nominate. Please forward the name of the prospective candidate and office for which he or she is being nominated to Lisa Williams (williamsl@uncw.edu) .

Join in the Discussion of "Student Transitions" at ALA Annual in Washington DC!

"Helping Students Transition to College"
Saturday, June 26, 4-5:30 P.M.

The LIRT Transitions to College Committee will host "Helping Students Transition to College," an ACRL Instruction Section Discussion Group. Come ready to discuss strategies and challenges in helping students succeed in their first year of college. Librarians from all settings are invited to share their experience and expertise and to explore new ways to collaborate on helping students gain the research skills they need to succeed in their new educational environment.

Watch the LIRT-L list for location of the program!

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)

LIRT TOP TWENTY

By the LIRT Top 20 Committee

1. Archer, Joanne, Ann M. Hanlon, and Jennie A. Levine. "Investigating Primary Source Literacy." *The Journal of Academic Librarianship* 35.5 (2009): 410–420.

Giving a much needed boost to research on "primary source literacy," librarians at the University of Maryland set out to investigate their students' knowledge of primary source materials. The authors developed an online guide of tools and resources to assist in primary source research. They then studied students' knowledge of these materials by arranging a user study consisting of undergraduate students. The goal was to determine if the online guide successfully assisted students in their research efforts. Although the results were mixed, the article demonstrates the need for students to be able to define primary sources, familiarize themselves with key terms and tools, and apply their existing knowledge to locate primary resources. As more classes delve into primary sources, this article will be of interest to instruction librarians, history bibliographers, and archivists alike.

2. Baildon, Mark, and James S. Damico. "How Do We Know?: Students Examine Issues of Credibility with a Complicated Multimodal Web-Based Text." *Curriculum Inquiry* 39.2 (2009): 265–285.

This article examines the way learners engage multimodal texts—texts that mix images, music, graphic arts, video, and print—and the methods used to evaluate credibility of them. Using *Loose Change*, a documentary first published on the Web in 2005, as an example of a multimodal text,. Baildon and Damico parse the process by which a group of 32 ninth-grade students judged the credibility of the film's claims. The first half of the article discusses the theories surrounding the analysis of multimodal texts. The second half outlines the research methodology and describes the research outcomes. A particularly interesting outcome from the study was the impact of visuals in assessing credibility. In the authors' own words, "this supports the notions about print being supplanted by images in the new media age and the corresponding need for greater attention to issues of visual literacy as a core component of multimodal literacy education." This article is particularly useful to librarians and faculty members who engage learners with text, images, and video that can be increasingly complex to evaluate.

3. Ballard, Susan D., Gail March, and Jean K. Sand. "Creation of a Research Community in a K-12 School System Using Action Research and Evidence Based Practice." *Evidence Based Library and Information Practice* 4.2 (2009): 8–36.

Interesting both for the data collected as well as the methodology used, this article reports the results of an investigation of high school and elementary school students' knowledge about "ethical... use of ideas and information[.]" The authors used action research which is intended to lead to specific action rather than generalizable data, though they claim it may be transferable to similar populations. High school students were surveyed to assess their understanding of the ethics of behaviors such as fabricating data or plagiarizing. While a high percentage of students were able to identify "direct instances" of plagiarism as unethical, far fewer were

clear on the ethics of behaviors including "random citations" to meet assignment requirements. High school teachers were surveyed about their perceptions of typical student behavior relating to the ethical use of information as well as which behaviors they had challenged. Fifth-grade students were given a similar (but simplified) survey about their understanding of ethical uses of information. Students then completed a unit that included a research project and direct instruction about ethical use of information. A post-survey showed improvement in students' understanding of ethical use of information. Of particular interest was that 31% of fifth-grade students in the pre-test weren't sure or believed it was not ethical to ask a librarian for help. Even in the post-survey the number was 10%. In addition to an improved understanding of students' understanding of ethical use of information, the research also led to a stronger collaboration between classroom instructors and library media specialists, improved information literacy instruction, and even funding of continued research projects.

4. Barratt, Caroline Cason, Kristin Nielsen, Christy Desmet, and Ron Balthazor. "Collaboration is Key: Librarians and Composition Instructors Analyze Student Research and Writing." *portal: Libraries and the Academy*. 9.1 (2009): 37–56.

This article provides helpful guidance for librarians working with composition programs, but the tool used to gather data is what makes it truly fascinating. All students taking First-year Composition at the University of Georgia are required to upload their papers into <emma> ,an "open-source electronic markup and management application" developed by the university. <emma> allows both students and instructors to use XML to mark up students' work. The result is a valuable assessment tool that also serves as a repository of useful data for citation analysis. The features of <emma> allowed researchers to take a broad and anonymous sample of the student citations, and allowed researchers to see specific assignment feedback. Researchers' findings were in line with earlier citation research, which finds that a combination of "carefully considered" assignment design and formal library instruction result in the best student bibliographies. Researchers also noted some disciplinary differences in the values of writing pedagogy and library research that should be explored further.

5. Dahl, Candice. "Undergraduate research in the public domain: the evaluation of non-academic sources online." *Reference Services Review* 37.2 (2009) 157–163.

Dahl makes a good case to add some needed complexity to the ways students are taught to evaluate web-based information sources. She suggests a switch to evaluating whether items are suitable for a particular purpose rather than simply evaluating whether an item is "academic" (as many traditional checklists do). She also argues for valuing non-peer reviewed/scholarly information found online for undergraduate research, noting that "the lines between traditionally defined academic and non-academic sources are becoming continually more blurred." Dahl draws on other authors' work to suggest new methods for students to evaluate

materials based on the appropriateness of the task to the level, if the material supports their point in some way, if the material adds value, and if the material presents legitimate information. She also recommends that students compare websites to one another and to other sources of information. Dahl is careful to note that it is essential for librarians to be aware of the stance of the faculty member giving the assignment when doing this. The article does have one unfortunate flaw: Dahl uses the term "public domain" to refer to any freely available web resource. This does not, however, detract from the author's key message.

6. Figa, Elizabeth, Tonda Bone, and Janet R. MacPherson. "Faculty-Librarian Collaboration for Library Services in the Online Classroom: Student Evaluation Results and Recommended Practices for Implementation." *Journal of Library & Information Services in Distance Learning* 3.2 (2009): 67–102.

In an effort to make a long-term connection with distance students, librarians at the University of North Texas created the program "Librarian in the Classroom" (LITC). This article includes a comprehensive review of the literature relating both to distance students' library service and instruction needs as well as to the integration of librarians into the classroom. This study leads to an exploration of the reactions of the students, the professor, and the librarian to the LITC program. It is important to note that the LITC course examined in this paper was a Library Science course and the course professor is also a librarian which may impact the respondents' interest in library services. Students were surveyed both before and after the class. While many more students completed the pre-survey than the post-survey, a wide majority of both groups indicated that the LITC program was a "value-added service." While responding to reference questions for an online student took more time for the librarian than it would face-to-face, the use of a class bulletin board allowed all enrolled students to see the answer. The class librarian also felt that a personal interaction with an individual librarian improved distance students' comfort using the library in the future. The professor, while also a librarian, found that having an "insider-librarian" allowed her to focus on teaching rather than troubleshooting problems. An appendix to the article includes a lengthy list of recommended practices for both librarians and for faculty interested in implementing a Librarian in the Online Classroom program.

7. Fleming-May, Rachel, and Lisa Yuro. "From Student to Scholar: The Academic Library and Social Sciences PhD Students' Transformation." *portal: Libraries and the Academy* 9.2 (2009): 199–221.

In this article, the authors discuss a project to shed light on the information-seeking behaviors of doctoral students in order to provide academic librarians with insight into how best to assist them. The authors began their research by conducting a pilot survey of graduate students. The survey asked the students to explain their research process from beginning to end, how they prepare to conduct research, and their approach to the literature review. This data led the authors to investigate the doctoral students' behavior more deeply by conducting three focus groups of 24 students. The focus groups were asked how they conducted research, how they

used the library, what role library resources and services played in their research, and how the library could serve them better. The focus group discussions and the authors' observations led to the revelation that "emphasizing … the changes in knowledge, skills, responsibility, and the internal and external identity that students experience shape their information behavior." It became apparent that doctoral students were hesitant to ask for help from a librarian and often relied more heavily on assistance from faculty mentors. The authors also surveyed academic librarians to determinegauge their familiarity with the nature of doctoral study and how well they understood doctoral students' information needs. They found that most academic librarians lack the kind of research background akin to that of doctoral students and that "familiarity with the nature and process of earning the PhD would give academic librarians helpful insight about opportunities for providing services and assistance" to doctoral students.

8. Giullian, Jon. "Slavic Folklore, the Library, and the Web: A Case Study of Subject-Specific Collaborative Information Literacy at the University of Kansas." *Slavic & East European Information Resources* 10.2/3 (2009): 200–220.

This article details the steps taken to integrate information literacy skills into a 100-level Slavic folklore course at the University of Kansas. The course is geared towards first- and second-year students who need to take a course in the humanities. Librarians went beyond the typical 'one-shot' and worked with the instructor on designing multiple instruction sessions. Over the course of about two years, the librarians and instructor tried many different assignments incorporating research and evaluating sources, including online tutorials, course research assignments, a "bibliographic trail" exercise, bibliographic essays, and even a student-compiled Dictionary of Slavic Folklore. The article is useful in that it shows in great detail how librarians modified their approach to instruction over time. The author is also refreshingly honest about what strategies worked, and his theories on why some some strategies did not work . The article offers an excellent outline of the thinking and effort required for effective instructional design and how librarians might engage in instructional design. It also showed how committed the librarians were to making the instruction sessions successful. The article clearly shows that it takes teamwork, communication, flexibility, and a can-do attitude in order to integrate information literacy into a course.

9. Jacobs, Heidi L M., and Dale Jacobs. "Transforming the One-Shot Library Session into Pedagogical Collaboration: Information Literacy and the English Composition Class." *Reference & User Services Quarterly* 40. 1 (2009): 72–82.

Collaboration is an aspect of academia in which librarians are becoming key players. Jacobs and Jacobs present an article detailing the result of a collaborative effort between a rhetoric and composition professor and an information literacy librarian. The observation that research is a process much like writing led the authors to develop questions and reflect on the teaching of information literacy in English composition courses. Understanding that

multiple perspectives provide insight and opportunity, an additional aspect of the collaborative effort was implication for the future. The authors provide an overview of their collaborative effort, development of assignments, and the resulting spread of dialog to other faculty concerning their findings. This article is useful for librarians looking to develop information literacy initiatives through collaboration with faculty.

10. Jeffrey, Keven M., Lauren Maggio, and Mary Blanchard. "Making Generic Tutorials Content Specific: Recycling Evidence-based Practice (EBP) Tutorials for Two Disciplines." *Medical Reference Services Quarterly*. 28.1 (2009): 1–9.

This article outlines the efforts of librarians at the Alumni Medical Library, Boston University Medication Center. The librarians developed two evidence-based practice tutorials which were adopted by courses at the University. Since the mid 1990s, the librarians at the Alumni Medical Library have taught students the skills to formulate clinical questions and locate information by using medical resources. The tutorials were developed to assist with this process and provide access to knowledge. Details are provided on the methods used to develop the tutorials, format, and customization of content. Medical librarians will find this article useful for the subject specific detail and tutorial development for the discipline while general readers will be interested in reading of the technical aspects of developing tutorials.

11. Julien, Heidi, and Shelagh K. Genuis. "Emotional Labour in Librarians' Instructional Work." *Journal of Documentation* 65.6 (2009): 926–937

With increased emphasis on the teacher-librarian model comes both rewards and stress. Emotional labor—where workers are expected to espouse certain emotions as part of a job and to promote the organization's goals can readily be applied to teaching librarians. In this article, the authors look at how librarians perceive their teaching role, with the positive and negative experiences associated with it. Focusing on Canadian public and academic librarians, the study draws from qualitative interviews and participants' diaries. Although many of the participants derived pleasure from their instructional work, many had negative or stressful experiences as well. The authors recommend that institutions take into account the "affective experiences" of librarians by offering pedagogical training, increased preparation for classes, and that they the opportunity to express frustrations and stresses associated with teaching. Those interested in the "burn out" factor among instruction librarians will enjoy this article.

12. Knecht, Mike, and Kevin Reid. "Modularizing Information Literacy Training via the Blackboard eCommunity." *Journal of Library Administration* 49.1 (2009): 1–9

In this article, librarians at Henderson Community College in Kentucky describe their experiences using the eCommunity feature of Blackboard course management software as part of their information literacy program. Among the advantages of using Blackboard are convenience of access and immediate feedback for students. In addition to popularity among students, the authors point to

increased faculty participation in information literacy programs as one of the positive effects of using Blackboard. The ability of the Blackboard system to monitor and document student results is highlighted as a way to provide concrete outcomes for accrediting agencies. This article provides a detailed example for others who are considering online instruction efforts.

13. McMillan, Margy. "Watching Learning Happen: Results of a Longitudinal Study of Journalism Students." *Journal of Academic Librarianship* 35.2 (2009): 132–142.

As part of a five year qualitative, longitudinal study of journalism students at Mount Royal College, MacMillan charts and analyzes changes in personal growth, university curriculum, and the online information environment. The students attended sixteen formal library sessions during their regular course work, and sessions included close collaboration with faculty and exposure to reference, database, and information management tools, as well as authentic assignments. Throughout the duration, students reported and reflected upon their experiences through a series of ungraded resumes called I-Skills, and, after MacMillan's phenomenographic analysis, she posits that learning about databases and the internet is not as much about skill as a "set of strategies." The richness of the study lies in its study of students' own words.

14. Maggio, Lauren A., Megan Bresnahan, David B. Flynn, Joseph Harzbecker, Mary Blanchard, and David Ginn. "A case study: using social tagging to engage students in learning Medical Subject Headings" *Journal of the Medical Library Association*. 97.2 (2009): 77–83.

Students in a Master's of Arts in Medical Sciences program who were enrolled in a required Biomedical Information course completed an assignment that used natural language tagging in order to better understand the controlled vocabulary of MeSH. Students learned firsthand the pitfalls of natural-language tagging including an abundance of synonyms, spelling errors and differences, and varying levels of specificity. This assignment helped the students to understand the purpose of controlled vocabulary. While less than 10% of this 186 person class were able to "recognize and select MeSH terms related to a specified MEDLINE article" before the exercise, that number jumped to slightly over 78% afterwards and 46% of students found MeSH to be a clear concept. The activities described could easily be adapted to teach students about the value of any controlled vocabulary and would likely be effective with other students as well.

15. Markey, Karen, Fritz Swanson, Andrea Jenkins, Brian Jennings, Beth St. Jean, Victor Rosenberg, Xingxing Yao, and Robert Frost. "Will Undergraduate Students Play Games to Learn How to Conduct Library Research?" *Journal of Academic Librarianship* 35.4 (2009): 303–313.

Many academic libraries have explored the idea of creating games in order to teach students how to use library resources. The authors

of this article explore whether or not students are interested in an online game as a method of library instruction and how their feelings about games compare to their feelings about more traditional instruction methods. Game-activity logs and post-game interviews were used to gauge students' level of interest in this method of instruction. The article includes many direct quotes from the interviews and provides insight into the thoughts of college students. It will be useful for librarians thinking about developing their own online library instruction games.

16. Oakleaf, Megan, and Neal Kaske. "Guiding Questions for Assessing Information Literacy in Higher Education." *portal: Libraries and the Academy* 9.2 (2009): 273–286.

This article aids academic librarians seeking to assess information literacy by asking six questions applicable to a wide range of institutions. After addressing these questions, such as "What are the stakeholder needs?" and "Will the assessment tell us what we need to know?" readers will be able to better evaluate which assessment approaches are most suitable at their institution. The authors explain the significance and intent of each question, breaking the larger guiding questions into sub-questions to allow for full explanation. This article will prove highly useful to librarians involved in information literacy assessment, as well as those interested in information literacy more generally.

17. Oud, Joanne. "Guidelines for Effective Online Instruction using Multimedia Screencasts." *Reference Services Review* 37.2 (2009): 164–177.

Oud draws upon the field of cognitive psychology to provide a number of criteria to consider while developing instructional multimedia such as screencasts and videos. Because multimedia is more difficult for learners to process than text or images alone, the author advises tutorial authors to minimize the cognitive load required of learners. It is also recommended to Incorporate several key characteristics of effective online instruction such as interactivity, feedback, and promoting critical thinking.. This article will be particularly useful to librarians who provide online instruction, especially those planning to create screencasts or revising existing tutorials. A helpful checklist summarizing the author's recommendations is included.

18. Sorensen, Charlene, and Candice Dahl. "Google in the Research and Teaching of Instruction Librarians." *Journal of Academic Librarianship* 34.6 (2008): 482-488.

The authors designed a survey to assess how and why librarians use Google; how that use either aligns with or contradicts the way they teach students to use Google for research; and how much of what librarians teach about Google is influenced by faculty. The

survey consisted of 22 questions, five of which were open ended. Out of 144 surveys sent out, 49 responded, for an overall response rate of 49%. Findings included that librarians use Google as both a starting point for research and as a last resort when other methods have failed. Survey respondents also used Google because of its convenience and because it includes sources such as government information, grey literature, and conference presentations, whichthat are not indexed in library databases. There was also a significant difference between how often librarians teach students to use Google and their own use of Google for research. The survey also found that when faculty provide guidelines for acceptable use of Google, librarians were significantly less inclined to incorporate that into their instruction. The authors feel that discussions about Google need to move away from its viability as a research tool, and instead focus on encouraging the critical thinking skills required to use it effectively for academic research.

19. Tronstad, Bryan, Lori Phillips, Jenny Garcia, and Mary Ann Harlow. "Assessing the TIP Online Information Literacy Tutorial." *Reference Services Review* 37.1 (2009): 54–64.

This study provides the assessment results for a homegrown tutorial at the University of Wyoming Libraries. The tutorial known as TIP, or Tutorial for Information Power, includes five modules addressing and incorporating the 2000 ACRL Information Literacy Standards. To study the tutorial's effectiveness in student learning, researchers developed and administered pre- and post-tests. Additionally, the time students used to take the tests were compared and contrasted with students who took and performed well on the tests. This data demonstrates to readers that online tutorials are useful for teaching information literacy; however, more study is needed in terms of students' knowledge base before designing pre- and post-tests.

20. Yukawa, Joyce, and Violet H. Harada "Librarian-Teacher Partnerships for Inquiry Learning: Measures of Effectiveness for a Practice-Based Model of Professional Development." *Evidence Based Library & Information Practice* 4.2 (2009): 97–119.

This article analyzes the outcomes of a practice-based professional development course designed for teams of teachers and librarians. Teams worked collaboratively over the course of one year, creating and implementing units of inquiry-focused study for their K-12 students. The authors include a detailed description of how the course was designed, and detail the various tools participants used to report back data needed to assess and modify the course. Based on the study's findings, this practice-based model of professional development appears to be effective long term. Although devised for K-12 educators and librarians, the study provides a framework that could be modified for professional development at the post-secondary level. Additional refinement is ongoing to ensure the model is widely applicable.

TECH TALK: Linked Data

By Billie Peterson, Baylor University
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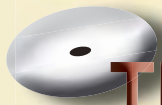
Dear Tech Talk: I was at a conference recently when one of the speakers made reference to "Linked Data". He didn't say much about it, but what he did say was intriguing; however I didn't quite understand it. What should I know about "Linked Data"? —Linked Data Loosely Discerned

Dear LDLD: Wikipedia states that Linked Data is "a term used to describe a recommended best practice for exposing, sharing, and connecting pieces of data, information, and knowledge on the Semantic Web using URIs and RDF." (http://en.wikipedia.org/wiki/Linked_Data) Linked Data is a subset of the Semantic Web movement and RDFs and URIs are the pieces of the enabling technology, but the essence of Linked Data is held in the phrase: "*exposing, sharing, and connecting pieces of data*."

For the most part, the Web as it currently exists consists of links to pages, documents, even databases—items that are made up of data, but not the data itself. Additionally, links on Web pages are simply links. The links may have context for humans who can read the surrounding text, but there is no context for machines—which becomes abundantly clear whenever one does a typical Google search! To gain a better understanding of the power of access to raw data, first view the short video, "Hans Rosling Shows the Best Stats You've Ever Seen." (http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html) Also, visit Rosling's Gapminder website: http://www.gapminder.org/. Next, view the video, "Tim Berners-Lee on the Next Web". (http://www.ted.com/talks/tim_berners_lee_on_the_next_web.html)

In this last video, one example of Linked Data identified by Berners-Lee is DBpedia. DBpedia "extracts structured information from Wikipedia and makes this information available on the Web. DBpedia allows you to ask sophisticated queries against Wikipedia, and to link other data sets on the Web to Wikipedia data." (http://dbpedia.org/) Take a look at DBpedia, especially the "Use Cases" page (http://wiki.dbpedia.org/UseCases). Like Rosling's Gapminder, these examples demonstrate the power of being able to access, use, and re-use different bits of data directly.

In both the video and in print, Berners-Lee makes an impassioned argument for Linked Data and identifies four simple rules for Linked Data to work:

1. Use URIs as names for things.
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information, using the standards (RDF, SPARQL)
4. Include links to other URIs. So that they can discover more things. (http://www.w3.org/DesignIssues/LinkedData.html)

Once again, URI and RDF are referenced. So perhaps an explanation of these two points is appropriate. URIs (Uniform Resource Identifiers) are most likely familiar. Any library with a DSpace installation knows that DSpace uses the Handle System (http://www.handle.net/) to create URIs for each record in the institution's DSpace implementation. This URI will not change and will always point to that specific DSpace record, although it is possible for the content of the record to change. DOIs (http://www.doi.org/) are another familiar example of URIs: persistent links most often seen in association with individual journal articles.

Berners-Lee's concept of a URI is fundamentally the same, but he emphasizes the implementation of "Cool URIs" —URI's that will still function "in 2 years, in 20 years, in 200 years;" URIs with syntax that is created through "thought, and organization, and commitment" and excludes structures that may change over time. (http://www.w3.org/Provider/Style/URI)

RDF stands for Resource Description Framework and is a "language for representing information about resources in the World Wide Web." (http://www.w3.org/TR/2004/REC-rdf-primer-20040210/) The RDF standard implements this concept by creating relationships between "things" on the Web using "triples." A triple is a statement that consists of a "Subject," a "Predicate," and an "Object."

Singer places the RDF standard into a more familiar library context by saying, "The 'subject' of the triple is a URI that represents a resource or a concept. . . The 'predicate' [property] defines a particular attribute of this resource, such as its title. . . The 'object' can come in one of two forms: as a resource that is simply expressed as another URI (this is how resources are related to one another), or as a literal, which may be a text string, a number, a date, and the like. A triple can say only one thing." (Singer, 118)

Singer also provides an example in which the journal, *Acta Psychologica* has a URI (http://example.org/ex/Acta+Psychol/0001-6918/). The full text of *Acta Psychologica* is accessible from *Academic Search Premier*, which also has a URI (http://example.org/ex/EBSCO/ASP). Using existing vocabularies (Dublin Core and RDF), the following triples describe information about *Acta Psychologica:* its title; that it's a journal; and that it's included in *Academic Search Complete*.

Subject	Predicate	Object
http://example.org/ex/Acta+Psychol/0001-6918/	dc:title	"Acta Psychologica"
http://example.org/ex/Acta+Psychol/0001-6918/	rdf:type	http://purl.org/ontology/bibo/Journal
http://example.org/ex/Acta+Psychol/0001-6918/	dcterms:isPartOf	http://example.org/ex/EBSCO/ASP
http://example.org/ex/EBSCO/ASP	dc:title	"Academic Search Premier"

A collection of these statements about the thing being described is a "graph;" there's no limit on the number of triples that can be used to describe a resource and the predicates can be taken from multiple vocabularies. Additionally, if a "Linked Data Agent" wants to know more about *Academic Search Complete*, it could follow that link. (Singer, 118–119)

Another example of the use of RDF triples using a MARC record is provided in the *Library Technology Reports* chapter, "Library Data in the Web World." Take this MARC tag for a publication statement for the book *Raintree County*:

260 $a New York : $b Viking Penguin, $c 1994

Although not coded like Singer's example, this example provides three RDF triples that represent the **data** and **relationships** found in this MARC tag for this MARC record:

New York → is place of publication of → Raintree County
Viking Penguin → is publisher of → Raintree County
1994 → is date of publication of → Raintree County (Library Data in the Web World, 8)

The use of Linked Data accomplishes two things:
It can enable access to individual bits of data on the Web, and
It makes that data readable by both humans and machines.

How does Link Data impact libraries? Most libraries have a significant investment in at least one database that provides access to the resources available from the library—the online catalog. For years, librarians have discussed constantly and frequently the issues associated with the proliferation of information silos found within libraries. Librarians and vendors work incessantly to eliminate these silos, as can be seen through time with the development of the Z39.50 standard, federated search interfaces, catalog user interface overlays such as Aquabrowser, Encore, or Endeca, and most recently discovery services such as EBSCO Discovery Service and Summon. However, none of these solutions really get to the heart of the silo issue—data silos—data imprisoned in MARC records.

Library catalogs consist of millions of individual records. Each record uses authority control and controlled vocabulary and is highly structured with rich data that describes items very specifically. These catalogs can be accessed *on the Web*, but, as expressed by others (Chudnov, Singer, "Library Data and the Web World"), they are not *of the Web*. If a user can find the library catalog, then she can search the catalog, **if** she uses the search interface provided by that catalog system. Until recently, library catalogs only provided access to information found in the MARC record—but there is a wealth of information that could supplement the MARC record. Some library catalogs have varying abilities to associate some data (Syndetics Solutions enrichment content or Google Books links) from outside the MARC record with individual catalog records, but these are limited solutions and only go one way.

What if a user's information quest would be more effective if she could query the data more directly and not rely on a systems search options? What if Wikipedia wants to make use of the data found in library authority records to improve the quality its information on authors and also provide connections to the body of an author's works? How many users really start their information searches with the online catalog versus the number of users who start their information searches with Google or other search engines? It's not possible for Google, or any other search engine, to find the rich data held by these catalogs. It's not possible for the rich authority records or controlled vocabularies to be used by other Web entities that might benefit from them. It's not possible because the individual bits of **data** are inaccessible to machines. However, the use of Linked Data in library catalog systems makes this possible, and, in fact, this has been done in LIBRIS (http://libris.kb.se/), the National Library of Sweden union catalog. See this Google search for Grisham, restricted to the LIBRIS domain as an example of what is possible: http://tinyurl.com/librisgrisham.

Within the library profession, there are already two movements that will assist with the implementation of Linked Data in library databases: FRBR (Functional Requirements of Bibliographic Records http://en.wikipedia.org/wiki/Functional_Requirements_for_Bibliographic_Records) and RDA (Resource Description and Access http://www.rdaonline.org/). FRBR has been addressed in a previous Tech Talk column (http://fleetwood.baylor.edu/LIRT/lirtnews/2005/sept05.pdf), and RDA is the soon-to-be-released replacement for AACR. The article "RDA in RDF" in *Library Technology Reports* discusses how FRBR and RDA work together and how RDA data elements are now being defined in RDF (http://metadataregistry.org/schema/list.html and http://metadataregistry.org/vocabulary/list/page/2.html).

The Library of Congress has created Library of Congress Authorities and Vocabularies (http://id.loc.gov/authorities) using SKOS (Simple Knowledge Organization System), an RDF-compliant language specifically designed for term lists and thesauri, one that supports broader and narrower relationship concepts. Take a look at the World Wide Web LCSH URI (http://id.loc.gov/authorities/sh95000541#concept) to see the LCSH entry for "World Wide Web". This data is visible and understandable to both humans and machines. View the "page source" to see more clearly the use of URIs and the SKOS language to define relationships in a way that machines can understand. This is only the beginning; Library on Congress plans to expand the system to allow more vocabularies and Linked Data relationships (Guenther)

Likewise, OCLC has made the Dewey Decimal Classification system available via Linked Data http://www.worldcat.org/devnet/wiki/DeweyInfoTechOverview. Once again, looking at a specific example (http://dewey.info/class/641/about) shows content that is both human readable and machine readable

Last, the eXtensible Catalog Project (http://www.extensiblecatalog.org/) plans to implement this open source catalog system using Linked Data. In her presentation, Bowen states that one of the metadata goals for the eXtensible Catalog is to "build open source software that reuses MARC (and other) data in an extensible environment". Additionally, she lists the following requirements for XC metadata:
FRBR-based
Waiting for RDA not an option
Retain granularity of MARC [emphasis mine]
Facilitate transformation from Dublin Core
Convert existing MARC (etc.) data to linked data [emphasis mine]

Consider Berners-Lee's comment in the video, "they [data content holders] are very tempted to keep it [data]. . . hug your database. You don't want to let it go until you've made a beautiful website for it." (http://www.ted.com/talks/tim_berners_lee_on_the_next_web.html) How similar is this remark to Roy Tennant's well-known comment about "lipstick on a pig" (http://www.libraryjournal.com/article/CA516027.html), referring to efforts to "dress up" online catalogs in attempts to create better user experiences? Perhaps a more interesting alternative is to "free" all of that highly structured data from the prison of a MARC record, using existing standards and vocabularies (FRBR, FRAD, RDA, RDF, Dublin Core, etc.) and joining—perhaps leading—the larger community to develop more tools that enable the implementation of Linked Data. Ultimately, this would make library data flexible, reusable, permanent, and most importantly, "*of the web*".

Additional Resources

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Exclusively in the June online issue:

Tech Talk
Library Support Staff Certification Program

RECOGNIZING VALUE, ENCOURAGING GROWTH
THE LIBRARY SUPPORT STAFF CERTIFICATION PROGRAM

Library Support Staff Certification (LSSC) Program Welcomes Candidate Applications

The American Library Association's Allied Professional Association (ALA-APA) is accepting applications from potential Candidates interested in achieving the Library Support Staff Certification (LSSC). The LSSC Program is the first national, voluntary certification program for library support staff. Over forty Candidates have applied since the program opened January 25, 2010.

The LSSC Program is open to any library support staff person with a high-school diploma or its equivalent and at least one year of full-time experience in a library within the last five years. Applicants do not have to be a member of ALA. The application fee is $325 for ALA members and $350 for non-ALA members. Candidates who choose to take an approved course may have to pay a fee set by the course provider. There is no cost for submitting portfolios. Candidates have four years to complete the program.

The LSSC Program website, www.ala-apa.org/lssc, has complete information about the competency sets, approved courses, and how to develop a portfolio. The Program has adopted ten competencies sets; Candidates are required to show achievement of three sets -- Foundations of Library Service, Communication and Teamwork, and Technology – and must choose three additional sets from Access Services, Adult Readers' Advisory Services, Cataloging and Classification, Collection Management, Reference and Information Services, Supervision and Management, and Youth Services.

The LSSC offers Candidates two ways to demonstrate achievement. The first is through completing approved courses from library education providers across the county. These providers set the course's fee, schedule, and requirements. Recently, the LSSC Program approved a Supervision and Management course from the State Library of Louisiana. Michael Golrick, one of the course's instructors, was pleased by the "level of enthusiasm and interest" demonstrated by the seventeen students who completed course. The LSSC Program encourages interested education providers to contact the program to find out more about course approval.

Candidates can also develop portfolios that demonstrate their knowledge, skills, and experience in a competency set. The LSSC Program offers help to Candidates who wish to develop and submit portfolios. Librarians with expertise in the competency set will evaluate portfolios and the Program is seeking more librarians who wish to do so. The application to become a Portfolio Evaluator is available on the LSSC website.

More information about the LSSC Program is available online at http://www.ala-apa.org/lssc. Direct questions to lssc@ala.org or call 312-280-2424. The LSSC Program is being managed by the American Library Association-Allied Professional Association (ALA-APA).

LIRT Standing Committees

Adult Learners
This committee is charged with assisting library professionals to more effectively serve adult learners.

Conference Program
This committee shall be responsible for annual program preparation and presentation.

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.

Membership
This committee shall be responsible for publicizing the Round Table's purposes, activities and image; and for promoting membership in the Round Table.

Newsletter
The committee shall be responsible for soliciting articles, and preparing and distributing LIRT News.

Organization and Planning
This committee shall be responsible for long-range planning and making recommendations to guide the future direction of LIRT.

Teaching, Learning, & Technology
This committee will be responsible for identifying and promoting the use of technology in library instruction.

Top 20
This committee shall be responsible for monitoring the library instruction literature and identifying high quality library-instruction related articles from all types of libraries.

Transitions to College
This committee builds and supports partnerships between school, public, and academic librarians to assist students in their transition to the academic library environment.

Web Advisory
This committee shall provide oversight and overall direction for the LIRT Web site.

Please see our online committee volunteer form at

http://fleetwood.baylor.edu/lirt/volform.php

Library Instruction Round Table News
c/o Darlena Davis
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