



School Public Special Academic LIBRARY INSTRUCTION ROUND TABLE NEWS

Volume: 36 No. 4 June 2014

From the President:

There are some very exciting things happening at the Library Instruction Round Table!



The first is our upcoming conference program, ***Going all in: Library Instruction for Students in Online Education Programs***. This program will focus on successful methods and specific issues (K-16) that need to be considered when teaching in this environment. Course development and communication with students are common issues that apply whether they are taught in an elementary school or a university classroom. Join us for this event on Sunday, June 29th @ 10:30 a.m. and learn useful strategies to try in your online classroom. See page 3.

The second exciting development is the inauguration of LIRT Awards. See the article on page 3 in this newsletter for the specifics of these awards and join us in applauding this year's recipients at our awards ceremony that will precede the conference program in the Las Vegas Convention Center.

Finally, Jennifer Corbin, our current vice president, will become president at the end of the conference. She will provide excellent service, leadership and vision to the round table; I look forward to working with her for another year as I move into the role of past president and to continuing to serve the members of LIRT. Please let us know of any suggestions you have or things you appreciate and enjoy so that we can serve you effectively as we go into the future.



See you in Vegas!

Barbara Hopkins
LIRT President

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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.



From the editor

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Welcome to the June issue!

As we gear up for ALA Annual in Las Vegas, this edition of LIRT News is full of interesting and informative content. In this issue, you'll find our latest **Top 20** articles, meet John Siegel in our LIRT member spotlight, and learn all about altmetrics in Billie Peteron-Lugo's **Tech Talk** column.

Are you looking to get more involved in LIRT? Well, you're in luck! We are sending out a call for LIRT officers. Feel free to nominate yourself, or to nominate someone who you feel would be a great addition to LIRT. You'll find a link to the nomination form and more information about offices on page 4.

If you're going to be in Las Vegas, please join us for this year's **LIRT Annual Program: "Going All In: Library Instruction for Students in Online Education Programs."** You'll find more information about this program as well as the dates and times for all of the LIRT meetings during the conference inside this issue. You are also invited to attend our inaugural **LIRT Awards** ceremony during next month's Annual conference. We hope to see you there.

As this is my final "From the Editor" column, I'd like to say goodbye. I'm stepping down as the LIRT News editor after two years. I've recently changed directions in my career, and need to concentrate on medical librarianship - which is proving to be both extremely interesting and challenging - especially for someone with a humanities and social sciences background. I'm definitely going to miss the wonderful people who make up LIRT, and can honestly say that the LIRT Roundtable and its committees have been the most rewarding that I've worked with. I encourage all of those who are reading this to get involved with the LIRT committees; they are the most warm and supportive group and welcome all new members - and they **need** new members!

So sign up today: <http://fleetwood.baylor.edu/lirt/volform.php>

Finally, let's welcome our new editor: Susan Gangl, the current LIRT News production editor and the Library Liaison for Jewish Studies, Philosophy, Religious Studies and Holocaust & Genocide Studies at the University of Minnesota. Susan has been an integral part of LIRT News and will be a wonderful editor. Let's all say hello to Susan and thank her for everything she's done to make the newsletter as informative and creative as it is.



Teri





LIRT • ALA ANNUAL 2014 • LAS VEGAS



ANNUAL PROGRAM AND AWARDS PRESENTATION

Sunday, June 29, 10:30-11:30 a.m.

LAS VEGAS CONVENTION CENTER LVCC N-264

Two New LIRT Awards to be presented at 2014 ALA Annual!

By Paula Johnson, Co-Chair of the LIRT Awards Committee

The Library Instruction Round Table (LIRT) invites you to attend the inaugural LIRT Awards ceremony at the 2014 ALA Annual Conference in Las Vegas, NV.

The **LIRT Librarian Recognition Award** is presented to an individual librarian in appreciation for their contribution to the development, advancement and support of information literacy and instruction.

The **LIRT Innovation in Instruction Award** is given to a library that demonstrates innovation in support of information literacy and instruction, with an emphasis on low-cost and easily reproducible innovations. Many wonderful nominations were received. This year's award winners will each receive a \$1,000 cash prize, a plaque and a \$500 travel stipend.

Please come show your support for the winners and for the new Awards on **Sunday June 29 at 10:30, in the Las Vegas Convention Center, Room N-264**. The two new awards recognize excellence in information literacy and instruction.

Regularly scheduled LIRT programming – **“Going All In: Library Instruction for Students in Online Education Programs”** – *immediately follows the Awards ceremony:*

GOING ALL IN:

Library Instruction for Students in Online Education Programs

An increasing amount of coursework, both at the secondary and postsecondary level, is being conducted online. This shift in the delivery method of education which began at the college level is now occurring throughout the K-16 continuum. Because many of the students in these classes and programs will never set foot into the host institution, this transformation has necessitated a great deal of change in all aspects of library services, including information literacy instruction. This conference program will spotlight some innovative ways that libraries are conducting and delivering instruction to this new cohort.

LIRT Meetings at the ALA Annual Conference in Las Vegas

(All listed events will be held in the Las Vegas Convention Center)

All Committee Meeting: Saturday, June 28, 10:30-11:30 am. LVCC-N110

Executive Board Meeting II: Monday, June 30, 10:30-11:30 am.
LVCC-N109

Going All In: Library Instruction for Students in Online Education Programs: Sunday, June 29, 10:30-11:30 am. LVCC-N264

Steering Committee Meeting I: Saturday, June 28, 8:30-10:00 am. LVCC-N110

Steering Committee Meeting II: Monday, June 30, 8:30-10:00 am. LVCC-N109



Calling all potential OFFICERS!

If you've been thinking about getting more involved with LIRT, now is the perfect time to consider running for office in the coming year. We will be building a slate of candidates to run for Vice President/President Elect, Vice Treasurer/Treasurer Elect, and Secretary/Archivist Elect. Do any of these sound intriguing? Check out our [Organization Manual](#) to learn the responsibilities for each position, and then complete the [Nomination Form](#) to express your interest. Go ahead! You'll be great! Of course, if you know of someone else you think would be perfect, you are welcome to nominate them as well.

— Mardi Mahaffy

<http://www.ala.org/lirt/nomination-form>

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Contributions to be considered for the **September 2014 issue** must be sent to the editor by **July 15, 2013**.

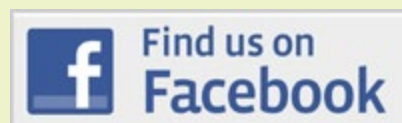
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LIRT Member Spotlight:



John Siegel Library Instruction Coordinator at the University of Arkansas at Little Rock



What brought you to LIRT?

I joined LIRT in 2009, when I became Library Instruction Coordinator at the University of Arkansas at Little Rock (UALR). I enjoy LIRT because it offers access to a variety of resources, such as valuable programs at ALA and the newsletter articles which inspire me to try something new in my teaching.

What was your path to librarianship?

After I graduated with my bachelor's degree, I was on the job market. I landed a position with the federal government contractor IQ Solutions in Rockville, MD. I worked on the contract specifically dealing with healthfinder® -- healthfinder.gov. I referred the public to a variety of government and non-profit health resources. I also evaluated websites for inclusion on the healthfinder® website. I became hooked on providing information (reference) and enrolled in the MLS program at the University of Maryland.

Tell us about your current position. What do you like most about it?

As instruction coordinator at UALR, I have a variety of responsibilities. I schedule freshman English and first-year experience (FYE) classes and am liaison to the composition and FYE coordinators. I am also the health sciences librarian, working with departments such as nursing and rehabilitation counseling. I teach a variety of classes, from first-year experience to graduate level health education. I also work the reference desk, help with outreach, and serve on a variety of library, university, and outside professional committees. I enjoy the variety of my position. There's never a dull moment!

In what ways does it challenge you?

The reference questions constantly keep me on my toes. I am always learning about new resources. I am also trying to always improve my instruction, so I am assessing and trying new things all the time.

If you could change one thing about libraries today, what would it be?

I wish academic libraries could be more nimble in responding to change, such as technology.

Throughout all your educational experiences, what teacher inspired you the most and why?

Dr. Keith Cogdill, the current director of the National Institutes of Health (NIH) Library, was one of my instructors during library school. His enthusiasm and passion for libraries inspired me to be the librarian I am today.

When you travel, what do you never leave home without?

My iPhone -- I like staying connected!

Tell us one thing about yourself that most of us probably don't know.

I'm definitely a dog person!





LIRT's Top Twenty

Submitted by the Top 20 Committee

Anderson, A., Johnston, B., & McDonald, A. (2013). Information literacy in adult returners to higher education: Student experiences in a university pre-entry course in a UK university. *Library and Information Research*, 37(114), 55–73.

Anderson, Johnston, and McDonald studied the experiences of adult students in a pre-entry course returning to higher education in the UK. The authors conducted semi-structured interviews to understand the students' study and research habits, focusing on how these students access and evaluate information. Interviewees expressed unsophisticated epistemologies and weak metacognitive awareness. For example, students focused on differentiating between what they saw as high-quality and low-quality sources, correct and incorrect information. The authors attribute this practice to students' realist epistemologies, in which clear-cut evaluations impede deeper critical engagement with texts. Anderson et al. cite similar, preceding studies, including Whitmire's 2003 study of Yale undergraduates. Anderson et al. forge new ground by examining a different population -- returning adult learners -- and by emphasizing the role of epistemology and metacognition in developing information literacy. Of note are the authors' backgrounds: none is a librarian. The research team is comprised of a curriculum developer, a lecturer in psychology, and a practitioner who runs the pre-entry course. Their study, which echoes previous calls for librarian participation in curriculum design, might help convey this call to a broader audience.

Angell, K., & Tewell, E. (2013). Collaborating for academic success: A tri-institutional information literacy program for high school students. *Public Services Quarterly*, 9(1), 1-19.

Many colleges partner with local high schools to develop programs aimed at increasing the information literacy skills of high school students and better preparing them for college. Sarah Lawrence College (Westchester County, NY) has taken this practice one step further by not only partnering with the local high school, but the local public library system as well. They've linked this unique collaborative partnership with the Yonkers High School "International Baccalaureate" program, a college-prep initiative that involves intensive research using

academic-level resources. This arrangement provides the perfect opportunity for sustained student involvement with a college librarian over the entire academic year (as opposed to more typical "one-shot" sessions). The partnership results in benefits for all involved, including clear demonstration of the value of an academic library; improving instruction methods and materials; bridging the gap between high school and college information literacy skills; improving student access to library resources; and even reducing student library anxiety. The authors provide a detailed program plan and schedule of workshops and activities, which allows other libraries to have a clear picture of how the program works. In addition, the authors have identified a series of questions and considerations for libraries interested in implementing a similar program in their own area.

Bandyopadhyay, A. (2013). Measuring the disparities between biology undergraduates' perceptions and their actual knowledge of scientific literature with clickers. *The Journal of Academic Librarianship*, 39(2), 194–201.

Asking students to evaluate their own information literacy skills is a common part of a library instruction session, and librarians often report out on these evaluations. However, students often perceive their own abilities and knowledge to be much higher than they actually are. In this study, Bandyopadhyay measures the disparities between students' own perceptions of their abilities and their actual knowledge of scientific literature. Using clickers, 274 students enrolled in a biology class were asked to rate their own skills and then answer questions related to evaluating peer reviewed articles. The author found that the majority of students were not able to distinguish different types of scientific articles even though they had self-identified as having the abilities and knowledge to do so. In addition to the discussion of the disparities, the author also discusses some of the benefits of using clickers in the classroom. This article provides some evidence that conclusions drawn from perception-based outcomes may not reflect actual student performance. Library instructors may want to add performance-based assessment to their information literacy instruction.

LIRT's Top Twenty, continued on page 7

Benjes-Small, C., Archer, A., Tucker, K., Vassady, L., & Resor Whicker, J. (2013). Teaching web evaluation: A cognitive development approach. *Communications in Information Literacy*, 7(1), 39–49.

To address the continuing disconnect between web evaluation instruction and student retention of evaluation techniques, a group of Radford University librarians researched and employed education theory and a constructivist approach to student learning when redesigning their web evaluation instruction. Based on the cognitive development theory of William Perry, the librarians knew that first-year college students typically employ a dualistic (right/wrong, black/white) viewpoint and, as they mature, become more cognizant of differing points of view. To help dualistic students learn to evaluate websites beyond what is simply “good” or “bad,” and without merely relying on authority figures (i.e. the librarian) to tell them which is which, Benjes-Small and her colleagues created a hands-on lesson plan that allowed the students to develop their own criteria for quality websites based on their own knowledge and experiences. A three-part lesson was developed where students first create their own set of evaluation criteria, then set the “gold standard” for a website on a specific topic, and finally compete with their classmates to find the best “gold standard” website. This constructivist approach, allowing the students to learn while doing, also includes librarian-led discussion that frames the students’ discovery and provides context to encourage them to adopt multiplicity positions and a more relativistic viewpoint. Both formal and informal assessment of this new exercise indicated significant improvement in meeting the learning objectives of the lesson.

Bluemle, S. R., Makula, A. Y., & Rogal, M. W. (2013). Learning by doing: Performance assessment of information literacy across first-year curriculum. *College & Undergraduate Libraries*, 20(3-4) 298-313.

The librarians at Augustana College in Illinois describe the implementation of a new assessment model for library instruction. This case study analyzes the effectiveness of performance assessment as an organic method of evaluating higher-level thinking information literacy (IL) skills as part of a required first-year course sequence. The sequence involves three successive courses throughout freshman year and sections are taught by as many as sixty different instructors who collaborate with librarians for the library instruction

portion of the class. The librarians created a simple activity worksheet that includes student explanation of their source’s appropriateness in context with criteria of the sources as determined by the class earlier in the session. Librarians shared final reports that included the various IL outcome, topic, criteria, and assignment from each class session to determine the overall implications. Results indicate general areas of student strengths and weaknesses allowing data-driven pedagogical and curricular improvements to be made. This model allows librarians to teach important IL skills, promote critical thinking, and evaluate learning outcomes within the required-course environment. Increasing awareness within higher education of library instruction and information literacy as an avenue for teaching and assessing the higher-thinking skills necessary for meeting both campus-wide and accreditation goals, adds to the value of the library and librarians to their institutions. The flexibility and overall simplicity of this model creates the opportunity for a more proactive role for librarians within their teaching communities.

Bonnet, J. L., Anderson Cordell, S., Cordell, J., Duque, G. J., MacKintosh, P. J., & Peters, A. (2013). The apprentice researcher: Using undergraduate researchers’ personal essays to shape instruction and services. *portal: Libraries & the Academy*, 13(1), 37-59.

Using narrative analysis, Bonnet et al. examined thirty-four research essays written by undergraduates and the corresponding letters submitted by faculty advisors. Through extensive examination and coding of these case studies, the authors identified evaluative statements that reveal patterns in undergraduate research behaviors and describe the meanings assigned to those behaviors. The authors’ findings challenge previous studies that characterize students as passive, indifferent researchers by identifying the “apprentice undergraduate researcher.” The apprentice researcher takes a personal interest in her topic, seeks authoritative sources, utilizes traditional and nontraditional information gathering methods, evaluates information, creates a personal learning network, and embraces the circuitous nature of the research process as a learning opportunity rather than an obstacle. The authors shatter the stereotype of the disengaged undergraduate researcher and encourage librarians to rethink the generalizations and assumptions they make about students and to consider

new possibilities for meeting the needs of the apprentice researcher. Bonnet et al. shed light on these possibilities by exploring the ways in which their findings apply to teaching. The authors describe practical interventions librarians can use in a variety of instructional settings to help students connect with their research topics, accept research as a reiterative process, and recognize the importance of building relationships within a scholarly network. Essentially, these interventions ask librarians to remain cognizant of the different levels of experience and motivation that students carry with them and to “teach research in the context of students’ needs and interests” (55). The authors conclude with a few recommendations for serving students.

Calzada Prado, J., & Marzal, M. Á. (2013). Incorporating data literacy into information literacy programs: Core competencies and contents. *Libri: International Journal of Libraries & Information Services*, 63(2), 123–134.

Responding to the increasing availability and importance of scientific, statistical, and technical source data, this insightful article advocates for school, public, and academic libraries to include data literacy in their information literacy programs. To support these efforts, the authors provide an extensive literature review of such related areas as definitions of data literacy, competencies explicitly associated with data literacy in existing information literacy standards, and current responses to the need for data literacy in libraries’ instructional programs and services. The article’s undeniable contribution to the discussion lies in its resulting identification and description of a set of core competencies and contents that can be used as an adaptable common framework of reference in instructional programs across institutions and disciplines. Specifically, competencies and contents under such categories as understanding data, finding and/or obtaining data, reading, interpreting and evaluating data, managing data, and using data are discussed. Topics for future research are also outlined.

Hattwig, D., Bussert, K., Medaille, A., & Burgess, J. (2013). Visual literacy standards in higher education: New opportunities for libraries and student learning. *portal: Libraries & the Academy*, 13(1), 61-89.

The authors argue for the importance of visual literacy in our current visual culture, citing the need for students to learn how to analyze and create visual documents and media across the curriculum within the higher education

curriculum. They discuss the history of visual literacy from the founding of the Visual Literacy Association by John Debes and others in the 1960s to ACRL’s publishing of its own *Visual Literacy Competency Standards for Higher Education* and current ideas in its various renditions, comparing ACRL’s standards for both information literacy and visual literacy with those of North Central Regional Educational Laboratory and several other individuals and groups. ACRL’s standards encompass finding, evaluating, interpreting, and creating images and other media; other rubrics or standards emphasize digital media and production. The authors then elaborate on how libraries can support and help schools articulate these standards in order to contribute to students learning in these areas, discussing various themes such as tracing copyright in an era of creative use of images and other media such as mashups. The article should prove valuable to all those who require a systematic treatment of ACRL’s *Visual Literacy Competency Standards for Higher Education* within the broader context of visual literacy standards and scholarship.

Hoffmann, D., & Wallace, A. (2013). Intentional informationists: Re-envisioning information literacy and re-designing instructional programs around faculty librarians’ strengths as campus connectors, information professionals, and course designers. *The Journal of Academic Librarianship*, 39(6), 546-551.

Using the tenets of social justice theory as a framework, Hoffman and Wallace challenge librarians to reflect on their views of information literacy and reevaluate their current instructional practices and pedagogical techniques. They propose that an overemphasis on demonstrating the mechanics of search and retrieval robs librarians of the opportunity to help students develop the higher order thinking skills necessary for comprehending, critiquing, and effectively addressing the complex information issues and problems they will encounter in their personal lives, workplaces, and communities. The authors explain how the desire to assess students’ understanding of the economic, social, and ethical issues entrenched in the use of information prompted the librarians at California State University, Channel Islands to seek instructional opportunities beyond the one-shot sessions and partnerships with colleagues within and outside the library. Through detailed descriptions of three different credit bearing

courses developed and taught by librarians, the authors illustrate innovative approaches for infusing information literacy into the curriculum and across disciplines to help students become “intentional informationists” (547). The courses discussed include a course on information and communication, a course on libraries as organization, and a capstone for pre-service teachers. The descriptions include examples of learning outcomes, course content, activities, teaching strategies, and student commentary. Recognizing that not all librarians have the opportunity to design and teach credit courses, Hoffman and Wallace provide smaller scale ideas that do not require a library session or course to encourage participants to thoughtfully reflect on complex information problems.

Holliday, W., & Rogers, J. (2013). Talking about information literacy: The mediating role of discourse in a college writing classroom. *portal: Libraries and the Academy*, 13(3), 257–271.

The authors of this article completed a small-scale, observational study using a sociocultural approach in order to determine how classroom language and activities -- classroom discourse -- affect how students and teachers think about information literacy and the research and writing process. They observed the interactions throughout the semester between nineteen students and their instructor in a university-level writing class as they were learning about how to write a persuasive research paper. The authors also examined the course syllabus, assignment descriptions, some student work, and conducted two focus groups with students to find out more about their experiences with information literacy. In addition, they interviewed the course instructor. In the end, the authors found four primary themes evident in this course's discourse. These themes include the tendency to refer to sources as objects and containers of information, thereby not encouraging students to engage deeply with information. An emphasis on the “right” number of sources was also found in the data analysis. They also found that a checklist method to evaluating the “right kind” of sources does not encourage a critical thinking approach to conducting research. The final theme brought all of the other themes together and presented a dichotomy of viewpoints regarding research. Some students thought of research as “finding sources.” Others considered research a process to “learn about” an idea. This study gives both writing instructors and librarians a window into how the language they use and their classroom activities influence how their students think and complete research.

Kuhlthau, C. C. (2013). Rethinking the 2000 ACRL Standards: Some things to consider. *Communications in Information Literacy*, 7(2), 92–97.

Noted information literacy researcher Kuhlthau proposes three “rethinks” for revision of the ACRL Standards for information literacy (2000), grounded in her extensive study of the information search process. First, she suggests rethinking the concept of information need, which in the Standards appears to be a concrete, fixed entity. Instead her research shows that information need evolves throughout the information seeking process with the addition of new information. Second, she suggests rethinking the Standards' emphasis on “extracting” information, which she finds a simplistic, mechanical, cut-and-paste approach. Instead her research demonstrates that learning from a variety of sources is a creative, constructive, dynamic process. Third, she proposes viewing information literacy as a holistic process of learning that draws on the affective, cognitive and physical domains. She shows how these domains are incorporated in her guided inquiry model of the information search process, which takes students through the phases of open, immerse, explore, identify, gather, create, share, and evaluate. Although this model was originally focused on Pre-K -12 students, Kuhlthau suggests adopting it for undergraduates and provides examples where this has already happened. She emphasizes the need to create standards that show the role of information literacy in an individual's deep thinking, reflection, innovation, and learning.

Latham, D., Gross, M., & Witte, S. (2013). Preparing teachers and librarians to collaborate to teach 21st century skills: Views of LIS and education faculty. *School Library Research (SLR)*, 16, 1-23.

In this case study, Latham, Gross, and Witte examined how teachers and school librarians are trained in their pre-service education to collaborate with each other. The authors conducted semi-structured interviews with education and LIS faculty at a US university, examining instructors' experiences with collaboration, points in each curriculum in which collaboration is or could be taught, as well as strategies and challenges related to teaching collaboration. LIS faculty in the study identified two courses that discuss teacher-librarian collaboration and numerous courses that discuss collaboration more broadly. Education faculty in the

study identified various courses that require use of library resources, but none where teacher-librarian collaboration is taught or discussed. Faculty in both disciplines see the topic as one that warrants teaching and proposed various strategies to integrate it into the curricula. Both the interviewees and the study authors propose that education and LIS faculty might co-develop a cross-listed course in order to train teachers and school librarians on teacher-librarian collaboration and also to foster a larger culture of collaboration between the disciplines.

Montiel-Overall, P., & Grimes, K. (2013). Teachers and librarians collaborating on inquiry-based science instruction: A longitudinal study. *Library & Information Science Research*, 35(1), 41-53.

Montiel-Overall and Grimes report on the implementation of a training program to train teachers and librarians in a collaborative model of teaching inquiry-based learning in a science classroom of Latino elementary students in an English Immersion program. The collaborative model used in this study involved coordination, cooperation, integrated instruction, and curriculum. The inquiry-based learning model taught to teachers and librarians emphasized hands-on problem solving and experimentation. The teacher-librarian collaboration was implemented at six elementary schools from two districts using twelve teachers, six librarians, and six peer mentors. Adults with technological and/or science experience were also used in the study. All of these participants were exposed to many professional development interventions to learn collaborative skills and inquiry-based instructional approaches to teaching science and information literacy practices. The study took place over two academic years. Participants were evaluated on understanding of teacher-librarian collaboration, inquiry-based learning in science, information literacy, and changed perceptions and pedagogy. The transformative and positive effects of the collaborative instruction are described, including descriptions of how student questioning was allowed to guide instruction and how library research was integrated into the process of learning. The role of the peer mentors was also positively viewed by participants and researchers. The article does an excellent job of informing the library community about the rewards and challenges of implementing a training program in teaching collaborative inquiry-based instruction.

Riehle, C. F., & Weiner, S. A. (2013). High-impact educational practices: An exploration of the role of information literacy. *College & Undergraduate Libraries*, 20(2), 127-143.

The authors of this article were interested in the way information literacy competencies are represented in five selected high-impact educational practices: capstone experiences, learning communities, service learning and community-based learning, undergraduate research, and writing-intensive courses. They looked at books and journal articles from a variety of disciplines that were published from 1999-2010 to see how information literacy competencies were represented in these areas even if these competencies weren't explicitly stated. They found many instances where information literacy was incorporated or was an outcome of these educational practices although they did not find many instances when it was required as a prerequisite. The authors recommend that librarians examine their assessment, pedagogical practice and program plans in order to see how they can take advantage of these high impact educational opportunities. They also include a helpful appendix that maps the literature they reviewed to high impact educational practices and to specific information literacy competencies. This chart would be helpful to librarians who would like to take an evidence-based approach to their outreach in these five areas. In addition, the recommendations provide a general blueprint of how to expand the information literacy program in these areas on any campus.

Smith, J. K., Given, L. M., Julien, H., Ouellette, D., & DeLong, K. (2013). Information literacy proficiency: Assessing the gap in high school students' readiness for undergraduate academic work. *Library & Information Science Research*, 35(2), 88-96.

As part of a larger interdisciplinary project, Smith, et al. completed a two part research analysis which audited existing information literacy practices at the University of Alberta (UA) and used the James Madison University Information Literacy Test to assess 103 twelfth grade students in three Edmonton, Alberta high schools. The team found that UA students were not aware of information literacy resources on their campus even though the students did recognize the importance of these skills. In a rigorous statistical analysis in the second part of their project, the team found that none of the 103 twelfth graders tested

had advanced information literacy skills and only 19% had proficient skills which meant 81% of these students were non-proficient in the area of information literacy. The team then tested the reliability of their results and found that they had performed a faithful analysis. Within these low results, students tested higher in the areas of using traditional print resources and understanding the ethical use of information, but did poorly in developing effective search strategies, understanding academic journals, using databases, and understanding the publication process. This article contributes to the research that is being completed in the area of the high school to college transition period. It also provides hard evidence to both K-12 and higher education educators that students are not prepared for college level research. Finally, it provides an example of how undergraduate students may value information literacy at the college level but do not know where to get help with acquiring these skills.

Stowe, B. (2013). Designing and implementing an information literacy instruction outcomes assessment program. *College & Undergraduate Libraries*, 20(3-4), 242–276.

This case study describes and analyzes the efforts of the library faculty at the Brooklyn Campus Library of Long Island University who are involved in developing, testing, and implementing a ground-up information literacy outcomes assessment program for the undergraduate core curriculum. Based on the increasingly prominent role given to information literacy by re-accreditation agencies, the library was prompted to significantly upgrade its assessment practice of collecting anecdotal evidence and administering clickers-based exit surveys. To detail the process of the upgrade, the article discusses such issues as key external and internal institutional forces that influence the development of an outcomes assessment programs. The library faculty members discuss choosing the appropriate assessment instrument (standardized or locally developed), establishing a hierarchy of priorities of assessment areas/goals, determining the actual assessment questions, and building the iterative assessment cycle (pre-assessment and post-assessment). The author includes examples from early versions of the evaluation instruments as well as the revisions of such instruments. The honesty of the library faculty members is disarming—they freely refer to the persistent personnel and managerial issues their library had been facing for some time and are generally very open about the challenges this represented in terms of developing

a sustainable assessment program. As a result, this article provides an invaluable resource for other institutions trying to build their outcomes assessment program from scratch.

Subramaniam, M., Ahn, J., Waugh, A., Greene Taylor, N., Druin, A., Fleischmann, K. R., & Walsh, G. (2013). Crosswalk between the Framework for K–12 Science Education and Standards for the 21st-Century Learner: School librarians as the crucial link. *School Library Research (SLR)*, 16, 1-28.

This article reports on a study of a project in which the researchers collaborated with school librarians to co-construct an after-school program for urban middle school students called Sci-Identity. Sci-Identity encourages students to connect science-infused media (e.g. science fiction, popular science, graphic novels, and science fiction movies) with science. The overarching goal of the study was to discover how school librarians can play an active, stronger role in science learning. The research took an ethnographic approach; data collected included project documentation, records of observation, interview transcripts and student stories. The data was analyzed through the lens of a conceptual framework that brought together the Framework for K–12 Science Education and the American Association of School Librarians' (AASL) Standards for the 21st-Century Learner, and the authors provide a “crosswalk” appendix showing these connections which the reader will find especially valuable. The researchers also used the lens of the AASL's five official roles of the school librarian: information specialist, instructional partner, teacher, program administrator, and leader. The analysis showed librarians able to extend their roles and expertise to assist in science learning, particularly in the creation of a sociocultural environment conducive to science exploration. Because of the importance of STEM within education, the researchers believe that demonstrating the link between science and school libraries will help to sustain strong library programs in schools.

Van Epps, A., & Sapp Nelson, M. (2013). One-shot or embedded? Assessing different delivery timing for information resources relevant to assignments. *Evidence Based Library and Information Practice*, 8(1), 4–18.

In this paper that adds to the literature on how to best reach students with information literacy instruction, the authors set out to answer the question of whether “just-in-time”

sessions are more effective than the traditional “one-shot” session. All students in the study received the same amount of instruction but the instruction was divided up differently. Two sections received four mini-lectures just prior to an assignment, and one section received one 50-minute session at the beginning of the semester. In order to determine the impact of the sessions on student learning, the authors looked at the type of information resources, the quality of the resource, and completeness of the references. The authors found that students who had received the “just-in-time” sessions included a higher number of quality resources in their assignments compared to the “one-shot” group. They also found that the “just-in-time” group used fewer web resources and more periodicals. In conclusion, this article provides librarians with evidence that “just-in-time” instruction may be a more effective alternative to the traditional “one-shot” session.

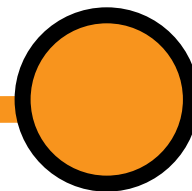
Walton, G., & Hepworth, M. (2013). Using assignment data to analyse a blended information literacy intervention: A quantitative approach. *Journal of Librarianship and Information Science*, 45(1), 53–63.

This timely research study joins current debates surrounding the effectiveness of e-learning compared to the standard face-to-face delivery of instruction by trying to determine if a blended information literacy learning and teaching intervention can significantly enhance undergraduate students’ ability to evaluate source materials successfully. Unlike many assessment projects related to information literacy, this article focuses on developing students’ capability to use higher order thinking skills, particularly those involving the use of information (application, analysis, and synthesis). The authors conclude that when given the additional opportunity to engage in an online discourse through social media learning, students ended up using a greater variety of material evaluation criteria and used these criteria more frequently in their assessed work than students exposed to face-to-face instruction only or students whose face-to-face instruction was followed only by a simple reflective online activity (test or quiz). Of special interest is the authors’ method of assigning qualitative data from students’ assessed work as a quantitative value for the purposes of statistical analysis: each use of a specific evaluation criterion was given a score of one (1). A possible limitation of this insightful study is the relatively small

sample size and the inclusion of participants from one academic discipline only (thirty-five undergraduate students studying Sports and Exercise)—a limitation which the authors address. The study represents a powerful advocacy piece for using a blended approach with an online discussion component in delivering information literacy to foster higher order learning in students.

Watson, S. E., Rex, C., Markgraf, J., Kishel, Hans, Jennings, E., & Hinnant, K. (2013). Revising the “one-shot” through Lesson Study: Collaborating with writing faculty to rebuild a library instruction session. *College & Research Libraries*, 74(4), 381–398.

A team of four librarians and three English department faculty at the University of Wisconsin-Eau Claire (UWEC) collaborated to revise “one-shot” library sessions by using the Lesson Study process. This method of lesson development is used in Japan. It consists of a five-step process that involves identifying goals, planning the lesson, teaching and observation, discussion of findings, and finally revising the lesson accordingly. The team used the Association of College & Research Libraries *Information Literacy Standards for Higher Education* as a guide to creating goals. The initial lesson was taught to a section of a freshman English course and observed by members of the Lesson Study group. In discussion of their findings the group discovered a need for clearer instructions, less librarian demonstration, and more student engagement. The revised lesson was taught to another section followed by more discussion. In addition to using the new planning method, the lesson featured an innovative research activity that required students’ to partner and find resources for the others’ topic with the intention of keeping students on task due to accountability. The group found that students were also inclined to communicate more effectively to allow replication of the process by the partner. Student feedback was included in the groups’ assessment of the second lesson as well as the actual worksheets from students. The project proved to be successful in bringing both library and subject faculty to a better understanding of student needs and improved assessment of student learning outcomes in library sessions.



Tech Talk

By Billie Peterson-Lugo, Baylor University
Billie_Peterson@baylor.edu

altmetrics

Dear Tech Talk-- What can you tell me about “altmetrics”. It’s a term I’ve heard bandied about. I think it has something to do with tracking the usage of research; but I’m really not clear on how it works or its overall value.

--Addled About Altmetrics

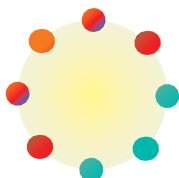
Dear Addled-- “Altmetrics is the study and use of scholarly impact measures based on activity in online tools and environments.” (Priem, Groth, and Taraborelli, 2012) In September 2010, Jason Priem first proposed the term in a tweet (<http://twitter.com/asnpriem/status/25844968813>); later that fall, he (along with Taraborelli, Groth, and Neylon) published the *Altmetrics Manifesto* (<http://altmetrics.org/manifesto>) in which they described the challenge of finding the best scholarly research in a world where scholarly output is both changing in format and increasing exponentially. The traditional metrics of peer review, citation counts, and journal impact factors (JIF) no longer suffice. Instead we need “alternative metrics” = altmetrics.

Before going any further, it’s important to note that the *Article-Level Metrics* primer from SPARC makes a clear distinction between “article-level metrics” and altmetrics. Altmetrics is defined by the fact that it incorporates new measurements (data sources) to assess the impact of an article, a journal, or a scholar; whereas article-level metrics refers to the use of traditional metrics **and** altmetrics to define the impact of a specific kind of research artifact: a journal article. (<http://www.sparc.arl.org/resource/sparc-article-level-metrics-primer>)

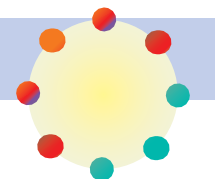
The *Altmetrics Manifesto* addresses some of the issues associated with the traditional metrics. Peer review, while it still has its merits, extends the time before research is published, can block the publication of radical ideas, and doesn’t necessarily reduce the amount of material published. Regarding the amount of material published, Neylon and Wu feel that the “issue is not how to stop people from publishing; it is how to build better filters, both systematically and individually.” (Neylon and Wu, 2009)

Through the years, citation counts have served as a measure of high quality research – the more the research is cited, presumably the more value it has. However, it takes years to build up citation counts, and initial citations counts may not appear until 1-2 years after publication. Some peer reviewers or journal editors will request that specific articles (their works or articles from their journals) be cited. Historically, citation counts for books and book chapters have been challenging to track. Additionally, citation counts don’t take into consideration why the item was cited – was it because it stimulated new research; was it a literature review; was it because it was poorly done research that is being refuted; some other reason?

The journal impact factor assesses the overall value of a **journal** by measuring the journal’s average citations per article. If the JIF is high, that implies that all the articles published in the journal are of high quality – which may or may not be the case. In addition, the algorithm for creating this single score for a journal is – for the most part – proprietary. Without transparency, there is no obvious way to validate the JIF.



Tech Talk altmetrics continued on page 14



The research process has changed substantially in today's online research and sharing environment. A researcher:

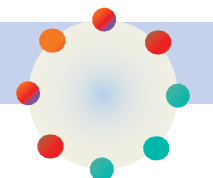
- identifies (maybe via searches or via social networks) and obtains (downloads; interlibrary loan) an article/book/data set/video
- stores it (or the citation) in CiteULike, Delicious, Mendeley, Zotero, etc.
- consumes the information from the research
- shares – informally and quickly – what she has learned, via blog posts, tweets, Facebook, etc.
- shares – formally – her research in a new article, book, book review, data set, video; and
- repeats the cycle.

Likewise, the scholarly artifacts generated from research in today's research environment have changed significantly – open access journals, research blogs, digital lab books, data sets, and more. The traditional measurements may still retain some value, but what can we track from this modern research cycle that might provide additional insight into the impact of the research – something that goes beyond and perhaps augments peer review, citation counts, and JIF? The number of downloads and/or full text html page views; the number of researchers storing citations in open citation and/or bookmark tools; the number of references in blog posts, wikis, tweets; the number of “likes” on Facebook. And, the corollary question is, how valid are these new measures?

First, let's get a baseline for the variety of social media tools that are available. Most librarians are well versed in Delicious, Digg, Facebook, Reddit, Slideshare, Twitter, Wikipedia, and YouTube as information-sharing tools, but there are a host of others with which there may be less familiarity including, but definitely not limited to:

- **Academia.edu** (<http://www.academia.edu/>): share and follow research
- **DataCite** (<http://datacite.org>): assigns persistent identifiers to datasets
- **Dryad** (<http://datadryad.org/>): stores and provides access to scientific or medical research data with links in journal articles
- **Faculty of 1000** (<http://f1000.com/>): helps scientists to discover, discuss and publish research
- **FigShare** (<http://figshare.com/>): makes all research outputs citable, shareable and discoverable
- **GenBank** (<http://www.ncbi.nlm.nih.gov/genbank/>): provides access to an annotated collection of all publicly available DNA sequences
- **GitHub** (<https://github.com/>): store and collaboratively develop software code
- **MathOverflow** (<http://mathoverflow.net/>): a question and answer site for professional mathematicians
- **Push** (<http://push.cwcon.org>): build research articles incrementally as the research takes place
- **Research Blogging** (<http://researchblogging.org/>): enables the identification of serious scientific research in blogs
- **Rubriq** (<http://www.rubriq.com/>): provides independent peer review
- **ScienceSeeker** (<http://scienceseeker.org/>): collects science articles from sources around the world
- **Topsy** (<http://topsy.com/>): provides a database of tweets from 2006

Scholars also now use a variety of open resources to capture the citations of the research artifacts of value to them: BibSonomy, CiteULike, Mendeley, and Zotero are the most well-known.



There is evidence that scholars work in these environments. Piwowar, one of the founders of Impactstory, states, “1 in 40 scholars is active on Twitter, more than 2 million researchers use the online reference-sharing tool Mendeley. . . , and more than 25,000 blog entries have been written about peer-reviewed research papers and indexed on the Research Blogging platform.” She goes on to say that she believes “that it will become routine to track – and to value – citations to an online lab notebook, contributions to a software library, bookmarks to data sets from content-sharing sites such as Pinterest and Delicious.” (Piwowar, 2013)

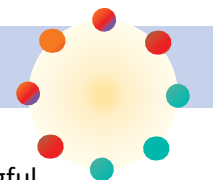
Of course, scholars aren’t the only ones using these tools and following research of interest. For a variety of reasons, people in the general public will follow scholarly research. Consequently, one of the aspects of the validity of altmetrics is associated with this issue of “scholarly-use” metrics vs. “public-use” metrics. However, in this day of making the artifacts of federally funded research openly accessible, demonstrated use of these artifacts by the public appears to be a needed metric.

Somewhat related to this scholars vs. public perspective, Lin and Fenner conceptualize a structural framework for the modern research process – viewed, saved, discussed, recommended, cited. Within that framework, they broadly identify how that framework might apply to scholars and to the public (presented in the table below):

	Scholars	Public
Recommended	Citations by editorials, f1000	Press articles
Cited	Citations, Full-text mentions	Wikipedia mentions
Saved	CitULike, Mendeley	Delicious
Discussed	Science blogs, journal comments	Blogs, Twitter, Facebook, etc.
Viewed	PDF Downloads	HTML downloads

(Lin and Fenner, 2013)

A key aspect of altmetrics is that the data used to track the use of the artifacts must be openly accessible, and ideally, accessible using APIs, which enables consistent, frequent retrieval of the data that creates the altmetrics. The value of openness is – transparency. The process of obtaining the measures can be replicated by others; additionally, by clicking on a link, a researcher can go to the source of the particular metric. The trick is presenting this data in ways that bring context to the measurement.



Collecting altmetrics – from such a wide range of sources – is challenging; presenting the data in a meaningful way is challenging. Most researchers – even if they have the skills and are motivated to obtain this kind of evaluative information about their research – don’t have the time to focus on collecting this information. Publishers and universities have a vested interest in seeing how altmetrics enhance the story they want to tell about their publications and their research and likewise are not in a good position to collect and present the data. Not surprisingly, a number of services and/or software have appeared to assist with these challenges:

- **Altmetric.com** (<http://www.altmetric.com/>)
- **Impactstory** (<https://impactstory.org/>)
- **PaperCritic** (<http://www.papercritic.com/>)
- **PeerEvaluation** (<http://www.peerevaluation.org/>)
- **PeerJ** (<https://peerj.com/>)
- **PLoS ALM** (<http://article-level-metrics.plos.org/alm-info/>)
- **Plum Analytics** (<http://www.plumanalytics.com/>)
- **Research Scorecard** (<http://researchscorecard.com/>)
- **ScienceCard** (<http://sciencecard.org/>)
- **Utopia Documents** (<http://utopiadocs.com>) – a little different in that it is a software for a PDF reader that provides altmetrics information on PDFs viewed through the reader along with other interactions with the text.

At this time, four of these services seem to be receiving the most attention: Altmetric.com, Impactstory, PLoS ALM, and Plum Analytics. Each presents a unique approach to the issue.

Altmetric.com is primarily a commercial service and provides three models: academic site license, commercial team access, and data/embeds for publisher/vendor platforms. However, librarians can request a free academic librarian explorer account (<http://www.altmetric.com/librarians-repository.php>). In addition, anyone can use the altmetric.com bookmarklet that provides altmetrics for articles viewed in a browser. (<http://www.altmetric.com/bookmarklet.php>) When altmetric.com is used, an altmetric score is provided via a colorful “donut”, which provides links to the original sources for all the information such as: Blogs, CiteULike, Facebook, Google+, Mendeley, News, Pinterest, Reddit, Twitter, and more. Altmetric.com also attempts to provide context for the score by comparing it to scores within the same environment. Publishers and vendors that have announced trials or firm partnerships with altmetric.com include: Bepress, BioMed Central, Elsevier (ScienceDirect and Scopus), Highwire, PLoS, Ex Libris (Primo), Springer, and Wiley.

Impactstory (referred to as Total-Impact until 2012) is “an open-source, web-based tool that helps researchers explore and share the diverse impacts of all their research products – from traditional ones like journal articles, to emerging products like blog posts, datasets, and software.” Impactstory requires that scholars set up their profiles and identify their research artifacts, but it also uses ORCID IDs to help with that process. Jason Priem and Heather Piwowar co-founded Impactstory, which was an outcome of a 2011 hackathon. They now have funding from the National Science Foundation and Alfred P. Sloan Foundation to continue its development. (<https://impactstory.org/about>)

PLoS ALM (Public Library of Science Article-Level Metrics) was the earliest publisher to actively present article-level metrics in order to provide a more detailed perspective on the importance and potential reach of articles. (<http://www.plosone.org/static/almInfo>) Each article in PLoS ALMs provides some of the following metrics:

- Usage – PLOS views, PLOS PDF downloads, PLOS XML downloads, PMC views, PMC PDF downloads
- Citations – PubMed Central, CrossRef, Scopus, Web of Science, Google Scholar
- PLOS – Comments, Notes, Ratings
- Social Network – CiteULike, Mendeley, Twitter, Facebook
- Blogs & Media – Nature Blogs, ScienceSeeker, Research Blogging, Google Blogs, Wikipedia, Trackbacks (<http://article-level-metrics.plos.org/alm-info/>)



Each PLoS article has a “Metrics” tab in which this information is displayed, with links that go to the source of the data.

Plum Analytics was founded in 2012 by Andrea Michalek and Mike Buschman (both having experience with the Summon web scale discovery service), added book metrics by partnering with OCLC in late 2013, and was acquired by EBSCO in January 2014. Plum Analytics collects impact metrics in five major areas: usage, captures, mentions, social media, and citations across 20+ research artifacts, such as: articles, books, blog postings, videos, presentations, conference proceedings, datasets, source code, cases, etc. (<http://www.plumanalytics.com/about.html> and <http://www.plumanalytics.com/metrics.html>). Examples of how Plum Analytics is being used at the University of Pittsburgh and the Smithsonian are provided at: <https://plu.mx/>.

For specific comparative information on these four services, both Chamberlain’s article and Loria’s blog post provide some helpful chart-based information.

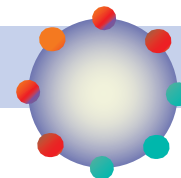
So, we’ve discussed some of the issues associated with the traditional methods of measuring research impact, and altmetrics address many of those issues as well as provide additional benefits:

- Faster recognition of scholarship
- Tracks non-traditional recognition of scholarship (social media, blogs, etc.)
- Measures non-traditional forms of scholarship (datasets, scholarly blogs, digital research, etc.)
- Tracks recognition from scholars outside the field
- Provides transparent view into the individual metrics
- Potentially provides context with the metrics (positive or negative; who’s reading (scholar or lay person); used in grant applications, or additional experimentation, or review articles, etc.)
- Provides new filtering options for the increasing amount of research (e.g., how many on Mendeley are interested in the research artifact)
- Encourages publication in new/innovative journals because it provides an alternative value mechanism to “journal impact”; (Mounce, 2013) and
- Potentially shows evidence of the impact of research from developing countries. (Alperin, 2013)

However, altmetrics is still a burgeoning field and has the associated growing pains, including:

- Popularity doesn’t necessarily equal quality
- Potential for opinions from experts and non-experts to be weighed equally
- No standardization – what’s a “good” number; how can comparisons be made
- Challenges associated with traditional forms of publication such as books and book chapters, which impact the humanities and (to a lesser extent) the social sciences
- Opportunities to “game” the system
- Issues with ambiguous links and identity resolution (e.g. three different links, a PubMed Central ID, a DOI, and a URI to pre-print or post-print, for the same article), as well as issues capturing references in non-textual artifacts (e.g. podcasts or YouTube)
- The amount of labor needed to populate a tool like Plum Analytics with scholars and their research artifacts
- Services and/or metrics disappearing (ReaderMeter or Connotea) or are being acquired by commercial companies (Plum Analytics (EBSCO), Mendeley (Elsevier))

Related to standardization, in 2013 “the Alfred P. Sloan Foundation awarded NISO a grant to undertake a two-phase initiative to explore, identify, and advance standards and/or best practices related to a new suite of potential metrics in the community.” (http://www.niso.org/topics/tl/altmetrics_initiative/) However, creating standards in such a fast moving environment will be challenging, and it is “impossible to know how long this process of standardizing altmetrics will take or



how successful it will be. It's not just a matter of digesting current web-based metrics. New ones are bound to develop as new forms of communication catch on." (Careless, 2013) Piwowar (Impactstory founder) cautions moving forward too quickly with standards, saying, "I think we want to be careful so that we don't adopt standards that could calcify innovation; these are early days for altmetrics." (Griffin, 2013)

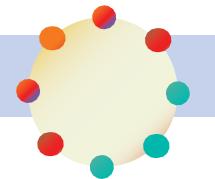
The issue of metrics in the humanities and social sciences is an on-going problem since much of that research is produced in the print environment of books and book chapters. Elsevier and Thomson Reuters are attempting to address this need with book citation products, but these can be expensive add-ons to already expensive databases, and this is a proprietary solution. Altmetrics hold some promise in this realm, because of the way books are mentioned in social media. With Plum Analytics partnering with OCLC, a new metric would be the number of libraries that hold a book. Amazon is another source for metrics on books, given the ratings and reviews they collect. Bushman and Michalek suggests that book "metrics that take into account usage, such as library holdings, library circulation, course readings and eBook downloads, add a layer of impact that is more meaningful for these disciplines." (Bushman and Michalek, 2013) Hammarfelt writes, "the digitalization and internationalization of research in the humanities, a general movement towards open access across research fields, as well as the further development and diversification of altmetric methods could, at least partly, solve [the current issues]. Then, altmetrics would be an attractive and, in many cases, superior alternative to traditional bibliometrics methods for analyzing and measuring the impact of research in the humanities." (Hammarfelt, 2014)

Gaming is recognized as a significant issue that needs to be addressed; however, it's not necessarily a new issue. The authors of the Altmetric Manifesto, acknowledge the issue of gaming, but also indicate that gaming has been used by some to the more traditional metric, journal impact metrics. They are very clear in saying that, "application designers should continue to build systems . . . to detect and repair gaming." (<http://altmetrics.org/manifesto>) Similarly, Andrea Michalek (Plum Analytics) "said the sheer quantity of data that is available can help guard against people who might try to game the system since patterns can be detected with big data. It's the same idea that underlies spam filters. 'Most gaming is detectable and as it matures it will be important to be able to combat it.'" (Kelley 2012)

So – no surprise for a relatively new-born concept – altmetrics have shortcomings and benefits. It may actually be too early to determine the ultimate value of altmetrics, but librarians shouldn't sit on the sidelines waiting for a determination. Lapinski, Piwowar, and Priem suggest that "librarians can provide. . . support in three ways: informing emerging conversations with the latest research, supporting experimentation with emerging altmetrics tools, and engaging in early altmetrics education and outreach." (Lapinski, Piwowar, and Priem, 2013) Likewise, Roemer and Borchardt emphasize the importance of librarians educating themselves and each other about "altmetrics developments that affect their work as collection managers, instructors, and independent academics." They go on to say that librarians need to educate the stakeholders (researchers/scholars) on the potential value of altmetrics and educate the altmetrics developers, publishers, and vendors about the "need for metrics that fairly represent the wide variety of cross-disciplinary research that takes place in academic institutions." (Roemer and Borchardt, 2013)

Public and school librarians may view altmetrics as an academic library issue, but – **no** – this is not the case! Harkening back to the beginning of this column, one purpose for citation metrics (and now altmetrics) is to serve as a filter for the overwhelming amount of information now available at a researcher's fingertips. As altmetrics appear more and more in openly accessible resources like PLoS or proprietary databases like Scopus or journal publishers, librarians in all types of libraries will need to explain how altmetrics can help researchers – whether school children, young adults, teachers, the general public, or college-level – find the most valuable articles in an area of research.



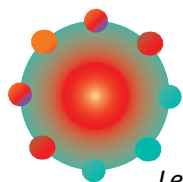


Ultimately, the concept of article-level metrics – applied beyond the “article” artifact – may be the ideal solutions. There is still value for the traditional metrics – peer review, citation counts, and journal impact factors, and there is value for the new altmetrics. In fact, altmetrics have the potential to provide some context that is missing from the traditional metrics, if verifiable correlations can be identified. For example, does an early-on high number of people saving a citation in Mendeley serve as a predictor of high citation counts further down the road; do comments in Facebook and Twitter inform whether high citation counts are in support of or refutation of the published research?

The blossoming connection between research artifacts and social media coupled with the long-known issues associated with traditional metrics makes it readily apparent that the time is ripe for an alternative approach to the impact metrics of research. Loria (2013) suggests that “what is ultimately required is the implementation of what I call an impact management system (IMS). The IMS will incorporate outputs and impacts, harvesting metadata from human resources systems, research management systems, institutional repositories and impact monitoring services. . . [with the intent] to collect research activity data that can be interpreted and weaved into variations on a theme for internal, external and public audiences.”

Yes, the jury is still out on altmetrics, but it appears to be showing potential as a viable option to assess the impact of research in the 21st century. Two journals have recently devoted the entire issue to the topic of altmetrics: The April/May 2013 issue of the *Bulletin of the American Society for Information Science and Technology* and the summer 2013 issue of *Information Standards Quarterly* (<http://www.niso.org/publications/isq/2013/v25no2>). For updated information, other specific resources of note include:

- Altmetrics in CitationCulture blog (<http://citationculture.wordpress.com/category/alternative-metrics/>)
- Bailey’s Digital Scholarship Altmetrics Bibliography (<http://digital-scholarship.org/alt/altmetrics.htm>)
- Impactstory Blog – <http://blog.impactstory.org/>
- Mendeley’s “Papers in Altmetrics” (<http://www.mendeley.com/groups/586171/altmetrics/papers/>)
- Twitter Altmetrics hashtag (<https://twitter.com/search/realtime?q=%23altmetrics>)



Additional Resources

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Alperin, J. P. (2013). Ask not what altmetrics can do for you, but what altmetrics can do for developing countries. *Bulletin of the American Society for Information Science and Technology*, 39(4), 18-21.

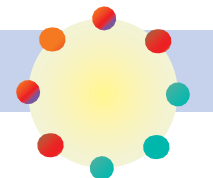
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Library Instruction Round Table News

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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.

For more information about our committees visit <http://www.ala.org/lirt/committees>

Please see our online committee volunteer form at

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

