Reference & User Services Quarterly

The Journal of The Reference and User Services Association (RUSA)

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Giving Credit: How Well Do Librarians Cite and Quote Their Sources? Lifting the Veil: Analyzing Collaborative Virtual Reference Transcripts to Demonstrate Value and Make Recommendations for Practice Towards Holistic Accessibility: Narratives from Functionally Diverse Patrons

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RUSQ Moves to Full Open Access

Barry Trott

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t their July meeting, the board of directors of the Reference and User Services Association (RUSA) approved a proposal from the *RUSQ* editor and board to make the journal fully open access, beginning with volume 57 no. 1, Fall 2017.

The RUSQ board based its proposal on several arguments:

- 1. Making sure that our professional standards are supported by our professional journal
 - a. As the open access movement is strongly supported by librarians, it makes sense that the flagship journal of the reference profession, RUSQ should support that model. Our sister organizations, LITA and ACRL, both offer their professional journals in fully open access models, starting in 2012 and 2011 respectively. It makes sense for RUSQ to join this effort. As the ACRL board noted in their statement on open access, "Scholarship by academic librarians advances the fields of library and information science, influences practices of aligned professions, and informs effective advocacy. In support of broad and timely dissemination of library and information science scholarship, the Association of College and Research Libraries (ACRL) encourages academic librarians to publish in open access journals."1
- 2. Ensuring a continued pool of strong authors and articles
 - a. As noted in the ACRL statement above, more and more librarians are seeking to publish only in open access journals. *RUSQ* has had at least one instance of an author withdrawing an article due to the lack of full open access. We have also had column editors who were unable to publish a particular piece because the author will only publish in open access publications. This will become an increasing issue for future editors. Move to a fully open access model will ensure that the journal continues to draw from a strong pool of authors for feature articles and columns.
- 3. Easing access for current RUSA members
 - a. Moving to full open access will eliminate the need to RUSA members to login to read *RUSQ*. The primary complaint that readers have had about the journal during my tenure as editor is the challenge of easily accessing current articles. The move to full open access ensures that all readers will be able to easily read journal content.

- 4. Increasing attention to RUSA
 - a. By moving to a full open access model, more readers worldwide will be able to connect with RUSA though the journal. Increasing ease of access for librarians, especially those in organizations that do not provide institutional access to *RUSQ* (public librarians in particular) should increase the reach of RUSA into new areas of potential recruitment. As increasing RUSA membership is a key to the survival of the association, the move to full open access can be a part of this strategy.
- 5. Broader worldwide access
 - a. *RUSQ* board members noted that in many countries worldwide, the cost of professional journal subscriptions is extremely prohibitive. Delayed access to these publications handicaps researchers who could benefit greatly from timely access to important publications, such as *RUSQ* articles and columns. Again, increasing the profile of the journal and of RUSA will be a benefit to the organization.

As part of the consideration of the cost of moving to full open access, I will be working with staff at ALA Publishing to explore possible cost savings in the production and other lines for the journal, including moving the journal to a more web-based format. If there are savings here, they would also contribute to making up the deficit that the move to full open access would entail.

While the move to a fully open access model will result in additional costs for RUSA in terms of lost subscription fees, the *RUSQ* board and I feel that there are significant benefits in terms of reach, access, and living up to our professional standards that warrant those costs. It is essential for our organization to clearly live the values that we espouse as professionals; the move to open access is an important step in that direction.

Reference

 "Policy Statement on Open Access to Scholarship by Academic Librarians," Association of College and Research Libraries, press release, July 11, 2016, http://www.ala.org/news/press -releases/2016/07/acrl-issues-policy-statement-open-access -scholarship-academic-librarians.

RUSA: Change is in the Air

Chris LeBeau, RUSA President, 2017–2018

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"Change begins at the end of your comfort zone" —Roy T. Bennett

t is my turn to welcome all new and returning members to RUSA. As we open the door on the new year this September, we find some interesting changes on our doorstep. While change is no stranger to our profession, perhaps some of the appeal of RUSA is the comfort we find in an association that does not change too much. Members enjoy established traditions and supportive, collegial networks that span our working lives. But, RUSA is an organic organization, so change and adaptation are part of the natural evolution of things. This year will be a year of adjustment and new beginnings. It will require patience when, not if, we encounter bumps in the road. The challenge before us is to manage the change while endeavoring to create forward momentum.

First, we will be greeting a new executive director for the first time in eight years. The position remains a shared arrangement with ASCLA. With all luck, the new director will be in place by the time this article appears. Expect a transition period as we get to know each other. We are wholly indebted to the RUSA staff for maintaining operations on an even keel for half a year in the absence of an executive director. My sincere thanks go to Leighann Wood, Jennifer Cross, and Melissa Tracy. I hope to arrange an online meet and greet with the new executive director in the fall.

Next, as we move forward, RUSA will be governed by a board of directors and advised by a leadership council comprising the board, committee chairs, *RUSQ* editor, divisional liaisons, section and interest group chairs, and RUSA staff.

Our leadership will be studying the new ALA conference redesign and the adaptations RUSA will need to make to accommodate it. This redesign promises to affect the way we manage our portion of the Annual conference. ALA President Jim O'Neil is encouraging divisions to hold more online meetings to free up your conference time to attend sessions! I encourage this. Space will be at a premium as the conference footprint downsizes.

We have revenue challenges. With the help of RUSA office staff, we are scrutinizing our expenses and redirecting our efforts toward activities that bring maximum member value and additional revenue. We need to devise new, less expensive ways to manage some of our programs like achievement recognition. We are aggressively seeking outside funding primarily through the efforts of Celia Ross who serves as RUSA's vendor relations coordinator. Section members also are actively soliciting vendor support. We will consider new fundraising efforts. We must scale our programs and activities to a level that staff, volunteers and funding levels can reasonably support.

If this is not change enough, the board spent the year voting on division restructuring proposals developed by the Organization and Planning Committee under the tireless leadership of Beth German. Kudos to the entire committee (listed below) for earnestly tackling this whale of a job. The committee was composed of long-standing RUSA members, deeply involved in the association. They formed their ideas from data, past surveys, and their own observations and knowledge of the functioning of the association. We restructure not for the sake of change, but to follow best practices for nonprofit organizations and to respond to changing conditions within our organization and within RUSA's internal office. The Organization and Planning Committee will become an Implementation Task Force that will guide the organization through the change process. You can read more about the structural changes in Alesia McManus's message to membership in RUSA Quarterly Update (May 23, 2017) (www.rusaupdate.org/quar terly update/from-the-president-su17).

What are the benefits of these structural changes?

- Swifter board action resulting from a stepped up meeting schedule of monthly meetings.
- While the board will retain a large profile in the short term, it will shrink in the long term, thereby right-sizing the governance to be in keeping with today's nonprofit models.
- Quorum requirements will be met more easily with some smaller committees enabling them to complete their work more expediently.
- RUSA staff bring us new talent and capabilities. Some things our volunteers try to maintain may be done more efficiently by our dedicated internal staff.
- Our Membership Committee will become Member Engagement. In addition to the traditional committee duties, this committee will add an emphasis on recruiting new members and engaging members new to the profession. It is predictable that RUSA will experience a rise in retirements, so it is important we attract the next generation.

RUSA has had a tremendously busy year under the energetic leadership of Alesia McManus. (Between the two of us, I think I tested the limits of my university email system.) Several task forces have presented us with reports with many good suggestions through which we continue to work.

Looking past the structural changes, I am excited about several things we are working on and some things we can develop:

- New course offerings from our Professional Development Committee
- Conversation series with leaders in the field
- Conversations about the future directions of reference
- Lightning polls on topics of your choice—do you have burning questions for which you would like quick responses
- Members' contributions on our new RUSA Update platform; share your studies, white papers, professional observations, innovations, member news, and opinions
- Contributions from our younger members from whom we can learn so much
- Continued public, academic, and special library collaborations
- The shift of *RUSQ* to full open access, increasing its visibility and access in the library community

I welcome the opportunity to serve the membership this coming year. I have many good friends and colleagues among you. I want to hear your ideas and suggestions for making RUSA a more vibrant association, and an association of choice. I look forward to working with all the RUSA leadership and with our newly elected RUSA leaders. Ann Brown, RUSA's new vice-president, brings a depth of knowledge of the association that should prove to be a great resource in this time of change. I want to express my thanks to the executive committee (Alesia McManus, Anne Houston, Sarah Hammill, and Kate Oberg) for their guidance this past year. RUSA officers and staff devote a tremendous amount of time and energy to our organization and to ALA, and we all thank them for their dedication.

The Organization and Planning Committee is Beth German, Tina Baich, Ann Brown, Anne Houston, Erin Rushton, Arlene McFarlin Weismantel, Bobray Bordelon Jr., Donna Brearcliffe, Jennifer Jacobs, Jenny Presnell, Colleen Seale, Matthew Wayman, and Chris LeBeau. Alesia McManus was highly involved.

Developing a Reflective Practice Template for Citation Management Software Instruction

Steven D. Milewski and Jeanine M. Williamson

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Correspondence concerning this column should be addressed to Barry Trott, RUSQ Editor, 7770 Croaker Rd., Williamsburg, VA, 23188; email: btrott@wrl.org. One of the essential characteristics of successful librarians is the ability to use their experiences to build their skills. Donald Schön defined this concept as "reflectve practice" in his 1983 book *The Reflective Practitioner*. Here, Milewski and Williamson take on the role of reflective practitioners in examining their work in teaching citation management software. Their experience offers a model for librarians in all sorts of instructional positions to engage in reflective practice.—*Editor*

eflective practice, which Schön termed "reflectionin-action," has to do with practitioners' attempts to make sense of surprising elements in the unique and uncertain contexts in which they act.¹ As Schön discusses, practitioners often must solve problems that do not match theoretical knowledge in their disciplines. Such problems, when reflected upon, can lead to improvements in practitioners' understanding and practice. Describing this process, Schön states:

In each instance, the practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomena before him, and on the prior understandings which have been implicit in his behavior. He carries out an experiment which serves to generate both a new understanding of the phenomena and a change in the situation.

Library researchers, too, such as Booth,² have discussed the value of incorporating reflection to undertand instruction and improve it. This paper describes our reflections on uncertainties arising in bibliographic management instruction, which led us to develop a template for others to use in reflecting about these kinds of classes.

As citation management software such as EndNote has been adopted by universities, librarians have often been responsible for instructing faculty and students how to use complex computer programs that automate the complex task of formatting citations in thousands of reference styles. Citation management software instruction poses challenges distinct from other kinds of library instruction due to its level of detail and numerous things that can go wrong as students with varying technology backgrounds, academic majors, and language skills attempt to follow along with instruction while using different kinds of computers, operating systems, browsers, and word processing software. While research has focused on the features and futures of citation management software and the use of citation management software,³ we could locate no writings on the application of reflective practice to citation management software instruction. Instructors in the fields of education and library science have used reflective practice to reflect upon and improve their instruction,⁴ and citation management software instruction can benefit from such reflection. The present study describes the development of a reflective practice template for citation management software classes using critical incidents as prompts for reflection. Specifically, we selected surprising events that happened during the instruction as the incidents for reflection, since we find that surprises are frequent in citation management software instruction and can provide useful data for analysis.

CRITICAL INCIDENTS IN INSTRUCTION

Tripp made the point that critical incidents could include any occurrences in instruction that are interpreted by the instructor as significant.⁵ They could include routine events typical of a category of occurrences, as well as solely surprising ones. Any analyzed event could be a critical incident. For example, a librarian might notice that students regularly check their smartphones during instruction. While this regular event is not surprising, it is worth analyzing because it may point to students' lack of engagement in the instruction.

Booth seems to have a fairly flexible conception of instructional events or features that can provide material for reflection, as well.⁶ Describing her own process of reflection, Booth stated,

To help me remember specifics immediately after any session, workshop, or presentation (when my residual impressions are at their strongest), I do a three-question reflection about the interaction: what worked, what didn't work, and whether I achieved my goals. I also quickly note anything that stood out about my own performance or that of my learners/audience, such as an interesting turn of phrase, takeaway, best moment, or problem I might have experienced with technology.

Graf and Harris call for re-emphasizing "the process of framing and setting the problem in the first place."⁷ They cite Schön's statement: "when we set the problem [upon which we reflect and act], we select what we will treat as the 'things' of the situation, we set the boundaries of our attention to it." Thus, for Schön, as for Graf and Harris, the perception of critical incidents would depend on what events were paid attention. Graf and Harris give an example of a survey in which they asked librarians to think about risks they encouraged students to take in an instruction session and risks they embraced themselves in the instruction session. The critical incidents in this case were risks taken.

SURPRISES AS CRITICAL INCIDENTS

Beilin discusses the fruitfulness of departing from plans in library instruction when students respond differently from how the librarian expects.⁸ Unexpected responses can give opportunities for novel thinking about a topic. While Beilin discusses "unanticipated ideas, questions or events," which are "the results of the students' unique contributions, group dynamics, and accidents that happen in the course of a lesson," one could add other causes of surprises in technologyrich teaching such as citation management software instruction. Indeed, features of the computer hardware and software are as much causes of surprises as students' experiences. We agree with Beilin that surprises can offer useful material for reflection. We used the concept of surprises in developing our template for reflective assessment of citation management software instruction.

CONTEXT

Our development of a reflective practice template for citation management software instruction was prompted by our experience with teaching EndNote to graduate social work classes. These classes were a rich source of surprising critical incidents that we incorporated into the template.

Social work teachers themselves frequently incorporate reflective practice in their instruction, but due to the nature of the subject matter, the reflection is quite different from the reflection that we incorporated in citation management software instruction. For example, Norton, Russell, Wisner, and Uriarte held meetings in which social work faculty shared reflective teaching journals, engaged in intergroup dialogue, and practiced meditation and visualization to focus on improving their teaching.⁹ These meetings were prompted by the anxiety that new teachers felt about instruction and by students' preference for faculty "who could role model social work practice skills in the classroom, such as creating a safe space, using empathic listening, and responding to students in a respectful and culturally competent way."

To give another example, Mishna and Bogo focus on using reflective practice and mindfulness to "aid instructors' understanding or and response to conflict in the classroom, which is unavoidable."¹⁰ The social work focus on group conflict is rather different from the focus of librarians as citation management software instructors. Similarly, Hermsen and Embregts incorporated reflective practice with a goal of helping students develop a "perspective focused on professional loving care."¹¹

FOR YOUR ENRICHMENT

TECHNOLOGY TEACHING IN SOCIAL WORK

Since technology was the focus of our citation management software instruction, our reflective practice looked rather different from the social work examples above. The NASW and ASWB Standards for Technology and Social Work Practice (2005) has a section on technical competencies which states the following:

Social workers shall be responsible for becoming proficient in the technological skills and tools required for competent and ethical practice and for seeking appropriate training and consultation with emerging technologies.¹²

While technology is increasingly being used by social workers, it is probably safe to say that people and communities are the primary focus for social workers, and technology is a tool.

The people/things dimension in applied psychology is an empirically derived way to summarize data about occupational differences.¹³ Helping professions such as social work have a "people" orientation, whereas technological fields tend to have a "things" orientation. Allen and Robbins place technical occupations squarely on the things side of the dimension and social service on the people side.¹⁴ Nevertheless, despite the "people" orientation of social work, students in this field must use technology, including for research and writing, and one would expect that like students in all fields, different individuals have varying degrees of success with these tools.

A challenge in technology education for social workers is that some educators do not have a high degree of computer self-efficacy (confidence in using technology). Colvin and Bullock point out that many social work educators are older than thirty-five and may lack confidence in incorporating technological tools in their courses.¹⁵ Younger social workers may have more computer self-efficacy. We found that many of the students in our citation management classes for social workers were nontraditional students older than 30. Thus they may have had lower computer self-efficacy than younger students.

We have both taught or roved for many graduate social work classes. Milewski is the social work liaison librarian, and Williamson is the EndNote specialist at the University of Tennessee, Knoxville. During our experience teaching the classes, we have run into several snags. Thus we wanted to engage in a careful reflective practice on the classes as a whole to improve them.

We began by brainstorming answers to Booth's questions cited above about what worked in the class, what didn't work, and whether our goals met. After the initial brainstorming and further follow-up discussions, we sought a way to make our reflective practice more organized and focused. To do this, we brainstormed again, this time reflecting upon surprising critical incidents during the instruction. We asked ourselves two working questions at this stage of the process:

- 1. What surprises did you encounter during the instruction, and what were the consequences?
- 2. What plans did you not carry out, and why? What were the consequences?

After this stage of brainstorming, we looked for themes in our discussion and found there were four kinds of surprises we encountered. These pertained to

- 1. people;
- 2. instructors/curriculum;
- 3. EndNote or other citation management program; and
- 4. supporting technology and software

Identification of these themes led us to develop questions associated with each theme that could capture all the problems that arose during the two sets of brainstorming.

THE TEMPLATE

The following outline is the template of questions we developed during the reflective practice process. They do not represent an exhaustive set of questions that could be used in reflective practice, but they cover the data we generated in our discussions. The next section gives examples of surprising critical incidents that led to selecting the questions.

- 1. People
 - a. How did the students' familiarity with technology affect their learning?
 - b. How did the students' language skills affect their learning?
- 2. Instructors/Curriculum
 - a. If an instructor requested the class, how did his or her expectations affect the instruction? Were the instructor's expectations communicated to the librarian before the citation management instruction session?
 - b. How did the students' curriculum and class projects affect the features they needed to learn about in citation management software?
- 3. EndNote (or other citation management software)
 - a. What compatibility issues arose with the computer operating systems during the class?
 - b. How did EndNote or other citation management software look different for Windows and Mac and need different directions for completing the same task?
- 4. Supporting Technology and Software
 - a. How did computer hardware issues and presentation technology affect the class?
 - b. How did wireless issues affect the class?

EXAMPLES OF SURPRISING CRITICAL INCIDENTS THAT INSPIRED QUESTIONS IN THE TEMPLATE

People

How did the students' familiarity with technology affect their learning?

Many of the students in graduate social work classes are non-traditional students, and some are less comfortable with technology than traditional age students. We reflected about how could we help make the instruction experience more comfortable for students who struggle with technology? Could we have arranged for follow-up instruction for students who did not catch on to the steps for using EndNote?

How did students' language skills affect their learning?

In a general EndNote class, a student was using software that had text in the Korean language, and her English language skills were not good, so she had trouble understanding the demonstration. Could we have found a way to switch the text back and forth from Korean to English so we could read it and she could use it? Could we have met with her individually later to go over the material?

Instructors/Curriculum

If an instructor requested the class, how did his or her expectations affect the instruction? Were these expectations communicated to the librarian before the citation management instruction session?

The instructor of the social work class wanted students to be able to collaborate when using EndNote, but he did not tell us this beforehand. Because we typically do not teach about sharing EndNote libraries in introductory EndNote classes, this posed a dilemma. We were not prepared, and we also thought the process might be too detailed for introductory EndNote students to learn. Typically we teach about sharing EndNote libraries in individual instruction. Should we be covering this topic in introductory classes, since some instructors would like us to? Should we tailor introductory EndNote instruction classes if the instructor wants the class to learn specific advanced functionality? If so, should we schedule longer classes or substitute out other content? Would it be good to schedule supplementary instruction?

How do the students' curriculum and class projects affect the features they need to learn about in citation management software?

In individual consultations we have learned that graduate students writing dissertations have different needs than

students writing class papers. Also students who are writing collaboratively may benefit from learning about End-Note Online or sharing EndNote libraries if they are doing research with professors. Should we have informed students of the ways they could use EndNote beyond what was in the standard lecture, and offered opportunities to meet for follow-up instruction? Could we have offered supplementary instruction for working groups?

EndNote (or other citation management software program)

What compatibility issues arose with the computer operating systems during the class?

We noticed that the version of EndNote we were using for the social work class was not compatible with certain versions of Microsoft Word 2016 (Mac). It took a great deal of time to perform the update during the class. Perhaps we could have instructed students using Macs to update their Word before the class.

Also, we noticed in several classes before EndNote X8 came out that the Mac Sierra Operating System was not compatible. It is always difficult to stay on top of what is not compatible with EndNote or other citation management programs as computer systems evolve. Incompatibility issues are a frequent source of surprises. Perhaps we could have regularly monitored the EndNote users forum to learn about these issues. We also have been surprised when students brought iPads or ChromeBooks to EndNote classes and expected to be able to install the software, which they cannot on these devices.

How did EndNote or other citation management software look different for Windows and Mac and need different directions for completing the same task?

Traditionally we have used a Windows machine to demonstrate EndNote and included screenshots for using EndNote with Mac Word 2011, which looked very different. Even now when we work with EndNote with Mac 2016, it looks more like the Windows version but still has some differences. Perhaps we could have made the presentation clearer by also including screenshots of minor differences between the Windows and Mac EndNote interfaces, or even doing a dual presentation if two screens were available and switch between them with two computers.

Also, different browsers behave differently when one exports references into EndNote. Perhaps we could have provided screenshots showing the different methods of exporting in Chrome, Firefox, and Safari, in addition to having the rover troubleshoot browser issues. The rovers in our EndNote classes answer questions when students raise their hand during the hand-on portion of the class.

FOR YOUR ENRICHMENT

What features did EndNote not have that students needed?

We have found that some students use Pages or Google Docs instead of Microsoft Word. What help could we provide these students when our EndNote presentation is geared toward Word? Could we have provided handouts for these students to look at while we did the Word demonstration?

Supporting Technology and Software

How did computer hardware issues and the presentation technology affect the class?

We noticed that one student in the social work class had a computer that did not work well. We had not brought extra computers with us since the class was in the social work building instead of the library classroom where we have extra computers when we teach. Should we have brought a few with us?

Also, in some EndNote classes there have been surprises with the computer we used for instruction. In one library classroom, three-column libguides displayed as one column because the older projector's display dimensions were limited. Should we have asked what dimensions the projector could display and then provided screenshots or been prepared for the limitation? We are often surprised by how projectors work or do not work with our teaching laptop, particularly in classrooms outside of the library.

In another instance in a building outside the library, we were surprised by the provided computer/podium set up which had some features we were not familiar with. While it was fairly easy to adapt, such problems added to the stress of teaching the class. Should we have had a policy of always bringing and using our own familiar computers?

How did wireless issues affect the class?

We have noticed that with many people using the wireless in the classrooms, there are problems with connecting. Also, downloading the EndNote software is often slow because of multiple users trying to download at the same time. Because of the volume of usage, we had to adapt on the fly, as was the case with many of the surprises we encounter in EndNote classes. We learned that it was good to have students start downloading the software before the start of class if they got there early.

Discussion

We found our reflective practice to be a useful process because it resulted in some beneficial changes for our citation management classes. In the library's teaching classroom, we are now using dual monitors displaying how EndNote looks in Mac and Windows operating systems. We are shifting to more visual handouts with screenshots of Mac and Windows EndNote programs and Cite While You Write tabs in Word as well. The EndNote Quick Reference Guides on EndNote.com have supplemented our previous strictly verbal handouts.

In addition, because of our experiences with the delays we encountered in installing EndNote on students' machines, we have improved the installation instructions on our EndNote libguide and asked that students try to install the program before class. We also arrive early to class and assist with the installation for any students who wish to get help.

We also have become more prepared to teach about using EndNote in collaborative research, which seemed to be important to the social work curriculum. We plan to direct students to the excellent training videos on this topic that are available from the Clarivate Analytics, the company that owns EndNote.

CONCLUSION

Our observation and analysis of surprising critical incidents in citation management instruction led us to develop a reflective practice template. We believe that engaging in a structured reflective practice process can help librarians include reflection on essential factors affecting the success of their citation management software instruction. A structured template such as ours does not preclude more freeform reflection, but it ensures that librarians do not leave out consideration of important aspects of this technology-rich instruction. Constantly reflecting on the instruction allows it to evolve in response to the people, instructors/curriculum, EndNote or other citation management program, and supporting technology and software.

We believe that the process of reflecting upon instruction in a team was effective since it allowed us to share our perceptions of surprising events during the instruction, compare memories, and validate our individual perspectives. The process of reflecting upon instruction in teams could be applied to a variety of different kinds of libraries and different types of instruction. For example, the general education librarians at a small college could get together and develop a template for reflecting upon their instruction. Similalry, children's librarians in a public library system could reflect together on how they provided story hours and develop a template to use when thinking about these instructional experiences. Reflective practice is a widely applicable thinking process that can be refined and applied by experienced librarian-practitioners. Tailoring reflective prompts to particular kinds of instruction should give librarians a useful method for generating insights about specific instructional contexts.

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For Your Information

Using Information Literacy in Public Libraries

Sonnet Ireland

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ACRL's Framework for Information Literacy for Higher Education has made waves among academic librarians since it was filed by the ACRL Board in 2015. Although the ACRL Framework's primary intended audience is academic librarians, librarians in all types of libraries engage in information literacy instruction with their patrons. Sonnet Ireland shares her perspective as a public librarian on the impact that the ACRL Framework has had on her view of information literacy and how it has impacted her hands-on work with patrons.—*Sarah LeMire, Editor*

ducation is the kindling of a flame, not the filling of a vessel." Socrates reminds us that education is not just about earning a degree and finding gainful employment; it is also about fulfilling ourselves as human beings. We easily make the connection between education and libraries in academic institutions, but we sometimes forget to include public libraries in that equation. I first noticed this when I was invited to join the NOLA Information Literacy Collective Executive Board,¹ a group that hosts a free annual forum dedicated to information literacy, in 2013. At the time, I was an academic librarian at the University of New Orleans, where I served as both a government information librarian and one of the reference and instruction librarians. As a result, I became guite familiar with ACRL's Framework for Information Literacy for Higher Education when it was released in 2015. When the NOLA Information Literacy Collective began working on local training sessions for academic librarians in the area, I saw the potential for its use by both public and school librarians. I felt it was obvious that we needed to include these librarians in our training efforts. After all, most of the students that I worked with were completely lost when it came to the very basics of research. Many of them did not even consider coming to the library until I reached out to their classes. School and public librarians are the first librarians that most people will interact with in their lifetimes. Including them, in my mind, would maximize our efforts and help the public as a whole. Most of my academic colleagues seemed surprised by this, assuming that public librarians had no use for any instruction tools. This is, of course, a misconception, as I would verify when I abandoned my tenure for a position with the St. Tammany Parish Library. To my delight, I found that public librarians do so much more than reference. We frequently have classes, workshops, and programs to help our patrons learn different skills, such as using a database or even just using a computer. While academic librarians primarily focus on the degreeearning learner, public libraries serve the lifelong learner.

Whether our patrons (or other librarians) realize it or not, the public library is designed to develop and encourage the lifelong learner in all of us.

INTRODUCING THE ACRL FRAMEWORK FOR INFORMATION LITERACY FOR HIGHER EDUCATION

The ACRL Framework for Information Literacy for Higher Education is comprised of six frames, or concepts.² Though I find some of the language cumbersome, I do believe it seeks to put into words what many instruction librarians know instinctively about information literacy. This is important since it can be very difficult to teach something we cannot identify or describe. Below are the six frames from the ACRL website. Please note that the frames are presented in alphabetical order to allow librarians more freedom in how they prioritize and utilize them in individual instruction sessions. I would also like to clarify that these frames are fluid. Many academic librarians disagree on the exact nature of each frame and may interpret them differently. Its flexibility is actually one of the benefits of the Framework; it can be used in myriad ways and bend as our instruction needs develop over time.

- Authority Is Constructed and Contextual
 - In other words, communities (societies or organizations) decide what makes someone an expert in a given field. Some examples include organizations like the American Bar Association or the American Forensic Association. Being an expert in one field, however, does not make a person an expert in all fields. In fact, expertise can be relative. The flip side of this is that fringe communities can attempt to bestow expertise on people who may not deserve it. So it is important to assess the community determining the guidelines for being an expert in a field. My favorite example is superheroes. Supergirl, who draws her power from a yellow sun, can only be a hero on planets with a sun similar to Earth's. Since Krypton has a red sun, she was just a regular person on her home planet.
- Information Creation as a Process
 - The format information takes can be just as important as the information itself. Different media requires different lengths. Legislators cannot rely on Twitter to publish new laws—they must be published in their entirety in a durable and easy-to-navigate format. Meanwhile, temporary information requires a quicker medium, such as flyers or Twitter. Other information actually demands a particular format. For example, DIY and makeup tutorials are usually better in video format than they would be written as text. This frame can also address the flow of information and how understanding that flow can add to a person's information literacy skill level.

- Information Has Value
 - This one is the simplest and could survive without a translation. It is the concept that information is valuable, but its value is determined by the other frames and by the information seeker. So an article that discusses different theories of how humans could colonize Mars might be priceless to someone trying to solve that problem, but it would only be of passing interest to the average reader. As with all goods and services, it is a question of supply and demand. It is not just the number of people who demand it, but how badly they demand it. Another part of that value is acknowledging that the information is the intellectual property of someone else. If information has value, then taking credit for someone else's idea is the same as stealing. By equating information with more tangible items, we can better understand the true significance of not paying the copyright fees for publications or for plagiarizing an author.
- Research as Inquiry
 - Research is not a one-step action. It requires asking and finding the answers to questions, which leads to more questions. Rinse and repeat. Even if you publish a paper, it will lead (if not you) others to ask even more questions. Thus exists the circle of scholarship, which dovetails nicely into the next frame.
- Scholarship as Conversation
 - Practically every scholarly paper, book, article, blog, etc. was written in response to a question that the author was trying to answer. Often, those questions come from other scholarly papers, books, articles, blogs, etc., which will lead to more papers, books, articles, etc. Sometimes, the scholarship is a response to someone else's answer to a question, continuing into infinity and beyond. The entirety of the scholarship in a given field can be seen as a huge conversation among the different authors, often beginning hundreds of years ago and continuing today. This can be true even in the case of recent technology. While you may be interested in the issue of fake news and social media, you might also find articles on the issue of yellow journalism in the late nineteenth and early twentieth centuries relevant.
- Searching as Strategic Exploration
 - Research is also not a straight and narrow path. It is a long winding road we all walk down. Often, we get distracted, wander down a side path for a little while to see the lovely trees or explore another area, before we end up back on track to our destination. For this one, I like to lighten the mood and use the example of a site like Wikipedia, where one can easily spend hours reading article after article. After all, we have all experienced time loss when exploring online. In this example, I use Wikipedia to remember what has happened on my favorite shows, like Orphan Black. An hour later, I have managed to read my way through

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multiple articles, landing on one about the Monlam Prayer Festival in Tibet. Embrace those side trips when using databases or reading scholarly articles, within reason, because you may find something that changes the way you think about what you are actually researching. You may even find an entirely new area to research.

PRACTICAL APPLICATION

Now, what does this have to do with public libraries? Everything. All of these concepts can be used in a public library setting. Patrons who are not currently in school can be more vulnerable to misinformation. They may not have as much exposure to different types of people with different kinds of views. They may not have someone, such as a professor, challenging why they think a certain way. They may not have an external reason to exercise their critical thinking skills on a regular basis. Instead, I see patrons who believe television doctors over their own physicians. They do not realize that those doctors are talking about general information, while their own doctors are familiar with their specific issues. I help patrons who no longer know who they can and cannot trust. They hear that mainstream media is now fake news, and they believe their Facebook newsfeeds and their friends' posts (which actually are filled with fake news). I hear some patrons discuss various conspiracy theories with each other in the library. They believed that all elections are rigged and that Hillary Clinton had already been chosen as president. Even after the surprising results in November 2016, they maintain that this election was an anomaly in a rigged system. These are only a few reasons why the public library is vital to them. In a time of uncertainty, the only thing many of my patrons trust is the library and our librarians.

INFORMATION LITERACY FIGHTS FAKE NEWS

In response to this need, I developed a sixty-to-ninety-minute class called "Fact or Fake? Learn to Tell Real Information from the Scams" for the Causeway Branch of the St. Tammany Parish Library. We talk about the difference between fake news, satire, and biased news. In the class, I teach the patrons how to assess information (or a website) with RA-DAR. Mandalios explains that RADAR stands for Relevance, Authority, Date, Appearance, and Reason for writing.3 We talk about different news items and assess them with these criteria. One sign of fake news is clickbait, which is when the headline of an article is sensationalized to encourage people to click on it. Often, the article has little or nothing to do with the subject of the headline, which means the information is not relevant to what they actually wanted to read. Authority can be trickier, but I encourage patrons to do research on who writes and publishes the information

they read or watch. Clicking on any About Us links or doing a simple search on Google for the author or publication will provide a lot of information. This also extends to who is quoted in the article. How does the author know about a conversation between our President and the President of China? If we do not know who the source is, we cannot assess their believability. If we at least have some key details about the person, we can make a better judgment about their comments. I also point out the importance of checking the date on information. Frequently, we share information online without realizing that it is old news.

Since many of our patrons are older, RADAR allows me to have fun with the acronym as it represents both the technology used to detect objects and a beloved character on the TV show MASH. MASH was a television show in the 1970s and 1980s about doctors, nurses, and other support staff stationed at the 4077th Mobile Army Surgical Hospital in South Korea during the Korean War. The character I am referring to is Corporal Radar O'Reilly, the Company clerk who seemed almost psychic throughout the show. Radar could hear the choppers coming in, often with casualties, before anyone else could. He also had a habit of handing items or information to the commanding officer before he was asked. Finally, he was the person everyone at the 4077th would go to if they needed something. No matter how hard it was to find the particular item or information, Radar always knew how to get it. Because of these attributes, RADAR really resonates with my patrons.

The patrons also learn keywords for identifying bias, as well as the different types of bias that exist. Since my patrons are aware of my love of mysteries and crime programs, I give them the example of a television detective who is convinced that a woman was murdered by her husband. I find that this scenario works beautifully for the biases that I cover. I take the patrons along different steps of the investigation and point out a specific bias held by one of the characters. Scenarios include confirmation bias:

The detective only focuses on information that implicates the husband. She points out the fact that the husband was having an affair and the neighbors heard the couple fighting earlier the day of the murder, but she dismisses the fact that DNA and fingerprints were found at the scene that do not match anyone living in the house.

Focusing on bias in a crime show helps demonstrate how different types of bias work without sending the class into a frenzy of political discussion. I am also careful to point out that bias does not make a person evil. We all have bias; the key is to know what that bias is so that we can take it into account.

Logical fallacies are also discussed to help patrons identify when a source is using faulty logic. This is a tactic seen in everything from social media posts to newspaper articles. In this exercise, separate little scenarios are used to make each logical fallacy more vivid. For example, correlation vs. causation is clarified by the following scenario:

Vandalism increases in the summer. Suspiciously, so do ice cream sales. Obviously, the consumption of ice cream leads to a form of madness that causes good citizens to vandalize property . . . No. In reality, both rates go up because of the time of year. Kids are out of school and are bored (unless they join the Summer Reading Program), so they get into trouble. It is hot in the summer, so we all enjoy ice cream even more than during the rest of the year.

Focusing on bias and logical fallacies, instead of just fake news, helps the patrons identify issues with any story before they share it on social media. After the class, they realize that ten articles that cite the same solitary research study are not as useful as one article that cites multiple resources that they can read for themselves. They also learn simple ways to verify a particular story, such as triangulation-i.e., finding the story in at least two other reputable sources. In this context, reputable sources are defined as news sources that have a long-standing reputation of being legitimate, such as the New York Times and the National Review. I remind them that reputable sources can have bias, but they are not fake. I also teach them how to double-check the story on a fact-checking site, such as First Draft News,⁴ iMediaEthics,⁵ and Snopes.⁶ Some patrons disagree about the reliability of Snopes, so I offer many alternatives and stress the most important part of any fact-checking site-the sources. If a site offers citations that patrons can go to and assess for themselves, then they can look at the actual evidence and make their own decisions. The goal is for patrons to think about what they read before adding it to the vicious cycle of misinformation.

Finally, the class covers the different kind of scams that exist online, over the phone, and even through the mail. After all, what is fake news but an attempt to defraud citizens of something even more valuable than money—the way they think and understand the world. We talk about protecting ourselves from catfishing, phishing, and spam. They learn how to assess an email address and a web link, as well as how to report fraud or attempts at fraud.

INFORMATION LITERACY OR METALITERACY?

Is the term information literacy enough? Mackey and Jacobson say no, "the emergence of social media and collaborative online communities requires a reframing of information literacy as a metaliteracy that supports multiple literacy types."⁷ I agree, and so I have started to embrace the term metaliteracy. They further explain, "metaliteracy promotes critical thinking and collaboration in a digital age, providing a comprehensive framework to effectively participate in social media and online communities."⁸ Metaliteracy more accurately includes other, more specific, kinds of information literacy, such as media literacy, digital literacy, visual literacy, and so much more.

With this in mind, I developed another class called "On the Money: Using the Library to Improve Your Financial Literacy." In this class, I teach patrons how to find financial information through the library catalog and our databases. I also direct them to reliable sites where they can find information on almost any financial question imaginable. We focus on government sites, such as the Federal Trade Commission,⁹ the Consumer Financial Protection Bureau,¹⁰ and Benefits.gov.¹¹ These are sites created specifically to protect consumers and connect them with the resources they need. I also emphasize the importance of promoting sites like these. There is a real concern in the government information world that these particular sites may disappear. Without voicing a political view, I explain how important it is to let their representatives know when the government provides a resource that they find important.

I also demonstrate how to use various government and nonprofit organization sites that can provide guidance on general or specific financial topics. We discuss the pros and cons of using various free personal budgeting software programs, as well as the types of security they provide. Patrons learn how to assess any other sites or financial software programs they might find. I advise them to find the Security section of any website that wants access to their financial information. They also learn how to look up what those security terms mean and how they function to protect their information. I then demonstrate some search techniques that can be used with their favorite search engine to locate sites that might develop in the future. The point of the class is not to simply give the patrons all the information they need, but also to teach them how to find information for themselves in the future.

Finally, the library also offers basic computer courses. In a series of four classes, ("Intro to Computers," "Intro to the Internet," "Intro to Email," and "Internet Safety") patrons learn how to use a computer and navigate a mouse, how to access the Internet and search the web, how to create and use an email account, and how to protect themselves and their computers. Here, I use information literacy principles to teach the patrons how to determine whether an email or website is legitimate. Patrons not only learn basic skills for using technology; they also learn how to think critically about the information they receive online, whether through a website or an email.

THE FUTURE

I have even more classes like this planned for the future. In fact, I am working on a class about continuing education throughout adulthood. Many of our older patrons are retired and are interested in learning new skills or just exercising their brains by taking a class. I have directed many of them

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to our library resources, such as Learning Express 3.0 and Hoopla, which offers many of The Great Courses video and audio classes. I have also demonstrated free massive open online courses (MOOCS) like Coursera and edX. Since this is a common need, I am developing a class that will explore these resources in-depth and show patrons how to find other MOOCs in the future. These are courses that will help engage older patrons who are looking for something to do with their time, while also exercising their minds and information literacy skills.

CONCLUSION

We are doing a lot of great things to teach our patrons information literacy or metaliteracy skills, but ours is just one of many public libraries offering classes like this. With the rising profile of fake news, librarians of all backgrounds have been called to action. For example, the Oakland Public Library offered "Stop Fake News!" classes in the beginning of 2017.¹² The librarians showed patrons how to find reputable sources through the library. They also provided patrons with the tools to identify fake news. The Gail Borden Public Library offered a similar program in January 2017 called "Librarians vs. Fake News."13 This session was live-streamed over YouTube, and the recording of the event is available on their site. If that surprises you, then check out what your local public library has to offer. Better yet, invite public librarians to any local information literacy gatherings or training sessions you have. As this year's Chair of the NOLA Information Literacy Collective, I am making a conscious effort to do just that. This year, our free forum will broaden the focus to public and school librarians, as well as academic librarians. We plan to have journalists and other non-librarian professionals talk at the forum about the importance of various forms of information literacy. While conferences or webinars with official library associations help librarians develop these skills, we also need to organize at a grassroots level to train ourselves and fellow librarians. Now more than ever, it has become clear that these information literacy skills are

needed by all ages. We can no longer afford to focus our efforts in independent groups, based on what type of libraries we serve. We need to work together to educate all people or offer them the opportunities to educate themselves, at least. See if there is a local group in your area, like LILi (Lifelong Information Literacy)¹⁴ in California. If not, start your own! Find a way to do what we are doing: encourage collaboration and discussion between academic, public, and school librarians. You might be surprised to find how many public librarians are doing everything they can to promote information literacy skills.

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Watching the Movie

Using Personas as a Library Marketing Tool

Spenser Thompson

Over the last twenty years, **Spenser Thompson** has worked on the marketing teams at Research Libraries Group (now part of OCLC), Innovative Interfaces, and Golden Gate University. He holds master's degrees in library science and psychology. He is on the review board of the Marketing Libraries journal and has presented at the National Library Marketing and Communications Conference. He maintains a blog at www.marketinglibraries. com and can his twitter handle is @mktglibraries.

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When Spenser Thompson said he'd like to devote this issue's marketing column to "personas," I have to be honest—I had no idea what he meant. But his description of "watching the movie" to see how different people use and perceive the library is really intriguing. Much like sportscasters "roll the tape," to get a better look at a play, librarians can also watch the movie to design better marketing experiences.—*Editors*

f you want to improve marketing at your library, "watch the movie." Watching the movie is an approach to marketing planning that has three parts: (1) building personas through observation and intuition, (2) finding a place for the library in the narrative of the persona, and (3) linking these personas to various stages in the "sales cycle": unaware of the library, aware of it, considering using it, or already using it. By watching the movie, you can design marketing experiences that are more creative, effective, and appropriate to the audience. This contrasts with approaches that start with "product-first" thinking or an exclusive reliance on demographic groups.

ABOUT PERSONAS

HubSpot—a technology company that provides a Customer Relationship Management system (sort of an ILS where the items are people)—define personas as

Fictional, generalized characters that encompass the various needs, goals, and observed behavior patterns among your real and potential customers. . . . By grouping people into persona categories, it is much easier for marketers, product designers, salespeople, and services people to tailor their content, messaging, product development, and services to different groups of people.¹

In HubSpot software, you can create personas and use them to manage email recipient lists and to track interactions online, or at events. It's not just about emailing demographics to get leads anymore.

A persona is not "men 40 years old who make X amount of money" or "students who work two jobs." These are demographic profiles that can be very useful in deciding who to target and what to tell them, but they are not fully realized personas. The personas can help get library staff beyond asking "What do we have and how do we promote it?" to the

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more useful "What characters are out there and where are they in time and space?"

By grouping people into carefully constructed personas, a small set of persona-targeted marketing strategies can effectively reach a much larger audience, delivering a personalized experience on a commodity scale.

Companies want their products to be deeply embedded in the lives of users, not just bought. Persona building can help them get there. Many companies use the world "life" in their tag line. GE's "Bring good things to life" or Safeway's "Ingredients for life." If I hear the phrase Mac User or Harley Rider, I get sense of that person's identity.

CREATING A PERSONA

Observe what types of people are wearing, where they walk when they come in the library, if they bring children, or what news events they happen to be talking about. What car do they drive or what kind do you imagine they drive? Cars are an excellent persona-building tool because the marketplace has so many models and is so thoroughly segmented by type of customer. You can pool the experiences of various members of the reference or circulation teams in a brainstorming session. Although this is a highly qualitative process, it can be as fruitful—in terms of your creativity—as focusing on metrics or the features and benefits of library services.

Decide as a group the answer to this question: How do we reach Busy Single Guy when he is a stranger? Or how do we get him to be more engaged with our library than he is (meaning, what additional services can we get him to use)? If you decide which stage of the story and which persona fits your marketing challenge best, you can focus your attention or dollars there. For example, how do you reach Busy Single Guy, who spends a few hours a week in the laundromat, who is at the awareness stage? He knows about the local library but has not considered using it.

ABOUT THE BUYER'S JOURNEY

The timeline your library focuses on is called the Buyer's Journey by today's professional marketers.² A marketing-focused library tries to imagine which "act" the person(a) is in, and what plot points (marketing tactics) will move him/ her to the next step. The job of a library's marketing staff is to inject experiences into the path of a given persona and march its members, literally (perhaps with signs) and figuratively, to the library.

Future library users are people living out their own movie scripts. Are their stories about being successful, getting by, or personal development? The best marketing aligns with the trajectory of people's lives through the persona that captures them in their full character shading.



Figure 1. This computer code flyer is aimed at Techie Tom and asks him to sign up for the library's E-book Service. Image: Spenser Thompson

Example Personas

Techie Tom's Terminal Boredom

I used to live on the second floor of a Silicon Valley apartment. I would see twenty-somethings walking to and from the Caltrain commuter station with service to Mountain View (where Google and other tech companies are). They would pass my window and then pass the library down the tree-lined street without glancing at it. Did they even know it was there? After making this observation, I created a persona called Techie Tom and invented a library challenge of raising e-book usage.

Who is Techie Tom? Techie Tom wears a T-shirt with a computer programming pun on it. I imagine that he thinks of libraries as antiquated and irrelevant. He finds the commute boring. In fact, his state of mind in general is bored with life. His "movie" is about the search for excitement.

As with film, something unexpected happens to the main character. Techie Tom sees a piece of paper on a tree. He stops because it does not look like an advertisement. Moving closer he sees that it is computer code, an IF/THEN statement that says if he is bored with his commute, he should download some science fiction books from a digital book service of the library. Moments later, Techie Tom buys a sugar donut at the coffee place at the station. He sees the same code on his coffee sleeve. This time he has a minute,

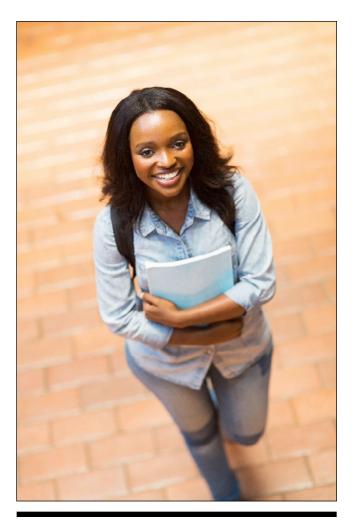


Figure 2. Social Sarah wants to make social connections in college. Image credit: iStock

so he pulls out his phone to scan the QR code and goes to a landing page for the promotion created by the library. There he signs up for an e-book subscription service at a special landing page created by the library staff. A generic example would be www.yourlibrary.org/commute. When he fills out the e-book registration form on the landing page, he starts climbing out of his dull life.

Social Sarah's College Adventure

Consider breathing life into a persona called Social Sarah, who is attending the prefreshman program at your university. Like Techie Tom, she thinks libraries are irrelevant and antiquated. She is very extroverted and very anxious about college. Perhaps she is afraid that falling behind academically during her first term will affect her social life. Given her social bent and the large amount of new experiences competing for her attention, she may never find the library; so the library staff has to find her. Libraries might want to partner with a sorority to find Social Sarahs that can wear T-shirts about the library around campus or serve as greeters. Social Sarah might show up to prefreshman week hoping to get a fast start on her social connections. This is a great time for a librarian to address the students. Getting ahead of your competitors for Social Sarah's attention, for example the student union, is a good strategy.

The Last Scene of the Movies

The last scene of these persona movies does not show librarians jumping up and down because e-book usage rose. These movies are about the users, not the library staff. In the last scene of Techie Tom's movie, he gets inspired by the sci-fi e-book and builds a huge rocket in his garage and blasts off in it. Social Sarah gets in a band with some cool kids and a bass-playing librarian. They organize a concert in front of the library. The college dean wanders by and tells the library director she will fund a concert space in the library. Now that's a Hollywood ending.

References

- 1. Sam Kusinitz, "The Definition of a Buyer Persona [in Under 100 Words]," *Hubspot* (blog), March 8, 2014, https://blog.hubspot .com/marketing/buyer-persona-definition-under-100-sr.
- 2. Lauren Hintz, "What is the Buyer's Journey?" *Hubspot* (blog), June 15, 2016, https://blog.hubspot.com/sales/what-is-the-buy ers-journey.

Yoga in the Library—A Research Guide

Beth Posner

Beth Posner is head of library resource sharing, the Graduate Center, City University of New York.

Correspondence concerning this column should be addressed to Mark Shores; email: shoresml@miamioh.edu. Whether you want to update your library's shelves of yoga books or support academic research in Eastern spirituality and Hinduism, this issue's column on yoga resources should be of great benefit. The author has compiled an excellent list of sources for both the practitioner of this ancient art and those curious about the philosophy behind it.—*Editor*

oga is a living practice of popular appeal, as well as an age-old tradition of scholarly interest. It is about the mind and the body, as well as the meaning of life and the nature of the universe. First introduced by Vedic priests to northern India five thousand years ago, the earliest yoga texts are two thousand years old. Its modern resurgence can be traced from the mid-nineteenth century, when it was popularized by Indian yogis and Western transcendentalists fascinated by Eastern philosophy and religion. As for contemporary yoga, it borrows from earlier traditions and texts as it also continues to evolve into new styles and systems. In this way, yoga is likely to remain relevant and vital, now and into the future.

The continuing and growing popularity of yoga of all sorts around the world speaks to the universal impulse people have to be well. For many, the initial draw is undoubtedly the fitness benefits of yoga postures (asana)—in terms of flexibility, balance, strength, and even cardio (if you do them fast enough), as well as its contributions to stress reduction. There are also students and scholars in universities studying yoga from a scientific or medical viewpoint, as well as through a theological, philosophical, psychological, or literary lens. Moreover, there are plenty of people who, after taking a yoga class or two, will want to learn more about a practice from which they experience meaningful benefits.

It is not surprising, therefore, to find library-card-carrying yogis turning to their local library collections for more information about everything from the value and values of yoga to its practice and purpose. Librarians, in response, should be collecting and sharing yoga resources in answer to questions, such as: What are the differences between styles of yoga? What are the risks and rewards of yoga practice? What is the history of yoga? Do the spiritual aspects of yoga make it a religion? Is yoga dualistic or monistic? Why is the *Bhagavad Gita*, about a warrior, a classic yoga text? What is the connection of karma and reincarnation and enlightenment? Why do many yoga classes begin with chanting Om (pronounced as Aum)?

It is because of yoga's long history and intricate and allencompassing philosophy that there are so many iterations and interpretations of the practice today. Traditional yoga still focuses on spirituality, using postures only as a way to

center the mind and body for meditation and, ultimately, enlightenment. Yogic paths include raja yoga (focusing on meditation, which includes asanas), karma (action), bhakti (love or devotion), jnana (study), and tantra (ritual). Patanjali, a second-century Indian scholar and grammarian, writes about an eightfold path to living a good life, which includes asana practice, as well as ten ethical precepts: the yamas, which are requirements to be pure, content, disciplined, studious, and devoted, and the niymas, which are prohibitions against harm, deceit, theft, lust, and greed. Many types of yoga have also developed, such as Kundalini, Tantra, and Tibetan yoga. And, many teachers have gone on to develop their own schools, presenting yoga in their own ways, such as: Ananda, Anusara, Ashtanga, Bikram/Hot Yoga, Forrest, Integral, Iyengar, Jivamukti, Kripalu, Purna, Sivananda, Viniyoga, Vinyasa Flow, and Yin Yoga. Most share certain practices and beliefs, but because of their varying intensities and focuses, may not suit everyone. Each type of yoga also has its own texts, teachers, and traditions. Beyond these styles, there are classes in acro (acrobatic), partner, chair, hiking, restorative, tree, goat, laughter, and dog yoga (doga). And although traditional yogis do not agree that everything called yoga is yoga, there is also wine and chocolate, ganja, naked, beer, and rage yoga, depending on your mood or proclivities.

For many, the practice of yoga begins by learning some basic hatha yoga postures and coordinating movement with breath. One thousand years ago, the Hatha Yoga Pradipika identified thirty-two key postures and now there are thousands of variations. The practice of these postures is both relaxing and energizing, offering practitioners more awareness, calmness, and exercise. Moments spent on the yoga mat focus the attention and slow time; as opposed to using electronic devices that increase anxiety and decrease attention spans. This is why most yoga classes include asana, breathing (pranayama), and meditation, with the shared goal of building the focus, strength, balance, and flexibility needed for physical, mental, spiritual, and emotional health. It is also important to note that yoga is not only for the flexible; postures can be adapted for specific physical needs and therapeutic adjustments can even aid in healing.

As for the spiritual dimensions and mystical claims of yoga, there is also much to learn; perhaps the answers to all questions do lie in yoga study? Still, although yoga is an ancient practice offering valuable ideas and insights, it can also be confusing and elicit suspicion from many casual practitioners who do not believe in enlightenment and may be put off by the perception that yoga is "new agey." For many, there is more value in exploring yogic philosophy and taking its teachings more metaphorically or poetically, rather than literally. Yoga can be practiced at all ages and stages of life and co-exist with most any religion or worldview. It can provide guidance and support from cradle to grave, from calming babies to facing death. And, in between, there are yoga vacations to take, vegetarian cuisine to eat, Ayurvedic medicine for healing, nutrition to maintain health, ethical principles to follow; and, of course, there are library resources about all of these to collect.

Yoga in the Library—A Research Guide

Librarians and those new to yoga must be mindful that yoga should only be taught by knowledgeable teachers, lest there be confusion about the asanas or even injuries. So, anyone interested in yoga should find a local class with a well-trained instructor who can answer questions, demonstrate postures and correct alignment, provide feedback and adjustments, and recommend favorite books. Librarians, too, should seek out local yoga teachers who can make recommendations and direct their students to the library. Controversies and misunderstandings include everything from cultural appropriation to the dangers of overstretching to scandals involving teachers. Although most yoga instructors receive at least two hundred hours of training, not all do, and, even with good teachers, verbal instructions can be confusing, and big classes limit personal attention. Thus, books and online resources are a welcome supplement to those interested in developing a home practice.

Here, you will find well-regarded titles, but undoubtedly, some excellent works are excluded and some may be out of print (although copies can be obtained through interlibrary loan and book resellers). There are thousands of wellreviewed books and book length bibliographies about yoga resources. You can easily find entire articles about Ayurveda, vegetarian cooking, yoga videos, or fiction about yoga. The challenge for librarians interested in meeting this information need lies precisely in facing the quantity and quality of available resources, as well as in understanding yoga's more esoteric ideas. Because of its enduring popularity and variety, there is seemingly no end to what librarians could collect. Nonetheless, whether people are interested in yoga for physical or spiritual reasons or for self-awareness or universal awareness, both public and academic librarians have plenty of motivation and opportunity to develop collections in this area. (Namaste.)

REFERENCE SOURCES

Titles contained in this section include useful reference works, such as bibliographies, encyclopedias, and pronunciation dictionaries.

Bachman, Nicolai. *The Language of Yoga: Complete A to Y Guide to Asana Names*, Sanskrit Terms, and Chants. Boulder, CO: Sounds True, 2005 (ISBN: 978-1-5917-9281-9).

This reference book provides definitions and pronunciations for more than three hundred Sanskrit terms, and includes English definitions and illustrations for more than two hundred yoga postures. Includes audio CDs of pronunciations and chants.

Callahan, Daren. Yoga: An Annotated Bibliography of Works in English, 1981–2005. Jefferson, NC: McFarland, 2007 (ISBN: 978-0-7864-3162-5).

Librarian Callahan's exhaustive bibliography of more than 2,400 scholarly and popular books, periodicals,

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dissertations, theses, manuals, and conference proceedings is organized alphabetically with author, title, and subject indexes.

Jarrell, Howard R. International Yoga Bibliography: 1950 to 1980. Metuchen, NJ: Scarecrow, 1981 (ISBN: 978-0-8108-1472-1).

Jarrell's title covers more than 1,700 resources published in multiple languages, including doctoral dissertations and theses, books, journals, magazine articles, and yoga periodicals; with author, title, and subject indexes.

Larson, Gerald James, and Ram Shankar Bhattacharya, eds. Encyclopedia of Indian Philosophies. Vol. 12, Yoga: India's Philosophy of Meditation. Delhi: Motilal Banarsidass, 2011 (ISBN: 978-8-1208-3349-4).

Tracing the history of yoga from the *Yoga Sutras* to modern yoga, with an emphasis on Patajala yoga, hatha yoga, and related systems, this comprehensive 786-page volume includes summaries of seventy-five classic Sanskrit texts.

CLASSIC SANSKRIT TEXTS

Titles in this section include the classical texts from which modern yoga has evolved. Standard academic editions are included, as well as versions recommended by yogis for their interpretive insight. (Older, public domain versions are also available online, although print may be welcome.)

Doniger, Wendy. *The Rig Veda: An Anthology: One Hundred and Eight Hymns*. New York: Penguin Classics, 2000 (ISBN: 978-0-1404-4402-5).

Yoga was first mentioned in the *Rig Veda*, the 1500 BCE collection of Vedic hymns that later became one of the sacred texts of Hinduism. It speaks of "yoking," which is how yoga is generally translated, as a discipline to control and harness the breath.

Eknath, Easwaran. *The Bhagavad Gita*. Petaluma, CA: Nilgiri, 1985 (ISBN: 978-0-9151-3236-2).

Miller, Barbara S., and Barry Moser. *The Bhagavad-Gita: Krishna's Counsel in Time of War.* New York: Columbia University Press, 1986 (ISBN: 978-0-2310-6468-2).

Mitchell, Stephen. Bhagavad Gita: A New Translation. New York: Harmony, 2000 (ISBN: 978-0-6096-0550-9).

Prabhavananda, Swami, Christopher Isherwood, and Aldous Huxley. *Bhagavad-Gita: The Song of God.* Signet, 2002 (ISBN: 978-0-8748-1008-0.)

This poetic discourse describes the yogas of devotion, service, meditation, and study, as well as yoga techniques. Written by an anonymous sage sometime in the third or fourth century BCE, and included as the sixth book (about 700 stanzas) in the great Indian epic, the *Mahabharata*.

Olivelle, Patrick. *Upanişads*. Oxford: Oxford University Press, 1996 (ISBN: 978-0-1995-4025-9).

The Upanişads (600 BCE–200 CE) are Vedic scriptures, expounding the foundational concepts of Hinduism, Buddhism, and Jainism, as well as yoga practices. This edition, edited by a noted scholar who incorporates recent historical and philological understandings in a valuable introduction, is useful for non-specialists, as well as academics.

Bouanchaud, Bernard, and Rosemary Desneux. *The Essence of Yoga: Reflections on the Yoga Sutras of Patanjali*. Portland, OR: Rudra, 1997 (ISBN: 978-0-9158-0169-5).

Iyengar, B. K.S, Yehudi Menuhin, and Patanjali. Light on the Yoga Sutras of Patanjali: Patanjala Yoga Pradipika. London: Aquarian/Thorsons, 2002 (ISBN: 978-0-0071-4516-4).

Patanjali, and Georg Feuerstein. *The Yoga-Sutra of Patanjali: A New Translation and Commentary*. Folkestone, UK: Dawson, 1979 (ISBN: 978-0-8928-1262-2).

Patanjali, and Barbara S. Miller. Yoga: Discipline of Freedom: the Yoga Sutra Attributed to Patanjali; a Translation of the Text, with Commentary, Introduction, and Glossary of Keywords. Berkeley, CA: University of California Press, 1996 (ISBN: 978-0-5202-0190-3).

Satchidananda, and Patanjali. *The Yoga Sutras of Patanjali*. Yo-gaville, VA: Integral Yoga, 2002 (ISBN: 978-0-9320-4028-2).

Attributed to the sage Patanjali, the 195 aphorisms of the *Yoga Sutras* (second century CE), a synthesis of earlier teachings and traditions, advises readers how to achieve mastery over their desires and emotions and, in so doing, achieve spiritual growth.

Muktibodhananda, Saraswati, Satyananda, and Svatmarama. Hatha Yoga Pradipika: Light on Hatha Yoga: Including the Original Sanskrit Text of the Hatha Yoga Pradipika with Translation in English. Munger, Bihar, India: Yoga Publications Trust, 1998 (ISBN: 978-8-1857-8738-1).

Svatmarama, Elsy Becherer, and Hans-Ulrich Rieker. *Hatha Yoga Pradipika*. New York: HarperCollins, 1990 (ISBN: 978-0-0444-0600-6).

This fifteenth century CE manual is the classic text of Hatha Yoga as it was conceived and practiced by early Hatha Yoga masters and includes asana, pranayama, chakras, bandhas energy locks), and nadis (energy channels).

HISTORY AND BIOGRAPHY

The development of yoga spans thousands of years. Its history and the lives of its fascinating teachers both exemplify and demystify the philosophy and practice of yoga.

Alter, Joseph S. Yoga in Modern India: The Body between Science and Philosophy. Princeton, NJ: Princeton University Press, 2004 (ISBN: 978-0-6911-1874-1).

This scholarly work examines the history of yoga in India, and its dramatic development during the twentieth century.

Eliade, Mircea, Willard R. Trask, and David G. White. *Yoga: Immortality and Freedom*. Princeton, NJ: Princeton University Press, 2009 (ISBN: 978-0-6911-4203-6).

First published in English in 1958, this was one of the earliest comprehensive scholarly surveys of yoga, forming the basis for western understandings of yoga practice and philosophy.

Feuerstein, Georg. *The Yoga Tradition: Its History, Literature, Philosophy, and Practice.* Prescott, AZ: Hohm, 2001 (ISBN: 978-1-8907-7218-5).

The late Feuerstein, a German Indologist and translator, offers non-specialists a comprehensive study of the origins of yoga history, philosophy, and practice in the context of Indian religions.

Goldberg, Michelle. The Goddess Pose: The Audacious Life of Indra Devi, the Woman Who Helped Bring Yoga to the West. New York: Vintage, 2016 (ISBN: 978-0-3074-7744-6).

Journalist Goldberg offers a fascinating and accessible biography of Indra Devi (1899–2002), the globetrotting woman who exposed the western world to the practice and philosophy of yoga.

Goldberg, Philip. American Veda: From Emerson and the Beatles to Yoga and Meditation: How Indian Spirituality Changed the West. New York: Harmony, 2010 (ISBN: 978-0-3855-2134-5).

Intended for all readers, Philip Goldberg's *American Veda* tells the story of how the ancient philosophies and practices of yoga have profoundly affected the worldview of millions of Americans while simultaneously being transformed by western mores.

Yogananda, Paramahansa. *Autobiography of a Yogi*. Los Angeles: Self-Realization Fellowship, 1998 (ISBN: 978-0-8761-2079-8).

First published in 1946, this classic memoir by a preeminent guru (teacher) still resonates with many practitioners today searching for a path to self-discovery and self-actualization.

DEVELOPING A YOGA PRACTICE

These works cover the physical practice of yoga as well as how to understand and apply its philosophy. Most are suitable for beginners.

Cope, Stephen. The Wisdom of Yoga: A Seeker's Guide to Extraordinary Living. New York: Bantam, 2006 (ISBN: 978-0-5533-8054-5).

The author, a western-trained psychotherapist, goes beyond presentation of yoga positions to offer a funny and profound guide to the ancient wisdom of the *Yoga Sutra* and its relevance to the modern practice of yoga.

Cope, Stephen. Yoga and the Quest for True Self. New York: Bantam, 2000 (ISBN: 978-0-5533-7835-1).

Drawing on the author's personal journey, this book demystifies the philosophy, psychology, and practice of yoga, revealing its practical applications to many challenges of contemporary life,

Desikachar, T. K. V. *The Heart of Yoga: Developing a Personal Practice*. Rochester, VT: Inner Traditions International, 1999 (ISBN: 978-0-8928-1764-1).

Drawing upon the teachings of Krishnamacharya, one of the greatest modern yogis, his son, Desikachar, describes all elements of yoga practice—poses, breathing, meditation, and philosophy for yoga students. Highly recommended for beginner practitioners seeking a broader context for their exploration of yoga.

Farhi, Donna. *The Breathing Book: Good Health and Vitality Through Essential Breath Work*. New York: Henry Holt, 1996. (ISBN: 978-0-8050-4297-9).

This clearly written and accessible guide shows how proper breathing techniques can reduce stress and dramatically improve both physical and mental health; includes strategies for enhancing general energy and well-being, as well as addressing numerous more specific health issues.

Farhi, Donna. Bringing Yoga to Life: The Every Day Practice of Enlightened Living. San Francisco: HarperCollins, 2005 (ISBN: 978-0-0607-5046-6).

For readers seeking to integrate the spiritual and philosophical teachings of Patanjali's *Yoga Sutras* into their daily lives, this engaging book by a renowned teacher emphasizes the challenges and rewards of non-physical aspects of yoga practice.

Folan, Lilias M. Lilias! Yoga: Your Guide to Enhancing Body, Mind, and Spirit in Midlife and Beyond. New York: Skyhorse, 2011 (ISBN: 978-1-6160-8451-6).

This popular instructor began teaching on television in the 1970s and offers safe and creative yoga routines for mature practitioners.

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Frawley, David. Yoga: The Greater Tradition. San Rafael, CA: Mandala, 2008. (ISBN: 978-1-6010-9016-4).

For readers new to the spiritual aspects of yoga, this title offers brief introduction to yoga tradition and practice by a noted Vedic scholar.

Iyengar, B. K. S. Light on Yoga: Yoga Dipika. New York: Schocken, 1979. (ISBN: 978-0-8052-1031-6).

The definitive modern guide to yoga, with illustrations of positions and descriptions of breathing exercises, as well as an account of the philosophy of yoga. Offers guidance for beginners to advanced students.

Iyengar, B. K. S., John J. Evans and Douglas Abrams. Light on Life: The Journey to Wholeness, Inner Peace and Ultimate Freedom. Emmaus, PA: Rodale, 2006. (ISBN: 978-1-5948-6524-4).

This companion to *Light on Yoga* focuses on the intellectual and spiritual aspects of yoga; offers more advanced practitioners the wisdom of a master teacher.

Iyengar, B.K. S. *The Tree of Yoga: The Definitive Guide to Yoga in Everyday Life*. New York: HarperCollins. 2013. (ISBN: 978-0-0079-2127-0).

Drawn from Iyengar's teachings and lectures, this work covers the therapeutic nature of yoga for enhancing everyday life and health.

Jamieson, Theresa. *Conscious Birthing: Yoga and Meditation for Pregnancy*. Sally Milner, 2009. (ISBN: 978-1-8635-1391-3).

These exercises and postures are specifically and carefully designed for each stage of pregnancy, and illustrate physical postures, along with conscious breathing and meditation exercises to help focus the mind.

Kempton, Sally. *Meditation for the Love of It: Enjoying Your Own Deepest Experience*. Boulder, CO: Sounds True, 2011. (ISBN: 978-1-6040-7081-1).

Kempton, an expert teacher, offers valuable techniques for anyone interested in practicing and enjoying the benefits of meditation.

Kraftsow, Gary. Yoga for Transformation: Ancient Teachings and Holistic Practices for Healing Body, Mind, and Heart. New York: Penguin Compass, 2002. (ISBN: 978-0-1401-9629-0).

Useful for more experienced yoga students, Kraftsow's *Yoga for Transformation* introduces yoga techniques that treat the emotions, mind, heart, and soul, as well as the physical body.

Lasater, Judith. Living Your Yoga: Finding the Spiritual in Everyday Life. Berkeley, CA: Rodmell, 2015. (ISBN: 978-1-9304-8536-5).

An expanded edition of a popular and accessible work meant for all readers, Lasater's *Living Your Yoga* connects traditional yoga philosophy from the *Yoga Sutra* and the *Bhagavad Gita* to the experiences of everyday life. Lasater, Judith. *Relax and Renew: Restful Yoga for Stressful Times*. Berkeley, CA: Rodmell, 2005 (ISBN: 978-1-9304-8529-7).

Geared toward all readers, this Lasater title offers methods of restorative yoga, including relaxation poses and breathing practices to relieve chronic stress.

Payne, Larry, Georg Feuerstein, Sherri Baptiste, Stephan Bodian, Therese Iknoian, LaReine Chabut, and Doug Swenson. *Yoga All-in-One for Dummies*. Somerset, NJ: Wiley, 2015 (ISBN: 978-1-1190-2272-5).

This *Dummies* title incorporates six works by well-regarded yoga teachers published in one volume. It offers beginning yogis valuable details about the practice, including links to online demonstrations..

Radha, Swami Sivananda. *Kundalini Yoga for the West*. Spokane, WA: Timeless, 2004 (ISBN: 978-1-9320-1804-2).

This classic work, written by the first Western woman to become a Swami, makes the philosophy of Kundalini, with its emphasis on chakras (energy centers of the body), more accessible to those seeking to incorporate its lessons into modern life.

Schiffmann, Erich. Yoga: The Spirit and Practice of Moving into Stillness. New York: Pocket, 1996 (ISBN: 978-0-6715-3480-6).

American yoga master Schiffmann combines hatha yoga and meditation practice into an easy to follow program for all levels of yoga practitioners.

Wallis, Christopher D. Tantra Illuminated: The Philosophy, History, and Practice of a Timeless Tradition. Mattamayura, 2013 (ISBN: 978-0-9897-6130-7).

This well-written introduction to the central teachings and transformative practices of Tantra, a 1,500-year-old tradition, uses translations from primary Sanskrit sources.

White, David G., ed. *Yoga in Practice*. Princeton, NJ: Princeton University Press, 2011 (ISBN: 978-0-6911-4086-5).

This anthology of primary texts from diverse yoga traditions includes Hindu, Buddhist, Jain, and Islamic sources; with introductions to each selection by the editor; for students and practitioners.

HEALTH/SCIENCE

Broad, William J. The Science of Yoga: The Risks and the Rewards. New York: Simon & Schuster, 2012 (ISBN: 978-1-4516-4142-4).

Written by a New York Times science writer, this volume debunks myths, explains the benefits of yoga for modern life, and offers a vision for how ancient yoga practice can be updated and improved for modern practitioners. Calais-Germain, Blandine. *Anatomy of Movement*. Rev. ed. Seattle, WA: Eastland, 2007 (ISBN: 978-0-9396-1657-2).

Written by a dance teacher and performer, *Anatomy of Movement* offers thousands of drawings to illustrate anatomical structures and systems and their functional connections to yoga and other physical activities.

Kaminoff, Leslie, and Amy Matthews. *Yoga Anatomy*. 2nd ed. Champaign, IL: Human Kinetics, 2011 (ISBN: 978-1-4504-0024-4).

This bestselling anatomy guide for yoga includes full-color anatomical illustrations of asanas and vinyasas (sequences of poses), and brings into focus underlying structures and principles of various yoga movements.

Coulter, H D. Anatomy of Hatha Yoga: A Manual for Students, Teachers, and Practitioners. Honesdale, PA: Body and Breath, 2010 (ISBN: 978-0-9707-0061-2).

Coulter, PhD in anatomy from the University of Tennessee for Health Sciences, offers this comprehensive and authoritative work, with full color illustrations, connecting the traditions of hatha yoga with modern understandings of anatomy and physiology.

TEACHING YOGA

These texts are good introductions for advanced practitioners considering sharing their practice with others.

Farhi, Donna. *Teaching Yoga: Exploring the Teacher-Student Relationship.* Berkeley, CA: Rodmell, 2006 (ISBN: 978-1-9304-8517-4).

Fahri's *Teaching Yoga* explores ethical standards for yoga teachers, with an emphasis on developing and maintaining healthy professional relationships with students.

Ippoliti, Amy, and Taro Smith. *The Art and Business of Teaching Yoga: The Yoga Professional's Guide to a Fulfilling Career.* Novato, CA: New World Library, 2016 (ISBN: 978-1-6086-8227-0).

The authors include information about how to establish a career as a yoga teacher, and the challenges of running one's own yoga studio. Marketing, social media, networking, and managing business finances is also included.

Stephens, Mark. Teaching Yoga: Essential Foundations and Techniques. Berkeley, CA: North Atlantic, 2010 (ISBN: 978-1-5564-3885-1).

This title, for new and experienced teachers, covers basic topics in teacher training classes, including yoga philosophy

and history, eleven styles of contemporary yoga practice, and aspects of anatomy and physiology. Stephens addresses 100 percent of the teacher-training curriculum standards set by the Yoga Alliance, an accrediting body.

Stephens, Mark. Yoga Sequencing: Designing Transformative Yoga Classes. Berkeley, CA: North Atlantic, 2012 (ISBN: 978-1-5839-4497-4).

Stephens has trained more than 1,000 yoga teachers twenty-plus years. This title offers sequences of yoga postures for beginning, intermediate and advanced levels and types of yoga classes, including yoga for kids, expectant mothers, women undergoing menopause, and seniors.

WEB RESOURCES

There are many article, blogs, websites, and videos to explore online, including these highly recommended sites.

Do Yoga With Me (https://www.doyogawithme.com)

Do Yoga With Me features hundreds of free, streaming yoga lessons taught by highly qualified instructors. Some content is for beginners but overall the site is better suited to intermediate practitioners who have taken a few basic yoga classes.

Yoga Alliance (http://yogaalliance.org)

The Yoga Alliance is a large nonprofit association of over 84,000 yoga teachers and schools. The site includes a powerful registry and search tool for locating and finding reviews of registered yoga teachers, classes, and schools across the United States and beyond.

Yoga Journal (http://yogajournal.com)

Founded in 1975, *Yoga Journal*'s popular and inclusive monthly print magazine and website covers all aspects of yoga practice. Sections of the website offer tips on integrating yoga into your personal life, how to become a teacher, and "Yoga 101" which has information on yoga philosophy, Sanskrit terms, and video tutorials.

Yoga International (http://yogainternational.com)

The Himalayan Institute's Yoga International site includes articles, video tutorials, workshops, and courses about all aspects of yoga. Some content requires a membership for access. The group offers an app for Android and IOS devices that has guided meditations, tutorials and more.

Six Words

Nicolette Warisse Sosulski and David A. Tyckoson

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SIX WORDS THAT GET YOU STUFF

Nicolette Warisse Sosulski

Librarians are tainted.

Now, what I mean is that we are no longer able to think like regular members of the population when it comes to searching. We have come, more and more-over years on desk—to think like the indexer or taxonomist of a database, OPAC, or website. We do not realize the extent of this transformation—we just get more and more successful at finding things, not realizing how we find them changes or how we, incrementally, discover strategies that work. We are oblivious to these strategies we use until we have an aha moment and realize they are not obvious to anybody else. Although information science has made great strides in natural language searching programs, successful information literacy instruction still involves teaching laymen to think like indexers. However, we may not realize just how much our own thought processes have morphed and how different they are from those of our patrons.

I discovered that I use one of six words in a vast majority of my research search strings. As I realized this right before a search class I was teaching a few years ago (then there were only five words), I incorporated it into the class. Over time, I have learned that this tactic, fruit of more than 22,000 hours of reference-mostly from my Sunday Night Paper Panic students in chat—is helpful to others, even to fellow professionals. My patrons come in with statements like "I need to do a report about money and grades and how one helps the other so that poor people do worse in school" and I distill that down to a three-to-six-word query that, more often than not, includes one of these six powerful words. I have come to see that teaching these words—and using these words to construct pared-down search strings-ups search success rates. And so I give you "Six Words That Get You Stuff." They are (drum roll, please):

Impact—shows effect

Research questions:

- "I need to know about money and school and how poor people do not do as well in school maybe and why."
- "So is there data to support that you might be more likely to have a heart attack if you drink too much coffee?"
- "I am trying to prove that video games do not mess up teenagers."

Search string examples:

- Impact Poverty Educational Achievement
- Impact Caffeine Heart Rate
- Impact Video Games Mental Health Teens

Statistics—how many or how much

Research questions:

- "Has average rainfall increased over the years in Seattle?"
- "So how many people really eat nothing but drive-thru?"

Search string examples:

- Statistics Rainfall Seattle 2016
- Statistics Fast Food Consumption United States

Demographics—what are they like there?

Research questions:

- "I might be moving to Florida but I do not want to end up in one of those old people cities where everybody is ancient—I am only fifty-seven."
- "Will I be the only Muslim in Steilacom, Washington?"

Search string examples:

- Demographics Age Hallandale, Florida
- Demographics Religion Steilacom, Washington
- Demographics Religion Southwest Washington

Timeline—shows discrete developments or time points

Research questions:

- "I have to go home for Thanksgiving and I know it is all going to be politics and I am not sure what happened in Benghazi."
- "I am supposed to trace the key battles of the Civil War."
- "I am writing a report on Italian Renaissance paintings and I need five big ones."

Search string examples:

- Timeline Benghazi
- Timeline Battles Civil War
- Timeline Paintings Italian Renaissance

History—like "Timeline" but yields narrative rather than discrete developments

Research questions will be very similar to those for "Timeline" but "History" is better for underlying root cause and influence, concepts that cannot be so easily bullet-pointed. However, the researcher has to be ready to read paragraphs instead of scanning bullet points.

Search string examples:

- History Conflict Balkans
- History Feminist Literature

Outcomes—what results were found, especially in health/medical, social work, and education settings, and whether an initiative actually have the effect it was intended to

Research questions:

- "I have to come up with an analysis of what works to stop bullying in schools."
- "I have a research project on if celibacy campaigns really reduce teen pregnancies."
- "I need to know if HIV programs in schools make people uses safer practices."

Search string examples

- Outcomes Antibullying Campaigns
- Outcomes Celibacy Initiatives
- Outcomes HIV Awareness Education

This distilled, noun-dominated query style, combined with these six powerful words, in a search field which is either open or designated as all text, keyword, or abstract (#subjectfieldisevil), produces search results in which germane, usable articles appear in the first or second pages of the result set. Of course, added facets of publication date, source publication, and/or website or domain can further specify your search and give you a more customized result set. My patrons have informed me that this search strategy works for them, and it has transformed anxious search neophytes into competent basic researchers. If any of you know words seven, eight, and nine, I urge you to comment, or to contact me at librista@gmail.com.

RESTATING THE NOT ALWAYS OBVIOUS

Dave Tyckoson

Librarians are excellent searchers. We have the ability to construct complex search strategies, identify controlled vocabulary subject headings and keywords, and identify which databases or websites are most likely to provide us with material, and identify and evaluate the results. Very few other people or professions have skills that match ours. This is why many people come to a librarian when they have a tough question—because they know that we can find what they want.

However, to find what someone is looking for we need to know what it is that they want. A sophisticated search

A REFERENCE FOR THAT

on the wrong question will not bring up the right answer. Unfortunately, many librarians fail to help users because they fail to identify the specific question that the user has in their mind. A good reference interview leads to a good search.

Of course, if users asked for what they really wanted, this would not be a problem. But most users do not ask specific questions, but start with something much more general. It is up to the librarian to respond and to identify the real question that underlies the initial one. This is the heart of the reference interview—and something that we do every day when helping our users. By succeeding at the reference interview, we succeed at reference.

Imagine the following reference transaction happening in your library. The conversation goes like this:

Librarian: Hi there. How can I help you today?

User: I need some sources for my paper.

Librarian: I can certainly help with that. What is your paper about?

User: Global warming.

Librarian: We have lots of information on global warming—what in particular are you looking for?

User: How global warming is affecting Canada. I hear that global warming is having the biggest impact on the coldest places.

Librarian: Sure! I can help you find that.

The next step in the process is the point of success or failure. The librarian has already welcomed the user and asked two good open ended questions. The librarian has identified that the user is working on the impact of global warming on Canada. Using Nicolette's six words technique, the librarian can start by searching for something like:

Impact global warming Canada

Putting that phrase into a web search engine identifies a lot of what look like very useful sources that are right on target for this topic, including within the first ten one called Impacts of climate change—canada.ca, a site produced by the Canadian government. With this the student will be able to write a great paper, the librarian can mark the transaction in the statistics, and move on to help the next user.

Well, maybe not. In this example, the user sits with that list of millions of sites and still does not find something useful. Yes, those are good sources on global warming in Canada. But no, they do not help this user. After a while the user selects a couple of sources and puts them in the paper, but they are still not really what that user wanted. There is another step in the reference interview that would have confirmed or denied that this is what the user wanted. Let's go back to our sample reference interview and add that extra step, starting where we left off:

Librarian: Sure! I can help you find that.

Librarian. So you want to find out how global warming is affecting Canada—is that it?

User: Yes—and especially how it is affecting the Polar Bears. From what I have read, they seem to be suffering a lot from the effects of global warming.

Librarian: OK—so you want to know how global warming is affecting the Polar Bears in Canada. I am pretty sure we can find information on that. Is that right?

User: Yes. And I did find this one article on my own, but I need some more sources like it. (shows the librarian "Will Polar Bears Die Out Because of Climate Change?")

Librarian: That looks really good—and I see it is from *Nature*, which is a great source for anything in the sciences. Let's see what else we can find.

At this point the librarian enters another version of the same topic as in the earlier version of the search:

Impact global warming Canada polar bears

Looking at the first screen of results, the conversation continues:

User: Wow-those look great!

Librarian: Yes, there seems to be a lot here. Some are from organizations like the World Wildlife Fund and Polar Bears International, several are from the Toronto newspaper, and there's even one from NASA. Do you think these are helpful?

User: Definitely—you are best! Thanks so much.

Librarian: Well, if you need more information on this, come back again.

User: I sure will. I have an Econ paper due in two weeks, so I will be back to find sources for that one when I start working on it.

What the librarian did differently was to restate the question for the user. In fact, the librarian restated the question twice as more information was learned. And it is that restatement that helped the user frame the question and confirm what was needed. Restating the question brought out additional information that was critical to the search

This is a step that many librarians omit—and one that can completely make or break the success of any reference transaction. Reread our sample search. By restating the question the first time, the user was encouraged to add to the initial version. The information added was critical—and really was the main focus of the information need. But it was not what the user asked for, so it was difficult for the librarian to find out just with usual questioning techniques.

Restatement is a technique that usually helps. It is just another way for us to ask a question, but it is different enough from open or closed questioning that users tend to provide different information when we restate their query. From my own experience, it is a technique that works. Yes, it takes more time and makes the reference interview longer. But the added time spent in the interview—in this example, maybe thirty seconds—saves lots of time at the other end of the process.

I like to measure reference success with Joan Durrance's tried-yet-true Willingness to Return method. Will the user return in the first part of this sample search? Maybe or maybe not. It depends on what the user needs in the future and how desperate the user is to find it. Will the user return in the second half of the example? Yes—the user has already told the librarian that they are coming back. This is part of the power of restating the user's question.

Do try this at your library. It works in face-to-face and remote reference. Combined with Nicolette's six words, it will make you a librarian that your users turn to when they need help the most.

Giving Credit How Well Do Librarians Cite and Quote Their Sources?

Peter Genzinger and Deborah Wills

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The practice of citing references is integral to scholarship. This paper focuses on three prominent journals for library science: College and Research Libraries, Library Resources and Technical Services, and Reference and User Services Quarterly. Errors in both citations and quotations were found in all three journals, although no statistically significant differences among journals were discovered. Citation errors of less than 10 percent were found for all three journals, while in total, 30.3 percent of quotations were judged to be questionable in some way. The paper includes recommendations for authors, editors and librarians. It also recommends further study of errors in quotations, which appear more troubling than those in citations.

he practice of citing references is integral to scholarship. It allows researchers to understand the way that a discipline is constructed, building on the work of earlier scholars. In particular, cited references provide a means for tracking down the works that have informed the discipline and acknowledging the contributions of the authors of those works.

For practicing librarians, cited references provide a gold mine of possibilities. To help students find relevant resources for a paper, librarians frequently refer to these references, explaining the structure and value of the citation trail, and helping students identify and locate relevant items. At the same time, librarians have the opportunity to instil in their students a respect for the importance of accurate and appropriate citation of the works that they use for their own writing. As Rekdal points out, with respect to preventing plagiarism, a "good start is to make sure that all students are aware that academic citations are extremely important as tools for communication and documentation of knowledge, and that they need to be complete and accurate, and employed with precision, to fulfill these functions."1

How much can we trust citations to be free of errors and quoted material to accurately portray the words and meaning of the referenced sources? As librarians, do we assume that references are accurate, and if so, is that a fair and useful assumption?

Our aims for this paper were to determine what research has been done on citation accuracy across disciplines, to perform our own study on selected journal articles in library science, to consider if current editorial policies might be having an effect on citation accuracy, and to make recommendations for authors, editors and librarians.

LITERATURE REVIEW

The study of reference accuracy has generally been divided into two areas: "citation accuracy," which refers to the elements of the citations in the reference lists of articles, such as author name, article title, etc.; and "quotation accuracy," which refers to the handling of direct quotes, paraphrases, and summaries.

For this paper, we reviewed fifty-four studies published between 1977 and 2015. Thirteen considered both citation and quotation accuracy, four focussed on quotations, and the remainder on citations alone. In addition, we consulted two systematic reviews of quotation accuracy in medical journal articles. See the appendix for a full listing of these papers.

CITATION ACCURACY

Since the 1970s, a considerable number of researchers have studied citation accuracy, particularly with respect to science and medical journals. Booth summarizes the findings of 36 studies of medical journals, and in their literature review, O'Connor and Kristof summarize nineteen studies, including three for library science journals, finding a combined error rate of 31 percent.² These studies have often focused on the issue of findability: the ease with which citations could be tracked down. Some studies have also highlighted the need to give appropriate credit to authors. Booth, who surveyed the literature up to 2004, found that author errors dominated the results, while "fatal flaws," which made the cited sources unfindable, were few in number.³

Researchers have generally organized errors by author, article title, volume, issue, year and pagination. For every journal studied, errors were found, ranging from as low as 8 percent to as high as 66.7 percent.4 Various researchers have attempted to classify citations as major-generally described as those that would hamper retrieval-or minor. However, the criteria for classification vary from study to study. For example, Lok, Chan, and Martinson consider incorrect years of publication as major errors, while Muhammed and Laskin classify them as minor.5 Several researchers count errors in author names as minor.6 In contrast, for Raja and Cooper, omitted or badly misspelled names are major errors, since they hamper the task of crediting authors for their work.⁷ Lopresti points out that even slight changes to authors' names, such as the omission of a middle initial, can impede the tracing of authors through citations to their work.8

Many studies compare journals within a discipline. For example, Fenton studied four otolaryngology journals and found "the higher the impact factor for the journal, the lower the number of errors detected in its papers."⁹ Wilks et al. found that articles published since 2010 in *Research on Social Work Practice* had significantly more accurate citations than those published earlier. In addition, articles with one author were significantly more accurate than those with multiple authors.¹⁰ A study by Asano et al. compared changes in error rates over time in the *Canadian Journal of Anaesthesia*. Between 1990 and 1994 there was a significant decrease in total errors from 48 percent to 22 percent. This was likely caused by a change in editorial policy requiring authors to submit the first page of each cited reference.¹¹ Similarly Oren and Watson, who studied eight peer reviewed journals from the ophthalmic literature, found that Elsevier, the only one of the publishers to use librarians to check citation accuracy, "had the lowest averaged error rate."¹²

Citation accuracy in library science journals has been studied by many researchers, beginning with Boyce and Banning in 1979.¹³ In a study published in 1992, Pope checked ten citations from each of ten library science journals, finding thirty errors in total.¹⁴ In a more extensive examination published in 1993 of five library science journals, Pandit found considerable differences among the journals. She reported that for both the journal with the least errors (Library Trends at 3.8 percent) and the journal with the most errors (Library Resources & Technical Services at 31.6 percent) the journal's editorial office had a policy to check the authors' citations.15 Benning and Speer compared library science with medical journals published in 1989, finding similar error rates between the disciplines, though they judged that errors in the library science literature were more likely to be minor.16 A study by Davies examined the 2007 citations from four high-impact information science journals. She found error rates ranging from 41.3 percent for MIS Quarterly to 49.1 percent for Information and Management.17

QUOTATION ACCURACY

Since the 1980s, researchers have studied "quotation accuracy." As well as tracking errors in direct quotations, they have included errors in paraphrases and summaries. Researchers have been particularly interested in errors that could mislead the reader or fail to reference a primary source. Again, research has focused mainly on science and medical journals.¹⁸

Drake et al., who studied ecology journals, chose a single statement from each selected article, for a total of 124. Of these, 54 percent were judged to be fully supported by the original source.¹⁹ Haussmann et al., studying physical geography journals, also chose single references from each selected article, for a total of 120. In 80.8 percent of the references, the cited article was found to clearly support the quotation.²⁰ Although no studies appear to have included North American library science journals, a recent study of library science journals in Taiwan examined 622 quotations from 111 articles and found an error rate of almost 14 percent.²¹

Some researchers have labelled quotation errors as "failed to substantiate," "unrelated," and "contradicted."²² Todd et al. and Haussmann et al. use the categories "clear support," "no support," "ambiguous," and "empty" (not citing the primary source).²³ De Lacey, Record, and Wade divide results into "precisely correct," "trivial error," "slightly misleading," and "seriously misrepresenting."²⁴ Evans, Nadjari, and Burchell

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also include "oversimplification" and "generalization" for minor quotation errors.²⁵ Lee and Lee, and Eichorn and Yankauer use the categories major errors (contradicted or failed to support) vs minor.²⁶

In 2015, Jergas and Baethge published a systematic review of studies of quotation accuracy in medical journal articles. Given the differences in method between the various studies, their analysis could provide only rough estimates, but they concluded that about "one in every eight to nine references was seriously incorrect," and approximately one fourth had errors of some kind.²⁷

Given the relatively few previous studies of citation errors in library science journals, and the lack of quotation accuracy studies, we felt that further research was warranted. In particular, in our study we go beyond an assessment of error rates to consider the implications of such errors. We also suggest where authors, editors and librarians could place their emphasis as they check articles for accuracy and use sources in their professional work.

METHOD

Our approach was to first check for citation and quotation accuracy in selected library science journals, and then to consider the implications of the types of errors found and what lessons could be learned. Our guiding principles were findability of the articles, traceability of authors, and integrity of quotations.

To select the journals, we referred to a study by Judith M. Nixon which ranks core titles in library and information science. Her study identifies six top ranking journals and she also provides a combined list of twelve top journals identified by three expert opinion surveys.²⁸ We chose the three peer reviewed journals that appear in both lists: *College & Research Libraries (C&RL), Library Resources & Technical Services (LRTS)* and *Reference & User Services Quarterly (RUSQ).*

We focused on the 2013 calendar year, selecting "Articles" from *C&RL*, "Articles" and "Reports" from *LRTS* and "Features" from *RUSQ*. Like many other researchers for the topic of citation accuracy, we chose to examine only references to journal articles, a source type used by all the authors concerned and one that is generally findable and searchable online. We also limited our focus to articles in English. This resulted in a sample of 426 from *C&RL*, 228 from *LRTS* and 189 from *RUSQ*. In addition, we contacted the editors of the three journals to learn their policies for checking citations.

For our study, one researcher started with *C&RL* and the other began with *LRTS* and *RUSQ*. Each then checked the other's work, discussing discrepancies as needed.

Citation Checking

To choose our sample for citation checking, we used the online Sample Size Calculator from Creative Research Systems, selecting a confidence level of 95 percent and an interval width of 5 percentage points.²⁹ This resulted in sample sizes of 202 for *C&RL*, 143 for *LRTS* and 127 for *RUSQ*. We then used a random sequence generator to select the sample citations. We limited our selection to articles available through our local library system to avoid overloading our interlibrary loan staff. When an article proved unavailable, we maintained our sample size by returning to the random sequence to select an additional article. The discarded articles totalled fourteen, representing 3 percent of the sample, and a variety of lesser-known library and archival journals.

Whenever possible, each citation was checked against the information from the actual journal article; when the information included with the article was incomplete, we checked further. For example, we looked for the journal's table of contents or a database that included the journal. We divided errors into author, article title, journal title, publication year, volume, issue, and pages. If only an author's initials were used, or if an author's middle initial was missing, we did not consider these omissions as errors, so long as the information given was accurate. In cases where issue numbers were missing, but the journal used continuous pagination, we judged the element "not needed" and did not record an error.30 For pagination, citations were considered correct if they either included the full page range or one or more specific, relevant pages. If pagination was not available in the item cited, for example if the article was published only on the web, the omission was marked "not applicable." When calculating error percentages, we adjusted the totals for each element to exclude those judged "not needed" or "not applicable."

Given the inconsistent categorizations used in previous research, we did not attempt to label errors as major or minor, but all errors and omissions, including missing author initials, were noted. We conducted a separate test of findability after the error check. Previous researchers have often measured the findability of articles with erroneous citations by searching for them in proprietary databases. Lopresti, for example, discovered that "almost one in five of the studied journal errors had the potential of defeating a search in Web of Science."31 Given the near ubiquitous use of Google, we decided to use Google as our finding aid. In addition, while working with library users, we have noticed their tendency to copy and paste the article title into Google, as they work to track down a citation. If they aren't successful, they may choose to add more words from the citation into a new search. We therefore began by searching Google for the full article title, as listed in the citation. In cases where an author or journal title was incorrect, a second search was conducted, adding in this incorrect information. The search was judged successful if the correct item was easily identified in the first page of results. Research by Asher, Duke, and Wilson suggests that students, at least, rarely look beyond this page.³²

Quotation Checking

Using recent studies by Drake and Haussmann as models for sample size, two references to journal articles were randomly

selected from each article in the 2013 issues of our three journals, making a total of 122.33 We then obtained the cited articles and checked them against the quoted statements, dividing the work between us as described for citation checking. Following the examples of Todd and Haussmann, we classified quotations as "clear support," meaning they provided unequivocal evidence, "no support," meaning they did not substantiate the statement in any way, "ambiguous," meaning they lacked a clear connection to the statement, or "empty," meaning they cited secondary sources rather than the original source.34 We also noted any errors that were difficult to classify. and tracked the incorrect use of quotation marks. We did not attempt to judge the truth of any of the statements.

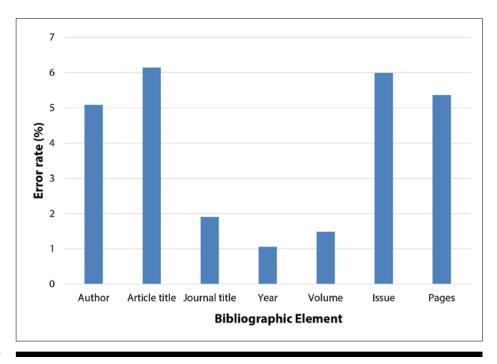


Figure 1. Percentage of errors in each bibliographic element

The issue of findability was also relevant for quotation checking, since we needed to pinpoint the appropriate parts of the referenced articles. We noted instances when this task was impeded.

RESULTS

Citation Accuracy

Our total sample size was 472. Of these references, 366 (77.5 percent) were completely error free. We found a total of 122 errors, for an overall error rate of 25.8 percent. The total errors noted for the three journals, respectively, were: 58 (28.7 percent) for *C&RL*, 31 (21.7 percent) for *LRTS*, and 33 (23.4 percent) for *RUSQ*. The combined error rates for individual elements of the three journals were, from highest to lowest, the article title element (6.1 percent), issue (5.6 percent), pages (5.4 percent), author (5.1 percent), journal title (1.9 percent), volume (1.5 percent), and year (1.1 percent) (see figure 1).

We found error rates of less than 10 percent for all individual elements across all three journals. Error rates for individual elements were similar. The highest error rate by element was 7.7 percent for article title (*LRTS*) and the lowest was 0 percent in both year and volume (*LRTS*). Error rates for individual elements are listed by journal in table 1.

A chi-squared test was used to check for differences among the overall error rates for the three journals. No statistically significant difference was found. The chi-squared test with 2 degrees of freedom and a discrepancy measure of 1.99 gave a *p* value of 0.037. This *p* value is far from indicating statistical significance (usually taken as 0.05).

When we contacted the editors for the three journals, we learned that for *LRTS*, authors have responsibility for citation accuracy, but the editor checks all citations herself, and many editorial review board members also check citations when they review papers. For *RUSQ*, authors have sole responsibility for checking citations, though editors and copy editors note incomplete citations and ask for corrections. *C&RL* relies on the diligence of their mostly librarian authors to check their own citations. Given the lack of statistically significant differences among the three journals, it appears that these varied approaches to citation checking are not affecting error rates.

Findability of Citations

Searching for full article titles in Google resulted in correct identification of nearly all the items, and all were eventually found using the information provided in the citation. For example, in one case, the subtitle was missing from the citation. The resulting title, "Purchasing E-Books in Libraries," proved too generic for a successful title search, but the item was findable through the journal title.

In some cases the item was findable in the top ten Google results, but hidden from view. For example, in a case where only the last word was wrongly cited, the only correct hit was for a prepublication version of the article. A search on the correct title led immediately to the published version via Project Muse.

In another case, words were missing from the beginning of the title. The item appeared as the first result in a

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Table 1. Error Rates by Journal

Journal	Author (%)	Article Title (%)	Journal Title (%)	Year (%)	Volume (%)	lssue (%)	Pages (%)
College & Research Libraries	6.9	5.5	1.5	1.0	2.5	6.2	6.6
Library Resources & Technical Services	2.8	7.7	1.4	0.0	0.0	8.0	2.2
Reference & User Services Quarterly	4.7	5.5	3.2	2.4	1.6	1.8	7.3

Google search, but since the missing words were the only ones presented for the title, the item could have easily been overlooked. For another title, the citing author added extra words at the beginning, which did not show up in the search results. One item that took considerable time to locate was published simultaneously, with different titles, as a book chapter and a journal article. The citation paired the chapter title from the book with the title of the journal.

Article findability was also impeded when incorrectly spelled author names were included in a search. In four cases, searching by the article title alone identified the item as the top Google result. However, adding the wrongly spelled author name, even when the error was a single missing letter, obscured the correct result. In each case, the search pulled up various references to the required article, but most included the error in the author's name.

Traceability of Authors

While the number of errors in the author element of the citations was small, we found a total of twenty-seven cases, from the three journals, in which initials, rather than full names were used, or where middle initials were missing. These omissions were not counted as errors, and did not impede findability of the article, but they might affect a reader's ability to trace specific authors through their citations.

Quotation Accuracy

We checked a total of 122 quotations from the three journals. We judged that clear support for the original statements was provided in 69.7 percent of cases, no support in 9.8 percent of cases, and ambiguous support in 18.9 percent of cases. 1.6 percent of cases were judged as "empty." While the three journals showed a similar level for clear support (66.7 percent to 72.4 percent), there was more disparity across journals for no support (6.9 percent to 20.7 percent) and ambiguous support (3.5 percent to 20.7 percent). In total, 30.3 percent of quotations were judged to be questionable in some way (see table 2).

A chi-squared test was used to check for differences in the overall error rates among the three journals. No statistically significant difference was found. The chi-squared test with 6 degrees of freedom and a discrepancy measure of 6.54 gave a *p* value of 0.45. As with the test for citation accuracy, this *p* value is also far from indicating statistical significance.

As we worked to check the accuracy of quotations, we were challenged to precisely categorize the errors we found. In contrast to the study of citation accuracy, quotation accuracy seems a more qualitative exercise, somewhat open to interpretation. As Luo et al. point out, "Quotation errors are usually harder to characterize and can be subjective."³⁵ We found a variety of cases that proved difficult to classify as either "no support" or "ambiguous"; some provided examples of overgeneralization or simplification, along with partial support, distortion, or insufficient context. In addition, there were various errors that did not affect the meaning of the quotation, including missing or inexact quotation marks, incorrect attribution, and wrong pages for direct quotations.

We found several examples where overgeneralization was used to support claims. One article claimed a high level of prestige for a certain type of journal based only on comments by two individuals in the referenced article. In another case, a single factor was highlighted to support an assertion, ignoring other factors listed by the referenced article. In some cases, a slight change of emphasis made a significant difference in meaning. For example, one article claimed that no changes need to be made to catalog records of a certain type; the referenced article called for "minimal" modification of these records. Another tendency was to read more into a statement than was warranted. For example, one article claimed that certain journals are read for current awareness; the referenced article did not state any reasons why these journals might be read.

In some cases, the quality of writing challenged us to judge the accuracy of the quotation. For example, one author cited his own previous work, but with such vague wording that we struggled to judge the accuracy of the quotation.

Direct quotes, within quotation marks, were nearly always accurate, though in many instances, quotation marks were not used when they should have been. In one case, only a partial quotation, missing a key term, was used. In another case, a quotation was attributed to the wrong person.

Concerning the issue of findability, whenever precise page numbers were lacking, it became difficult and time consuming to track down information. For example, one article claimed that a study showed a "doubling in usage" of ebooks. We read the long, referenced article very carefully,

	Clear Support (%)	No Support (%)	Ambiguous Support (%)	Empty Citation (%)
College & Research Libraries	66.7	15.2	16.7	1.5
Library Resources & Technical Services	69.0	6.9	20.7	0
Reference & User Services Quarterly	72.4	20.7	3.4	3.5
Total	69.7	9.8	18.9	1.6

Table 2. Quotation Accuracy Rates

but could not find this information. Surprisingly, we did not find any studies on quotation accuracy that recommended using page numbers for quotations, though Fenton reported, "Fifty per cent of the book references could not be verified, as chapters or page numbers were not supplied."³⁶

Without the inclusion of page numbers, paraphrases proved more challenging to verify than direct quotes. Even when it is possible to search a source online, it is difficult to guess what terms to use. An article by Rekdal provides compelling arguments for the use of page numbers. He comments, "Leaving out the page number when it could have helped the reader track down the source text puts a roadblock in the path of the basic driving forces of scientific development: the production of cumulative knowledge and verification."³⁷

When studying the accuracy of quotations, it is only possible to address the information that is specifically referenced. We did find some suggestions of omitted references. For example, we noted a case where a study was described but no reference was provided.

Given all the ambiguities uncovered by this exercise, we concluded that it is highly problematic to fully judge how accurately and appropriately referenced sources are used. Our error totals should therefore be viewed as approximations rather than precise findings.

DISCUSSION

Limitations

The findings of this study are limited to the journals and timeframe selected; it is not possible to generalize beyond this. In addition, given the variety of errors encountered when checking for quotation accuracy, the sample size may have proved too small to provide a full picture of how sources were handled.

Citation Accuracy

Compared with findings from other studies, citation error rates are reasonably low for the three journals tested. The overall rate of 25.8 percent places the results of this study toward the low end of the 36 published studies listed by Booth in 2004, who writes: "there is a clear trend for between 25% and 40% of references to be inaccurate."³⁸ Results are also low compared with those found by Davies. In her study of library and information science journals, she found that 45.3 percent of references had errors.³⁹

When we consider the issues of findability and author tracking, certain elements of the citation gain importance. For findability, accurate titles are key. In addition, errors of omission are often less important than errors of commission, since adding erroneous information into a search can obscure correct results. For tracking authors, even the smallest error in the author's name can be problematic.

Quotation Accuracy

Compared with other studies of quotation accuracy in science and medical journals, this study finds a relatively low percentage of cases providing clear support (see table 3). While it is not possible to judge the causes of errors, various possibilities can be suggested. For example, errors may represent a desire to bolster a given point of view, or may be caused by carelessness, haste, or a failure to read or understand the original article. It also seems possible that in their struggle to transform words from an original document into an appropriate paraphrase, some authors either leave out essential terms or substitute words that convey a different meaning.

CONCLUSION

Our findings suggest that citation errors are a continuing issue in library science journals. However, relatively few impede findability of the original source or traceability of authors. Quotation errors seem to present more complex and potentially more troubling problems. According to George and Robbins, quotation errors are "more important because they erroneously give credence to the authors' assertions."⁴⁰ These errors are of concern because they deal with the substance of the research.

Although this study has not found that editorial policies have a significant effect on reference accuracy, editors may choose to do some selective checking. We would advise them to decide which elements they consider most essential

Table 3. Percentage of Articles Providing C	lear Quotation Support, Arranged by Subject Area (adapted from Ha	ussmann et al. 2013)

Subject Area	Clear Support (%)	Articles Studied	Source
Nursing	93.3	180	Schulmeister (1998)
Radiology	90.5	95	Hansen and McIntire (1994)
Manual therapy	87.7	320	Gosling et al. (2004)
Burns and burn care	86.3	117	Al-Benna et al. (2009)
Otolaryngology/head and neck surgery	83	153	Fenton et al. (2000)
Anatomy	80.9	272	Lukić et al. (2004)
Physical geography	80.8	120	Haussmann et al. (2013)
Ecology	76.1	306	Todd et al. (2007)
Marine biology	75.8	198	Todd et al. (2010)
Opthamology	75	200	Buchan et al. (2005)
Surgery	70.8	137	Evans et al. (1990)
Library and information science	69.7	122	The present study
Emergency medicine	64.8	145	Goldberg et al. (1993)
Orthopedic medicine	62.0	200	Davids et al. (2010)
Ecology	54.0	124	Drake (2013)

for references and how best to use their limited time and resources to check for accuracy. For citations, given the ease of finding most articles in Google, it may be worth a quick Google search to ensure findability and correctness of author names. If only the referring article shows up in the results, this may indicate an error.

For quotations, editors may wish to spot check the accuracy of paraphrases, especially for very general statements. It seems less important to check the words within quotation marks and more important to ensure that precise page numbers are given. This eases the task of finding the information both for the editor and reader. It is also possible that the process of providing a page number will encourage authors to double check the accuracy of their work. (As writers of this paper, we benefited from rechecking our own page numbers.) Requiring authors to submit copies of the specific pages could further encourage accuracy, as well as easing the editor's task. Davies comments that requiring authors to submit the first pages of the articles they reference would at least ensure that they had obtained the articles.⁴¹

For authors, we suggest they take time to ensure that references to author names are complete and correct, and that accurate page numbers are provided for quotations. To improve citation accuracy, they may wish to start with the citation information provided by journals. Many journals also provide a way to download citations in RIS format and import the files into citation management software packages.

Given the trend toward interdisciplinary research, it will likely become increasingly challenging, and increasingly important, to differentiate researchers with similar names. As librarian authors, we should be mindful of the principle of authority control that establishes recognized formats for authors' names and be sure that full names, as listed on the sources, are always used. This approach is consistent with Chicago Style, used by many library science journals including the three in this study.

Authors who struggle to write an accurate and appropriate paraphrase may find that a direct quote is a safer choice. Not all statements easily lend themselves to rewording.

For practicing librarians, these findings can provide an object lesson that even professionals sometimes err. We should remember to encourage users to find original sources whenever possible. In particular, as we work with students, who are rushing to find that last source to support their arguments, we should remind them to read carefully and report accurately on what they read. Sources that disagree with their thesis are not only acceptable but essential for a complete and accurate description of a field of research.

FUTURE RESEARCH

Most research in this area has focused on medical science and its various subdisciplines. Aside from economics, social work, and library and information science, we found no studies that investigated citation or quotation accuracy in disciplines related to the arts and humanities or the social sciences. Future research could consider these areas to provide a fuller picture across the academic spectrum. In addition, given our findings that citation errors rarely impede article retrieval, and that errors in quotations and paraphrases seem more troubling, we wonder if future research should focus more on quotation accuracy. In the discipline of library and information science, a larger-scale multiyear, multijournal study of quotation accuracy may prove insightful. Jergas and Baethge point to the need for future research into the extent to which false quotations affect a citing paper's claim.⁴² We concur, with the additional proviso that such research be broadened in our field to investigate, for example, instances where library practice and/or policy may have been based on a false understanding of research findings.

While many of the studies we reviewed made recommendations about how editors might improve the accuracy of citations and quotations, few if any have specifically investigated the correlation between editorial policies and quotation accuracy. Future research might consider, for example, whether editorial staff conduct random quotation checks and how these might correlate with quotation accuracy rates for a particular journal.

Researchers may also wish to consider the value of comparing error rates across different publishing platforms, such as traditional scholarly journals vs the emerging open access models. Although publication practices are evolving, the need for care and accuracy in citing references will remain.

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Lifting the Veil

Analyzing Collaborative Virtual Reference Transcripts to Demonstrate Value and Make Recommendations for Practice

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Reference & User Services Quarterly, vol. 57, no. 1, pp. 42–47 © 2017 American Library Association. All rights reserved. Permission granted to reproduce for nonprofit, educational use. Extended transcript analysis was used to analyze how our chat reference was being used and make recommendations for practice. Because this analysis was longitudinal (over a year, or at least several months) significant patterns were documented. Several themes were noted that emphasized the unique characteristics of the Community College population. The project documented that chat reference patrons are persistent. The questions that came up about assessing the service underlined the commonalities between virtual and face to face reference.

orough of Manhattan Community College (BMCC) is a large (24K degree-seeking students) urban community college. Students have wide-ranging gifts and abilities and come from 155 countries. The BMCC Library offers 24/7 chat reference using Question-Point from OCLC. Other than scanning the results of a brief satisfaction survey, there has been no attempt to understand how the services are being used. This project used an extended transcript analysis, to describe how the service is being used, to answer questions of value, and to make practice recommendations.

This project was undertaken within the context of an initiative from the Association of College and Research Libraries (ACRL) to clarify and promote the value of academic libraries. These discussions directly led to creation of the Assessment in Action program.¹ This project was undertaken within the context of Assessment in Action.

LITERATURE REVIEW

Looking at these transcripts beyond the quantitative patterns raised several issues that are confirmed by the literature, including the impact of weak Internet infrastructure on remote services and how that is the connected to the fact that this is a commuter school. The challenges offered by college password systems are not uncommon. Do some of the usage patterns reflect our community? Finally, what are some of the possible ways that the relative success of chat reference can be assessed?

Access to adequate broadband Internet within low-income communities is a critical issue.² Naylor conducted focus groups to explore why their chat reference was under-used.³ They observed that lack of "high-speed Internet access" was a very significant issue.⁴

Armann documented the problems that can ensue when the library password is different from the main college password.⁵ This was confirmed by our study.

New York City is a city of immigrants. The New York City Department of Education documents 180 different languages spoken at home by New York City public school students.⁶ Conway examined persistence of immigrant students at BMCC: "A third of the total college freshman class spoke English as a second language."⁷ This is an important context for this study.

One of the possible measures of success of a transaction is gratitude. Mon and James examined the percentage of email reference transactions that received a "thank you." They found that 15.8 percent of the messages received a "thank-you" response. They suggest that it is difficult to conclude that this is absolutely a measure of success.⁸

The challenge with assessing virtual reference is twofold: a level of anonymity (sometimes bridged by identical questions and usernames) and a very short time duration of the interaction. It's interesting to observe how different research studies have tried to get around these problems. Ward used proxies to ask virtual reference questions, and then used a rubric to grade the "completeness" of the answers.⁹ Waugh used interviews to look at whether students have a greater comfort level with formal or informal language.¹⁰ Naylor used focus groups to explore why their service was so lightly used.¹¹ This suggests that transcript analysis, is only one dimension of examining how this service is used.

There also some new innovations in transcript analysis. Armann-Keown refers to the complexity of the reference questions that were appearing in chat reference.¹² Kemp and Maloney describe the uses of the READ Scale to evaluate the complexity of virtual reference questions.¹⁴

Passonneau and Coffey (2011) made an important theoretical contribution to "Lifting the Veil." With their essay they offered a way of tackling a very large amount of data. Grounded theory begins with the data, and develops hypotheses from the data. They also offer a series of questions that can focus the researcher's attention. The first three are valuable focal points for this study: "1. Contextual: What is happening? 2. Diagnostic research: Why does it exist or happen? 3. Evaluation research: How well does it happen?"¹⁵ This project undertook quantitative descriptions of how things are being used. By looking at what they were asking, and the implied classes, this was a form of contextual and diagnostic research. Evaluative questions are also considered.

METHOD

The Research Design

QuestionPoint is a collaborative virtual reference service offered as a subscription by OCLC. Borough of Manhattan Community College subscribes to QuestionPoint, as part of a group that includes nine City University of New York (CUNY) Libraries. This project took advantage of the fact that OCLC makes transcripts available for offline analysis.

These transcripts were received from OCLC, with student contact information stripped out. Grounded theory analysis was very influential in the decision to simply read through the transcripts, and allow the data to dictate the form and the scope of the project. The first read through was the slowest and yielded a rough list of topics and outcomes. Some of the specific inquiries appeared during the first run through. How to quantify the password problem? What about English fluency? Is it possible to measure persistence? The second pass was much faster and tried to code for the class that generated the assignment. A third partial pass looked at issues of correctness and applied an instructional benchmark. A fourth pass (also partial) looked at coding for persistence, to quantify it.

Tools for Qualitative Analysis

This was a "home brew" solution for qualitative and quantitative analysis. MS Excel, with the addition of Power Query and Power Pivot, was an inexpensive solution for this project. This package became less practical as time moved forward. It is only available in Windows, and it is difficult to transfer spreadsheets from one computer to another, and it is impossible to move away from Excel, to Google Sheets. The final two partial scans were repeated using Dedoose (www .dedoose.com/), a cloud based platform that made the qualitative coding much easier and much more portable between computers. Dedoose has a graphic interface that makes it possible to tag chunks of text. It is priced moderately on a subscription basis, making it a possible solution for researchers who do not have funding for software purchases. Access to software for doing this kind of work represents a fundamental challenge for faculty doing qualitative research.

RESULTS

In 2013 there were 823 transcripts generated. Both quantitative and qualitative measures were used to try and get a sense of how the service was being used. When was the service used in 2013?

Figure 1 represents the number of transcripts, totals over the year by time of day. What's interesting about this curve is that it is seen elsewhere on the Internet, as a pattern for shopping, or other forms of customer service.¹⁷ When looking at time of day, it is clear that about 20 percent of our questions are being asked outside of library hours. This quantifies one of the values offered by subscribing to the 24/7 service offered by QuestionPoint.

Figure 2 represents the number of transcripts broken out by day of the week, and then colored for time of day. It's important to recognize that both of these charts represent total numbers throughout the year. This stresses the point that the service, when compared to the considerable size of

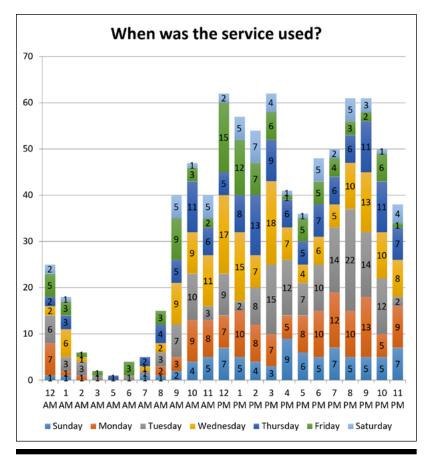


Figure 1. Totals by the hour over a year, color coded by day of the week

Table 1. Who is answering our questions?		
QP Backup	246	29.85%
Hunter College, NYC (CUNY)	109	13.23%
CUNY Graduate Center	52	6.31%
Bronx Community College (CUNY)	51	6.19%
Brooklyn College (CUNY)	38	4.61%
Virginia Community College System (VCCS)	26	3.16%
Univ of Hawaii at Manoa	15	1.82%
Lehman College (CUNY)	14	1.70%
Baruch College (CUNY)	14	1.70%
Eastern Michigan University	12	1.46%

the intended audience, is actually very lightly used.

Who answered our questions?

A glance at table 1 shows several trends. QP Backup represents the overnight coverage, librarians that are directly employed by OCLC (about 30 percent). Hunter, CUNY Grad Center, Brooklyn, Bronx Community College, Lehman, and Baruch College are all within the CUNY group (CUNY

questions appear to CUNY Librarians who are online before they appear to the whole cooperative.) The distinctive contributors to the top ranks are the Virginia Community College System, University of Hawaii at Mano, and Eastern Michigan University. This documents the important work of a collaborative system.

What were the questions about?

Trying to summarize the content of these questions was extremely challenging. Two different passes generated an interpretation of topics, and then an attempt to identify which class the assignment was for. Often the patron did not supply much information about what they were looking for, or what assignment was driving their research. Sometimes chat reference librarians, who are not familiar with the campus, don't know what follow up questions to ask.

Some of the most frequent questions included various login problems (see technical problems), content for speeches, and textbook issues. This reflects the fact the Library has a comprehensive textbook collection. All students also take Speech 100, and often are confronted with their first introduction to research when getting ready to make their informative or persuasive speeches. Many Speech professors suggest that statistics are a good

way to demonstrate the importance of an issue. This is probably why statistics appeared toward the top of the topic list.

Disciplinary breakdown

Table 2 represents the most frequent departmental/class specific designations. "Library" questions include questions that were vague enough that it was impossible to discover the class that was generating the question. Since this number represents almost 50 percent of the transcripts, the rest of the numbers must be considered to be "fuzzy" at best.

The English and the Speech classes are the two major places where students are exposed to research projects, and it is not too surprising that they are high in the disciplinary ranking. That year there was a lot of questions about a particular business research project.

Rhetoric was the designation that was used for questions that were about formatting papers and specifics of

Table 2. Specific Disciplines		
Library	370	
English	108	
Speech	102	
Rhetoric	29	
Business	27	
History	15	
College	14	
Health	12	

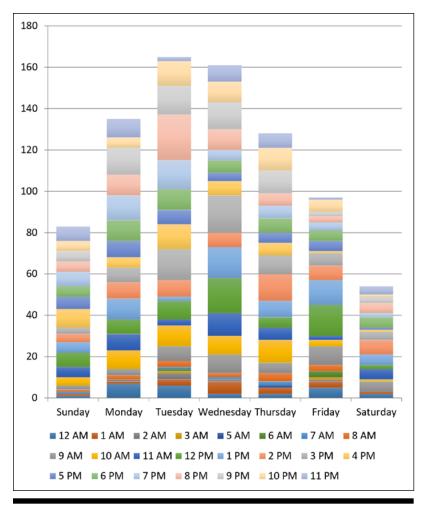


Figure 2. Time of day and day of week

MLA or APA style. This is also not surprising, since the Library continues to be a major source of information on "style issues."

"College" questions were questions that were referred to another department of the college. Grade interpretation, looking for sample syllabi, and questions about paying for textbooks with financial aid are some examples.

The college does have health courses. Health questions may also represent nursing courses or speeches on health topics. This is an example of why it was so difficult to code for courses or departments.

OBSERVATIONS

Persistence

This study found that virtual reference patrons are persistent. In a five-month sample (January–May 2013), 10 percent of the transcripts were judged to be following up on previous chat sessions. This was determined by identical user names, and phrases and questions within a limited period. Despite the lack of email addresses, persistence jumped off the page. Because of the distributed nature of the cooperative, often the librarian who picked up the question was not aware that this question had already been asked at least once (several students came back multiple times). Sometimes they would get a different, more coherent answer, and sometimes they came back repeatedly and received the same answer-until the explanation sank in. A few clearly came back with connected questions over several days (identifiable by particularly distinctive user names). This is a unique observation, and may be a much larger phenomenon than is possible to document without users being specifically identified and tracked.

Signs of Major Technical Problems for the students

There was seeking help with specific, direct problems with using library services. Often it was about having trouble logging into the databases remotely. At that time, a lot of students had trouble remembering their login password, because it was not a major password at the college that they needed to use on a dayto-day basis. Although it's hard to completely pin down, 17.4 percent of the questions were judged to have a login component.

Students were having a lot of trouble with their Internet service. There were many complaints about "slow Internet." If a session

crashes, is it the technical skill of the student, or the quality of their Internet service? We attempted to identify the location of IP addresses and got some odd results. There were a lot of local sounding questions with out of town IP addresses. How stable are (or were) the cheapest Internet Service Providers?

English fluency

It was the reaction of this researcher that many of the transcripts reflected English fluency issues. It's hard to calibrate, because the issue is very subtle, and impossible to measure. Sometimes the chat format may be blamed for a perceived lack of fluency.

Success

Success is a tricky question, particularly when dealing with a moment in time. Wrestling with the content of these transcripts, gratitude was selected as somehow indicative of the "success" of the transaction. About 70 percent of the transcripts showed some level of gratitude. There was no

certainty that this had any real meaning. Some people were overwhelmingly grateful, others seemed to be saying thank you out of politeness. It's impossible to be certain, but it was the perception of this researcher that gratitude is not a reliable measure of success. Without the opportunity for follow up, it's impossible to determine how accurate or successful the answers are.

DISCUSSION

One of the basic ideas behind this study was to demonstrate value and then to underline issues of practice. The numbers demonstrate a service that is being used 24/7 and is available at point of need. The quantitative measures show that the service is being used by students as needed, with a cyclical increase as the semester progresses. The success of the collaborative virtual reference project is evidenced by this data.

Persistence is a critical finding of this study. We found that around 10 percent of the sample represented students who were returning to the virtual reference portal, sometimes multiple times. This is a soft number. It could be higher. It was tracked based on noticing unique user names, coupled with identical questions. If students logged in with different or generic user names, they would not have been tracked. This also did not attempt to identify students who were returning throughout the semester for help on different projects. This is likely, but it was impossible to be definite with it. This was due to working with data where the email addresses had been stripped out.

Technological barriers jumped out of these transcripts. How stable is their technological infrastructure when doing research from home? This again reaches back to the specific circumstances of this particular population. This is a commuter school, and many of the students are first generation college students. In Fiscal 2013 about 80 percent of students applied for financial aid. Of the students who applied for financial aid, 70 percent were either low income or at poverty level.¹⁷ They are economically challenged. It is possible that their technological infrastructure away from campus is going to be less stable, and less reliable. What is unknown is whether this is still true. There has been less evidence of technological instability in current transcripts.

This study showed that a significant portion of the virtual reference traffic was generated by students having password problems. Since this sample was taken, it's possible that this problem has resolved, since the "library password" is now also the "wireless password" and the "pc login password," which is an improvement from 2013.

English fluency is an important issue to discuss. It is difficult to pin down in the anonymous environment of chat reference, but it was definitely present in this dataset. It leads to speculations about the chat reference tool being attractive to students who are concerned about asking for help face to face. Like the sense of technological instability, this is an important window on the particular characteristics of community college students, and the important role of community colleges in helping immigrants move forward. Chat reference should be seen as an important platform for serving these students.

QuestionPoint Discussion

One of the fundamental challenges of consortium-based chat reference is encountering different styles of reference. Many of the chat reference transactions are resolved with more information and less instruction. It's a truism in academic work that we do not dictate how someone provides reference service, but it's natural to wrestle with whether "I would have done it differently." The answers were not incorrect, usually, just a different approach.

One of the practices on QuestionPoint is that a transcript can be referred back to the student's school, at the librarian's discretion. One of the first takeaways of this project was the realization that many transcripts that would benefit from additional attention are not referred. **Review** of all the transcripts generated by chat reference has become a daily practice in our library.

Each institution that subscribes to QuestionPoint has the opportunity to load a "policy page." The use of the **policy pages** is critical for librarians working within the context of a collaborative service. The correctness of a reference answer is always difficult to judge, but in this study most of the true errors of fact were problems that could have been prevented by reading the policy page.

Do we encourage *extended consultations*? There is an important benchmark within the QuestionPoint community that measures participation by each organization by the number of questions that are answered. There were many transcripts in this dataset that were quite long, as the librarian patiently worked through challenges with an individual student. Collaborative services need to find measures of participation that acknowledge this balance between quantity of questions and time spent with individual students.

CONCLUSION

We were successful in drawing a multidimensional picture of how our virtual reference service is being used. The value of this service has been specifically measured. We noted significant usage outside of library hours. This confirms the basic premise of subscribing to a collaborative 24/7 service. This study absolutely demonstrates the value that our students are gaining from the 24/7 service. We noted topic patterns that matched up well with our curriculum (English and Speech are huge library users). We found that students are persistent advocates for themselves. A significant percentage logged back in, sometimes repeatedly. This is an important finding, and it would be interesting to see if it is replicated at other schools.

Are there ongoing technical barriers to student's use of virtual reference? Particularly when dealing with a commuter

school, do we understand what barriers students face when using virtual reference services? If this study is repeated with more recent transcripts, focusing on whether technical barriers have persisted is essential. As colleges shift toward hybrid and fully online learning, how much do we know about the technological infrastructure that our students are relying upon? Is this a question that is specific to commuter schools?

Reflecting back to the study done on the complexity of questions coming through chat reference.¹⁸ They reported a level of complexity that is not reflected in these transcripts. How complex are the questions being asked by community college students? Is there a major difference between how university students and community college students are using virtual reference? The next round of transcript analysis will examine a more recent batch of transcripts and look at complexity and technological stability.

There are some immediate outcomes to "close the loop" on this project. Noting that it is lightly used, we have been doing more marketing. We review transcripts constantly, not waiting for transcripts to be referred for follow up. Within the QuestionPoint community, it is hoped that this study will open up a conversation. Let's keep talking about instruction versus information. There are many common concerns between virtual and face-to-face reference practice. Let's open up a conversation.

CREDITS

This project is part of the program "Assessment in Action: Academic Libraries and Student Success" which is undertaken by the Association of College and Research Libraries (ACRL) in partnership with the Association for Institutional Research and the Association of Public and Land-grant Universities. The program, a cornerstone of ACRL's Value of Academic Libraries initiative, is made possible by the Institute of Museum and Library Services.

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Toward Holistic Accessibility Narratives from Functionally Diverse Patrons

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This study sought to get a more holistic view of how the functionally diverse, people with disabilities, view the library's accessibility at a large academic institution by utilizing interviews that incorporated open ended questions. Patrons were patrons of the library at all levels including faculty, staff, and students. Patrons also fell into one of four disabilities, either Autism, motor impairment, Post-Traumatic Stress Disorder, or visual impairment. An analysis of the transcripts indicates that patrons had many thoughtful insights into not only how the library was or was not accessible but also on how to address the issues that were presented. Based on the results, three recommendations for improvement in libraries are made including developing more empathy for the functionally diverse, empowering the functionally diverse to come forward and speak up, and incorporating universal design techniques to develop better spaces, buildings, and services.

hile the Americans with Disabilities Act (ADA) was passed into law in 1990, codifing accessibility for people with disabilities at a federal level in the United States, there are many loopholes which allow older buildings to circumvent true accessibility in favor of "compliance." Support for the law in libraries has been mixed from enthusiastic acceptance to downright hostility. Current attitudes toward the ADA revolve heavily around compliance with little effort beyond a "one size fits all" approach toward accessibility with the focus largely on physical disabilities.

A striking feature of the general literature about libraries and the functionally diverse (people with disabilities) is that the functionally diverse themselves are rarely asked for their input on their library experiences. Librarians typically interview or survey each other or library administrators and broadly focus their questions on policy or current assistance models and initiatives. That is not to say that the functionally diverse are ignored in favor of librarian voices. however their narratives are often limited or absent. This study interviewed a variety of functionally diverse patrons with an aim to understand their perceptions toward a large academic library and its level of accessibility, as well as what could be improved.

LITERATURE REVIEW

People with disabilities comprise roughly 15 percent of the global

population (about 1 billion people) according to the World Health Organization.¹ This is a significantly sized population that is understudied and not well understood within the library profession. This is especially true of people who are neurodiverse (autism, dyslexia, and Tourette Syndrome), have learning disabilities (dyscalculia, dysgraphia), or mental disabilities (post-traumatic stress disorder, Schizophrenia). In libraries, there has been a focus on this population decades before the ADA came into effect. Gibson surveyed library and information science programs in 1977 and found that many of them offered some kind of course, seminar, or other preparation for working with "handicapped individuals."2 Note that the term "handicapped," in common use at that time, is now considered to be offensive. The early literature on assisting people with disabilities is largely positive and highlights librarian awareness of people with disabilities, such as Mularski's work in 1985 that queried university libraries about their awareness of and capabilities, both with physical equipment and in staff training, to assist patrons who were deaf.3 However, the literature also underscores some librarians' negative attitudes toward people with disabilities as exemplified by Jahoda and Faustini's survey of academic libraries in 1982 where they included a free response comment from a respondent, "the handicapped are less than 2% of our student body! With the economic situation the way it is, we need funds and positions to serve the other 98% . . . I feel the emphasis on 'handicapped' will be short lived as we just can't afford it."4 Unfortunately, this sentiment is echoed in Scheimann's master's thesis where he surveyed library directors of small to medium-sized public libraries in 1994 about their compliance with the then new ADA regulations.⁵ While such blatant negative attitudes are fading from the literature, the pervasive use of language that includes the phrase "dealing with" as applied to "problem patrons" indicates that negative perceptions of the functionally diverse persist.

To counteract some of these negative perceptions, there are advocacy articles within the profession designed to discuss the needs of the functionally diverse. Huang was on the leading edge of advocacy by raising awareness of the needs of people with disabilities the very year that the ADA was signed into law, 1990.⁶ Lenn echoes Huang about the need for ADA compliance in 1996 thereby keeping the ADA at the forefront of the profession.⁷ While earlier articles like those of Lenn and Huang focused largely on physical disabilities, today there is a greater awareness of mental disabilities as in the case of Remy and Seaman's informative article on how libraries can better assist people with autism.⁸ Generally speaking however, the aforementioned articles are *about* the functionally diverse and do not necessarily incorporate the actual voices or narratives of the functionally diverse.

That is not to say that there has not been outreach to people with disabilities to ascertain what their needs are and how libraries might assist them. Mendle engaged in a survey of students with physical disabilities and students with learning disabilities to create an adaptive technology lab at the University of Alabama.⁹ Catalano determined that for students with disabilities who were distance learners, there needed to be a greater emphasis on universal design for learning and that online learning is a gateway for many people with disabilities to education.¹⁰ The literature is liberally salted with case studies and surveys that focus on a single disability and the intervention that the library has engaged in to better assist that singular disability, for example the use of assistive technology and students with autism in school libraries,¹¹ private study carrels and student volunteer readers for students with visual impairments,¹² and assisting people with hearing impairments in their research needs.¹³

Many articles however focus on surveying librarians, library schools, and library directors/deans about what it is that is being done to address the needs of the functionally diverse. Willis for instance updated an earlier survey that had been deployed to academic institutions and applied that updated survey to health sciences libraries to ascertain the progress made in eliminating physical barriers for people with physical disabilities and found that while health sciences libraries were doing a fairly good job with accessibility, they still had areas that needed attention.14 Samson interviewed librarians who had responsibility for functionally diverse patrons at eight universities to determine best practices for service to those patrons and found that universal design and access were key to creating accessibility.¹⁵ Walling conducted a library school survey to determine how much education new professionals were receiving about the functionally diverse and how best to assist them. This research showed that while library schools were at least discussing people with disabilities in classes, it was perfunctory at best, and adaptive technology was not discussed at all.¹⁶

Advocacy and informative articles, as well as pieces that focus on what the profession is doing, are needed, especially regarding a population that is often misunderstood, overlooked, or completely ignored. While library professionals do conduct quantitative and qualitative research on the functionally diverse, the focus is often on a single disability like autism or deafness or a single type of disability in a range like physical disabilities such as visual impairment and mobility impairment. Very little research has been done that looks across types of disabilities to see where there are connections, similarities, and differences. This paper specifically reached out to a broader range of disabilities to get a better understanding of how that range in disability affected the use of libraries by the functionally diverse.

Findings from the following study strongly indicate that libraries have a ways to go in understanding patrons who have disabilities as well as in making library services and spaces truly accessible. Two possible ways in which to address the concerns raised by patrons are: (1) the use of mindfulness as a way to build empathy and compassion within library employees toward people with disabilities and (2) the use of Universal Design theory.

Mindfulness has its roots in Buddhism and was popularized in the United States by Jon Kabat-Zinn.¹⁷ Mindfulness

is little discussed within librarianship and when it is, the focus is on mindful leadership.¹⁸ Mindfulness has also been examined as a way to manage stress and to manage daily workload in law libraries.¹⁹

Another, and perhaps more significant, recommendation is to include Universal Design from the outset of the design process when creating new or revised services and spaces. Universal Design incorporates the needs of all users, which includes people with disabilities, children, and the elderly, into the design process from the beginning to make the curriculum, space, or service accessible to everyone regardless of who they are.²⁰ Universal Design has been embraced by a variety of disciplines including architecture (new buildings), human computer interaction (how web and device interfaces are designed to be intuitive to users), and education (lessons that are designed to reach all learners).

This study set out to specifically query a variety of functionally diverse patrons to determine what the confluence and divergence of experiences might be between disabilities. As such, this small study represents a unique perspective on functional diversity than the previous literature.

METHOD

This study recruited functionally diverse patrons at a single large research university in the 2015 fall semester with a focus on people who are visually impaired, mobility impaired, autistic, or have post-traumatic stress disorder (PTSD). These four disabilities reflect a range of functional diversity experiences including both hidden and visible disabilities as well as physical, sensory, and mental disabilities. Visual impairment can encompass a variety of conditions from a complete lack of sight, to partial sight, to depth perception issues and reading impairment. Mobility impairment can range from having no use of the lower extremities to pain conditions that making walking or movement painful. Autism is a "group of complex neurodevelopment disorders characterized by repetitive and characteristic patterns of behavior and difficulties with social communication and interaction."21 PTSD can include hypervigilance (extra alertness and awareness of one's surroundings), heightened senses, avoidance behaviors (limiting environment or social situations that remind the person of past trauma), and reactionary behaviors (quick to anger, physically striking out).

A total of eight patrons were interviewed over the course of three weeks based on availability. The term "patron" is being used broadly here to refer to undergraduate students, graduate students, faculty, and staff. Patrons were recruited through email announcements, word of mouth, and posters. Patrons were asked to fill out a survey to determine study eligibility. Each interview was audio recorded and lasted anywhere from 35 to 85 minutes. Each patron was compensated with a \$30 Amazon gift card.

Study questions were open ended and focused on exploring what patrons thought about the library in terms of their own disabilities. Frankness in response was highly encouraged and so were suggestions for improvements that could be made to the library—physically, digitally, or in terms of personnel training.

EMERGENT THEMES FROM THE INTERVIEWS

Findings were drawn from the interviews through the use of a holistic approach rather than trying to impose a preset group of themes on the data. Analysis of transcripts indicates that there were fifteen broad categories of concern broken down here with several subcategories where appropriate.

Empowerment

Some patrons were impassioned with the need to not only be empowered to ask for help but to encourage their fellow functionally diverse to ask for help as well. One patron observed, "I guess I'll just say that people with disabilities tend not to ask [for] what they need. If the library wants to help students with disabilities by creating a welcoming environment [that] is key." This statement is particularly powerful because it illustrates two points at once. There is the self-reflection that people with disabilities don't ask for the specialized help that would make their learning easier and more accessible. There is also the implication that the library, as it stands now, is not a welcoming place for people with disabilities. Another interaction expressed this sentiment of empowerment by stating, "It's not about giving students requests, but giving students ideas about what to request." One patron likened having a disability to being in the closet, a phrase that was popularized by the gay rights movement. This contextualizes having disabilities as a civil rights and social justice issue and in need of the same kind of support and empowerment as other civil rights movements such as voting and equality.²²

Facilities

Perhaps most notably, patrons like the libraries but wish that they were accessible and welcoming for all people. One patron stated, "The front door for someone with a disability is kind of the back or side door for everyone else." In terms of library facilities, patrons had a variety of concerns including not enough quiet places to study, wishing more libraries allowed food, lockers to secure their belongings so they don't have to carry everything out of the library just to get a coffee, better layout for easier access to spaces and materials, and better lighting on the outside of the buildings. All of these concerns are generally pretty typical for students but can be even more important for people with disabilities because of their unique needs, for instance if a student has a chronic pain condition, carrying their backpack even for short trips can be painful and limit how much work they are able to accomplish that day. Likewise, a student with diabetes or other

food/liquid intake special needs does require more readily available access to food and drink.

Patrons with autism and PTSD made observations about the library as a space as a whole. There was a general agreement that the main stacks, which are labyrinthine, are intimidating and scary. All indicated that they generally see the library as a safe space, a refuge, and quiet. This plays into the stereotype of libraries as quiet spaces meant for serious work and does indicate that while more and more libraries are becoming noisy locations with collaboration spaces and learning commons, for many people, especially those that are neurodiverse or have anxiety disorders, that sense of safety and quiet is important.

Safety

Safety was an issue that patrons with autism and PTSD mentioned as being important to them. For patrons with autism, responses indicated an awareness and wariness around high theft areas. Patrons with PTSD, however, had far larger concerns including feeling intimidated by patrolling uniformed library security officers and especially how uniformed security officers create a false sense of security regarding theft and other crimes that take place in the library. The patrons with PTSD were also more generally aware of their own unique issues and one of them specifically mentioned using the "Safe Walks" police escort program at night because of it.

One patron with PTSD noted that they didn't feel unsafe but they didn't really feel safe either when using library facilities. They also pointed out that their response to threat and violence was to fight and they were aggressive when it came to being intimidated or threatened. For those who have experienced trauma, the "fight, flight, or freeze" responses to perceived threats are most typical.²⁶ While many people flee or freeze in place, the patron's response of the "fight" reaction indicates that awareness of such a response and training in de-escalation is probably needed by library staff.

Communication

Communication came up in a variety of ways in the interviews and is broken down into several categories.

Struggles with Communication

Patrons expressed a deep struggle with communication when they are tired and stressed, especially when they know what they need but are having a hard time expressing it and feel like they are imposing on the library employee that they are getting help from. For instance, one patron remarked, "I get that people are busy, but it can be difficult to explain that I'm having a hard time explaining. . . . I know I am saying non-verbal, but what I mean is less verbal. . . . Finding a bathroom, people understand that type of urgency, but when it's more nuanced, like a research goal—I mean, I've had situations where I was pushing a syllabus towards them and going 'That. That's the thing.'" Here, the patron is acknowledging that the communication issue is on their end, rather than on the library's part. The patrons want to communicate but have trouble doing so and they don't perceive that there are ways to communicate to library employees in a timely and private way.

Frustration with Communication

In the case of frustration with communication, patrons felt that there were many times when they asked for help but that they didn't get it, it was too hard to get help, or the library employee wasn't patient enough. Specifically mentioned was frustration with calling, especially not knowing who or where to call, using the virtual chat because the patrons have difficulty typing and couldn't keep up with the library employee, and needing to train the people they work with because the library employees don't have enough training in how to assist people with disabilities. A tone that appeared throughout the responses in this category was not wanting to be a burden. As stated by one patron. "Mainly, I don't know where stuff is and I don't want to be a pest."

Interactions with Library Employees

This category is different from communication in that the heart of the issues, positive or negative, revolved around issues of expertise, attitude, training, and circumstance.

Expertise Needed

The need for expertise was expressed by graduate student patrons doing advanced work. They stated that they often looked for full time employees rather than graduate or student assistants. One patron stated, "there's sympathy, empathy, general interest and support, care—but I need expertise." This was supported by statements like, "They certainly don't know much about the computing work stations" and "It's easier to do it yourself than supervise and monitor" and "Usually, if I were to call, because usually it's a student at the front desk that picks up, I'll get transferred three or four times before I get to the right person. And even after getting transferred three or four times, I'll just get sent to voicemail." These interactions indicate an underlying tone of frustration and the interactions also point out that it is hard to get to subject experts.

Negative Interactions

Negative interactions with library employees revolved around the lack of expertise and more importantly the lack of compassion and empathy. Interactions with library employees that turned negative usually involved needing some accommodation for disability that wasn't necessarily obvious, like needing to leave a book bag at the front desk so the patron could more easily get a cup of coffee and return or being intolerantly corrected on how to use materials.

Positive Interactions

Patrons mostly had good things to say about their interactions with library employees, including statements that, "Everyone's been very kind to me" and "[They've] always been quite professional and efficient. . . . They're really helpful and clear." However, these positive statements are generalized and there was very little in the way of specific positive feedback.

Training

Patrons expressed a deep frustration with the clear lack of training and sensitivity regarding interacting and assisting people with disabilities. While patrons all stated that they had positive interactions with library employees, they also expressed dismay at the lack of disability awareness. For example, one patron stated, "I want to be treated in a library service context, like 'if I need help, I'll ask.' If people pass by me, looking around in the library, if it's staff, they'll say 'let me know if I can help you with anything.' But sometimes people get pushy about it, assuming I need help. I'd much rather be in control when asking for help." Another patron expressed, "I feel like in general, people are not as understanding as people with disabilities that aren't so visible." This was echoed by another patron with an invisible disability, "I don't realize that what's going on is a part of my disability. A bad day with my anxiety disorder could look different than everyone else's." All of these interactions point to a very clear need for more training within the library as well as a greater variety and availability of training literature, programs, and seminars.

Perceptions of Libraries

Patrons had mostly positive views of libraries in general and really appreciated having libraries available as spaces to do work. However, their perceptions of libraries often conformed to stereotypes in terms of thinking of libraries as quiet safe havens. One patron remarked, "I find a lot of the times I encounter undergraduates in the library who don't seem to have the same socialization in libraries that I do. Like they act like they're in a frat house or something. They have a disrespect for what the space should be for. Just because you can talk in a place, doesn't mean you can party in a place." Negative connotations about undergraduate students aside, the patron's theory about socialization being different could be partly true as generational differences in patrons affect how they interact with the library and with each other. This patron was a graduate student who was much older. As times have changed, libraries have changed with them, often being the first place in a community to adopt new technologies like computers. Yet, outdated perceptions of libraries remain, as clearly evidenced here. Another example is when a patron was taking a picture of one of the paintings in the library and a library employee reprimanded her for doing so, "She

was like in her twenties and she already had the dour librarian face!" The perception of a "dour librarian" is one that is pervasive in popular culture and is certainly not helped by abrasive interactions and confusing rules as perceived by patrons.

Accessibility

Patrons had a lot to say about accessibility and this subject is divided into four subheadings.

Frustration

Patrons mentioned time and again that they had positive experiences with library employees, but that there was room for improvement and more importantly, that the library as a whole didn't go far enough in consistency or fully thought out ways to be accessible. A patron who is mobility impaired stated, "Like I need to return the resources I checked out, but it's the middle of January and it hasn't been plowed in a week and it's hard to get around . . . a special understanding of times when your disability is going to make it difficult to get to the library in the first place or back to the library." Patrons with disabilities are not asking for special treatment. They are concerned with being able to use the resources of the library without penalty when their disability gets in the way because of factors beyond their control like the weather. Patrons acknowledged that the library is trying to help them, but at the same time, they are aware that the library isn't actually taking their specific needs into consideration. "I've seen incremental progress over time. I think I've mentioned that the workstations are still wonky. [The workstations] are still coming from the perspective that someone needs it there, but it's not taking my needs into consideration. Progress, but not success." To address these issues, it might be better for libraries to start doing usability testing, including focus groups and user observation, to understand exactly how spaces can be built or adapted to the needs of all users thereby making buildings and services accessible for all.²³

Physical Concerns

Patrons stated that there were a wide range of inconsistencies regarding physical access to spaces and materials from poor lighting to aisles not wide enough for wheelchairs. Some patrons felt that the barriers to accessing materials in a timely way was just too great and so they had largely given up trying to get to the materials on their own and instead relied on trying to get assistance. However, they also stated that their preference is to be independent but that the current inaccessibility of spaces and materials makes that nearly impossible.

Digital Issues

A significant concern for patrons was being able to easily access digital resources. For patrons who were visually impaired, their concerns revolved around accessibility of databases via screen readers. Other patrons were concerned with browsing online to find materials because of the inaccessibility of the stacks. Due to the distributed nature of resources, particularly books, patrons also wanted more centralization for getting and renewing resources.

Suggestions

There were many different suggestions ranging from communication to streamlining processes. Suggestions included alternative forms of communication like word boards, a disability liaison, easier ways to return and renew books including interlibrary loan materials, and more mental health support like therapy animals that are popular at final exams time.

Cleanliness

Patrons indicated that cleanliness was a concern, especially in computer lab spaces. They were concerned with how often spaces are cleaned and whether or not cleaning supplies could be easily available to wipe down the spaces that they use on their own. They were also concerned with the cleanliness of rented equipment, such as headphones. While the patrons did not state this was a concern, neurodiverse individuals often take comfort in routine and for some, cleanliness and orderliness. For instance, if the person has an anxiety condition, like PTSD, being in a clean and sanitary location might be really important. That said, no two manifestations of a condition are exactly the same, though they do have certain hallmarks of similarity which allows for generalizations like people with PTSD having exaggerated startle responses. It should be noted that some libraries on campus do make disinfecting wipes available but that they might be in out of the way areas and therefore need greater visibility.

Signage

Signage was a major issue, especially for patrons with mobility concerns. For some, signage issues revolved around poor wayfinding signs and for others, the current state of signage wasn't high contrast enough or clearly marked. Route planning, especially for mobility impaired patrons was a high priority made more difficult by the lack of signage or poor signage or inaccurate signage. Because of the labyrinthine nature of the main stacks, accurate and easy to read signage is at a premium but does not currently exist. Signage concerns were stated for both the interiors and exteriors of buildings, particularly because not all entrances are mobility impaired accessible.

Universal Design

Mobility impaired patrons brought up universal design as being a key factor in their desire for where the library and society should go as a whole. "Universal design, also known as *life span design*, seeks to create environments and products that are usable by children, young adults, and the elderly. They can be used by people with 'normal' abilities and those with disabilities, including temporary ones."²⁴ As people with mobility disabilities often have greater difficulty navigating spaces, they are perhaps more acutely aware of just how poorly spaces and architecture is designed. One patron very aptly stated, "The most important thing for me is hoping that whatever ability level other people have, accessibility issues are for everyone. It's not about who has problems and fixing it for them. The most important thing is hoping my experiences help with making other people's experience better."

Hours

As in most libraries, hours of operation were a concern for patrons. They expressed a deep frustration with libraries not being open longer and expressed a desire for a 24 hour library. While patrons had many of the same concerns as students without disabilities, primarily having a quiet space to study especially when cramming for tests or writing papers at the last minute, the need for longer hours was evident in more subtle ways because of the patron's disabilities. While there are two libraries on campus that are 24/5, they are both known to be noisy and overwhelming to the senses. As one graduate student patron with PTSD noted, "I thought I could go there and I realized that I couldn't go there. It wasn't for me." They later remarked that the environment of the Undergraduate Library was just too overwhelming for a student who not only needed quiet but also a sense of safety from others.

Privacy

Privacy was cited as a need in part because of the nature of disability. Because some people with disabilities already have very visible disabilities, getting help that accentuates their disability in a public setting is deeply uncomfortable. One patron who is visually impaired stated, "I know that people stare at me on the sidewalks, walking down the street periodically. It's not the most comfortable sort of thing. I just want to keep doing what I need to do" and "There's no privacy. There's no place where I can take a screen and smash it in my face if I really need to." These statements illustrate a lack of sensitivity at a societal level but also at the library level. While many libraries would more than likely provide a private space for this patron to "take a screen and smash it in my face if I really need to," this patron would have to request it, which would bring further attention to their disability, thereby creating a vicious cycle of wanting privacy but having to give up privacy to get it.

Marketing

A major emergent theme was that patrons asked for resources or services that already exist and may have existed for quite

some time. To that end, asking about marketing became a question that was added to the interview as an ad hoc question. The data fell roughly into two themes.

How to Reach Patrons

Some felt that email was really effective and others felt that it would be easier to reach them via posters. Email was generally a bone of contention for patrons in terms of how much they read and what they would read—some stating any email would be read while others said that email would be read only if it was specifically aimed at them in terms of their class level or major.

What Needs to be Done

Perhaps most distressingly, patrons clearly articulated a laundry list of issues that indicate that the library has failed to educate, market, and reach out with the kinds of information that patrons are looking for. For example, patrons stated that they wish they had access to knowing what resources are actually available, what technology items can be checked out and for how long, the loan periods on materials was often confusing and hard to navigate, that books are shelved by subject for maximum browsing, places where students can share information about their projects and student groups, transportation options especially during academic breaks, and knowing where quiet study spaces are located. As one patron stated, "I worry about needing things that already exists." Which starkly illustrates how little the patron was aware of what was available to them; a failing on the library's part, not the patron's.

DISCUSSION AND CONCLUSION

Limitations of study

While the eight interviews that were conducted yielded valuable information, a wider range of experiences would be useful in making further determinations about accessibility at the university library. However, the in-depth nature of the interviews created a portrait of the problems and concerns that students with a range of disabilities face in the library. As there are many libraries on campus, focusing on the experiences of just one library at a time would also be of significant use to make more particular recommendations and changes to accessibility in each unique location. Further, exploring the differences in patron type and by disability would also add to the understanding of accessibility needs.

Discussion

While these interviews occurred at a single large academic institution, the width and breadth of the concerns raised by patrons indicates a troubling trend that is likely repeated at other institutions. It is clear that patrons generally loved the library and the library employees that work there. However, functionally diverse patrons also deeply struggled with getting their needs met and even being able to articulate what those needs were. Their gaps in knowledge pertaining to the basic workings of the library indicates that more time needs to be spent on outreach and marketing to make patrons more aware of the services available as well as streamlining access to those services, among other things. Patrons had many suggestions and ideas for improvement of spaces and services. More importantly however, were the more intangible concerns that patrons raised such as empowerment, universal design, and empathy.

Empowerment

A language theme that emerged throughout the interviews with the patrons was use of phrases similar to "I don't want to be a bother" or "I don't know how to ask" or "I'm intimidated by the (process, librarian, environment, etc.)." The question then becomes how to empower the functionally diverse to actively reach out to their libraries and ask for what they need. Green's article "Empowering library patrons with learning disabilities" may seem like a good place to start but Green largely focuses on making assistive technology available to people with learning disabilities.²⁵ While the availability of assistive technology and specialized services is absolutely empowering, not as many people use them in part because of the perception of use as a marker of disability especially if the person's disability is a hidden one. In the functionally diverse community, invisibility in a key survival skill and that includes not speaking up. For this marginalized population, the key component to empowering them borrows from union organizing and user experience.

Saul Alinsky, one of the fathers of union organizing states that a good organizer, "learns the local legends, anecdotes, values, idioms. He listens to small talk. He refrains from rhetoric foreign to the local culture."26 What Alinsky is pointing out here is that a good union organizer, or as in the case of libraries, a good librarian trying to reach out to an underserved and little understood population, needs to become part of that population and understand the needs and desires of that population from within. Alinsky is a proponent of observation and understanding the core values and morals of the group being organized. In academia, we might focus on the user experience and specifically on ethnographic methods to learn the insider information that librarians might lack. "Using ethnographic methods helps us learn about the people using our libraries because we start to understand how they use them, in ways they might not even be conscious of themselves."27 In combination, union organizing techniques of observation and discussion with user experience and other ethnographic methods, come together to create a powerful set of tools in which to reach out to the functionally diverse in a way that is much deeper than surface level understanding. This will lead to better understanding and communication and more than likely, a better library for everyone.

Universal Design

Universal design is a tool that can be applied to all types of scenarios and disciplines, though it is most commonly thought of in terms of architecture and spaces as well as learning. Using concepts of universal design when either planning a new building or redesigning a space will go a long way in making sure that the physical spaces are accessible to all people, from those with permanent disabilities to people with more subtle disabilities like children just learning to walk or someone experiencing a temporary disability. Gail Staines' book, Universal Design: A Practical Guide to Creating and Re-Creating Interiors of Academic Libraries for Teaching, Learning and Research, while well thought out in terms of universal design thinking, hardly mentions the functionally diverse, and is still a good resource to keep in mind when thinking about how to make library spaces more accessible to all.²⁸ Taken in conjunction with many of the concepts presented in A Web for Everyone: Designing Accessible User Experiences, while focused on website accessibility, gives excellent ideas about how to keep the functionally diverse in mind when thinking about website development and could easily be applied to universal design.²⁹ These two resources can serve as a way to open up thinking about spaces and functional diversity for libraries that are going through a new build or redesign of spaces or buildings.

Empathy

The othering of the functionally diverse is something that happens within society and the media constantly. To combat the othering that occurs, re-humanizing the functionally diverse to understand and empathize with them and their needs is needed. Ken Robinson, in discussing how organizations are not machines states that, "People have values and feelings, perceptions, opinions, motivations, and biographies, whereas cogs and sprockets do not."³⁰ As a popular disability activist motto states, "I am not my disability." Both of these statements say the same thing: people are human no matter what they do and who they are. Treating people with functional diversity as people first is about being empathetic to their needs.

A leader in vulnerability research, Brené Brown defines the differences between empathy, compassion, and sympathy. Compassion is when people recognize the struggles within each other and treat each other gently and with lovingkindness as a result.³¹ The power of "me too" is in part rooted in compassion. Brown defines empathy as, "the ability to understand what someone is experiencing and to reflect back that understanding."³² Sympathy is a tool for distancing oneself from the pain of others and is antithetical to compassion and empathy. Cultivating empathy within the library involves understanding not only our own reactions to the

functionally diverse but also understanding how the library as an institution reacts and then taking steps to address both the personal and organizational deficits that are identified. Reflection at the personal and organizational level can be a powerful tool in generating understanding and empathy. In particular, mindfulness meditation has become a cornerstone for many people and organizations that are embarking on a reassessment of where they are, their strengths, values, and current foibles. Jon Kabat-Zinn, the "Father" of mindfulness in the United States, defines mindfulness as "awareness, cultivated by paying attention in a sustained and particular way: on purpose, in the present moment, and non-judgmentally."33 To be non-judgmental in the moment, especially when the previous experiences of the individual and/or the organization push either one of them toward a negatively judgmental stance, requires practice and intention.

Conclusion

This study, though small, revealed a width and breadth of ableism and non-accessibility that might be a major revelation for libraries that pride themselves on being ADA compliant. The experiences of the patrons clearly show that there is a lot of work that needs to be done for the library to be truly accessible and welcoming to functionally diverse people. Incorporating a greater degree of empathy, empowerment, and universal design into how we think about not only patrons, but also services, training, and buildings, will go a long way to making libraries truly accessible for all.

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Best Free Reference Websites

ETS Best Free Websites Committee

The ETS Best Free Websites Committee is Autumn

Lorraine Mather (co-chair), Paul E. Victor Jr. (cochair), Georgia A. Baugh, Allyssa Guzman, James Langan Jr., Yaniv Masjedi, Emily Reed, Sheena Sewell, Mary Vasudeva, and Jeremy Walker. elcome to the nineteenth annual Best Free Reference Websites list. In 1998, the Machine-Assisted Reference Section (MARS) of RUSA appointed an ad hoc task force to develop a method for recognizing outstanding reference websites. This task force became a formal committee at the 2001 ALA Annual Conference, and is now named the Emerging Technologies Section (ETS) Best Free Websites Committee.

A link to this year's winners can be found on the ETS webpage along with a link to the "Best Free Reference Websites Combined Index," which provides, in alphabetical order, all entries from the current list and previous eighteen lists. Annotations for the Best Free Websites List entries, written by committee members in the years the websites were selected, provide guidance for using the websites as reference tools. Once again, the committee considered free websites in all subject areas useful for ready reference and of value in most types of libraries.

The committee has established the following criteria for nominations:

- Quality, depth, and usefulness of content
- Ready reference
- Uniqueness of content
- Currency of content
- Authority of producer
- Ease of use
- Customer service
- Efficiency
- Appropriate use of the web as a medium

More detailed explanation of the criteria can be found on the ETS webpage: http://rusa.ala.org/update/awards/best -free-reference-websites/.

As in previous years, the committee worked virtually, using email and the online bookmarking website Diigo (http:// www.diigo.com). Each member nominated five to seven websites according to the criteria specified above, and then wrote annotations that would assist fellow committee members with reviewing and voting for their favorite nominated websites. Thirty-two websites were nominated. After careful review, the committee members recognized sixteen Best Free Reference Websites for 2017. The annotations for the winning websites were edited by the co-chairs to ensure that they are of optimal use to librarians and fit the criteria listed above.

If you are interested in working with the committee to identify the Best Free Websites for 2018, the twentieth anniversary of this list, please complete the Committee Volunteer

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Form on the ALA website (https://www.ala.org/cfapps/com mittee/volunteerform/volunteerform.cfm).

BEST WEBSITE WINNERS 2017:

American Kennel Club, www.akc.org

The American Kennel Club (AKC) is the most wellknown and authoritative dog registry in the world. On the AKC website you can find information not only about different breeds of dogs, but also about dog health, nutrition, training, grooming, and care; upcoming dog shows and events; and pending legislation related to dogs. An AKC history and archive is also available, as are links to AKC publications. The website is easy to navigate. Dog breeds can be searched by name or browsed by category. Categories include group (herding group, hound group, sporting group, etc.), size, and characteristics (best for apartments, best family dog, hypoallergenic, smartest, etc.). Resources can also be searched by intended audience and area of interest (breeders, owners, clubs, events) and the resources page allows you to search by interest category (dog training, dog health, puppy information).

Author/Publisher: American Kennel Club Date Reviewed: March 13, 2017

ClinicalTrials.gov, https://clinicaltrials.gov

This database serves as an index and provides research results for clinical studies on human subjects in all 50 states and 196 countries. Search by keyword, or use the advanced search to filter results to open studies, closed studies, studies with or without results, phase of the study, funder type, or study location. The site includes a glossary, information about clinical studies, and several appendixes that explain how to search, how to read a study record, and how to find the results of studies. These trials are divided by audience group (patients and families, researchers, and study record managers) to target search strategies to specific research uses.

Author/Publisher: National Library of Medicine (National Institute of Health)

Date Reviewed: March 5, 2017

College Scorecard, https://collegescorecard.ed.gov/

College Scorecard allows users to easily access statistical information about higher education institutions throughout the United States. Search for information about colleges by programs and degrees, location, size, name, type of school, special missions, or religious affiliations. College profiles include location, number of students, type of institution, cost information, graduation and retention rates, earnings after school, student body makeup, academic programs, and more. The website also contains information about financial aid and what to look for when choosing a college to attend.

Author/Publisher: US Department of Education

Date Reviewed: March 13, 2017

Data.gov allows users to quickly find and access government data on a wide variety of subjects related to society, economics, science, and technology. Publicly available data from every department of the federal government can be found on the site. Datasets and data-driven reports are available in a wide variety of formats, including HTML and PDF. Users can search for data using simple keywords or using filters to discover data according to a variety of topics, categories, tags, formats, and authoring agencies. Lastly, Data.gov provides support to developers for building web applications that can directly access and use some government datasets.

Author/Publisher: US General Services Administration Date Reviewed: March 6, 2017

Drug Information Portal, https://druginfo.nlm.nih.gov/drugportal/

The Drug Information Portal provides users with a central starting point for learning about over 17,000 drugs. This includes drugs still undergoing testing and trials, all the way through established drugs that are widely available on the market. Users can search for known drugs by name or discover drugs by searching through various drug categories. Each drug has an individual entry which provides users with a quick overview of the drug's use as well as a variety of links to other government websites and authoritative health and medical associations. These links connect users to information regarding trials, clinical research, and general drug safety information. The site also has a mobile friendly version that many library patrons will find useful.

Author/Publisher: National Library of Medicine Date Reviewed: March 6, 2017

EuroDocs, https://eudocs.lib.byu.edu/index.php/Main_Page

EuroDocs offers links to primary sources in European history that are transcribed, reproduced in facsimile, or translated (including some video, sound files, maps, photographs, etc.). The sources in EuroDocs cover a wide range of subject areas including politics, economics, and social and cultural history. The homepage allows you to browse by country or by means of a limited period menu. Documents are in chronological order. Visitors can also use the search box in the left-hand navigation pane to find specific documents or topics.

Author/Publisher: Harold B. Lee Library, Brigham Young University

Date Reviewed: March 2, 2017

First Amendment Library, www.thefire.org/first-amendment -library/

Information about the First Amendment and its five freedoms, including an interactive timeline, a collection of articles, and a database of more than 900 Supreme Court cases make up this library. The library also contains Special Collections of primary-source materials, overview essays, and lists of Supreme Court justices and litigators of First Amendment cases. The resource can be searched by topic, year, keyword, or citation. A fifteen-member board of advisors, including First-Amendment lawyers, scholars, and historians, oversees the library.

Author/Publisher: Ronald Collins, Editor-in-Chief/Foundation for Individual Rights in Education (FIRE)

Date Reviewed: March 5, 2017

GCFLearnFree, https://gcflearnfree.org/

GCFLearnFree is a free tutorial website that teaches basic technology skills as well as life skills needed in the workplace. From Microsoft Office and email to reading, math, and more, GCFLearnFree.org offers more than 2,000 lessons on more than 180 topics, including 800+ videos, and 55+ interactives and games, completely free. A search feature is available on every page of the website, or users can search tutorials by subject. The website contains videos and pictures to help aide the learner through the lesson, and provides links throughout the tutorial that point to additional resources. Free mobile apps are also available on the website for users who would like to complete tutorials on their mobile devices. This is a helpful resource for immigrants and individuals seeking assistance with computer use.

Author/Publisher: Goodwill Community Foundation Global Date Reviewed: March 13, 2017

Grants.gov, www.grants.gov/

Grants.gov provides a centralized location for grant seekers to find and apply for federal funding opportunities. The funding is made available from more than 1,000 different programs and amounts to more than \$500 billion annually. One goal of the site is to standardize and streamline the grant information, application packages, and processes for finding and applying for federal grants. Part of the site is dedicated to educating applicants on topics such as what types of grants are available, one's eligibility to get grants, and how to apply for them. The online grant workspace allows applicants and affiliated colleagues to work on the same application together. Grants.gov also makes the necessary forms available, and provides instructions on how to fill them out. The online grants database allows applicants to search for grants and to apply such limiters as eligibility, type of agency, or different subject categories (education, health, science, etc.). This site is helpful for anyone wishing to apply for federal grant funding.

Author/Publisher: US Department of Health and Human Services

Date Reviewed: March 3, 2017

Motley Fool, www.fool.com/

Motley Fool is an investment education website that gives advice on investing, personal finance, and retirement planning. The intended audience is beginners in finance and investing as well as more experienced researchers who would like advice on stock options. Motley Fool contains a lot of advertisements throughout the articles as well as links to endorsed products. With that said, the advice is credible and the website is a free resource for those seeking basic information on the financial world. The Motley Fool, founded by brothers Tom and David Gardner in 1993, is headquartered in Alexandria, Virginia, but maintains offices in the UK, Germany, Australia, Singapore, and Canada.

Author/Publisher: Tom and David Gardner/The Motley Fool *Date Reviewed*: March 13, 2017

National Security Archive, http://nsarchive.gwu.edu/

Established in 1985, the National Security Archive is a non-governmental group that advocates for open government and expanding public access to government information. This group of investigative journalists and scholars has filed 50,000 Freedom of Information and declassification requests to more than 200 offices and agencies of the US government. The site serves as a library and archive of declassified US documents containing more than 10 million pages of previously secret US government documents. There is a standard, Google-style search link at the top of the page. The Documents link allows one to browse records relating to US national security, foreign policy, and intelligence policy, as well as diplomatic and military history. The links on the Documents page also include information on various foreign countries and their relationships with the US This information is organized by geographic region (i.e. Europe, China, Middle East, etc.).

Author/Publisher: National Security Archive *Date Reviewed*: March 3, 2017

NIH 3D Print Exchange, https://3dprint.nih.gov/

The NIH 3D Print Exchange provides a platform for researchers and general users to share 3D printable files of biochemical and medical objects. In addition to allowing researchers to collaborate, the website provides students and educators with quick access to materials representing human and non-human anatomy, molecules and molecular structures, bacteria, and variety of other biochemical models for use as teaching and learning aides. Additionally, users can access files for printing customized laboratory or prosthetic equipment. Researchers can search the website through a Google-style search link, use an advanced search interface, browse models by category or license type and sort results by publication date. Participation in the exchange is not limited to researchers and authorized users, and all users are encouraged to create and share their 3D printable models on the exchange.

Author/Publisher: National Institutes of Health *Date Reviewed*: March 8, 2017

Re3data, www.re3data.org/

The Registry of Research Data Repositories lists over 1,500 research data repositories worldwide that contain research in a wide-range of academic disciplines. It allows users to browse the list by subject, location, and by content type. Entries include links to the specific repositories.

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R3Data uses a system of badges to rate repositories on whether they are open, the types of licensing they offer, whether they are certified, and whether they allow the use of persistent identifiers. It helps researchers find a repository for their data that fits their preservation and sharing needs.

Author/Publisher: The re3data.org Project Consortium Date Reviewed: March 9, 2017

Time & Date, www.timeanddate.com/

Time and Date offers many quick and easy tools to identify current times in other time zones. The website also features articles about various time/date topics such as daylight savings time and international holidays and festivals. It also provides diverse types of calendars such as "on this day in history" trivia, world-wide weather, phases of the moon, and sky maps. The site provides tools to easily calculate dates of future natural events such as solar and lunar eclipses. Additional features include a countdown to future dates, a timer, a stopwatch, an alarm, a calendar creator, and a distance calculator.

Author/Publisher: Time and Date AS Date Reviewed: March 13, 2017

USA Jobs, www.usajobs.gov/

USAJOBS is the Federal Government's official employment site. Search and apply for federal jobs across the US as well as internationally. More than five hundred Federal agencies use USAJOBS to facilitate their hiring processes and match qualified applicants to job openings. Establishing an account on this site allows you to upload resumes (which you can make available to recruiters) and other documents, receive application status updates, as well as save jobs and searches. USAJOBS also offers application guidance and resources for various populations (veterans, people with disabilities, students/graduates, etc.). The homepage allows searching by keyword (job title, agency, skills, etc.) or by location. An events section (toward of the bottom of the homepage) announces various hiring opportunities and workshops being held throughout the country.

Author/Publisher: US Office of Personnel Management Date Reviewed: March 3, 2017

Wonderpolis, www.wonderopolis.org/

Wonderopolis is a collection of articles intended for children and families to peruse. Browse by category or search through more than 1,800 intriguing questions ("Wonders of the Day") that children ask, such as "What are stars made of," or "Why don't all books have pictures?" The website is similar to How Stuff Works, but is intended for a younger audience. Hosted by the National Center for Families Learning (NCFL), Wonderopolis has won several awards including TIME magazine's "50 Top Websites of 2011," Parenting. com "Best Kids' App," and Winner of Learning Magazine Teacher's Choice Award for the Family. Each Wonder of the Day article can be saved as a PDF and/or printed, and all articles contain ideas for easy activities and a list of sources.

Author/Publisher: National Center for Families Learning Date Reviewed: March 9, 2017

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RUSQ considers for review reference books and professional materials of interest to reference and user services librarians. Serials and subscription titles normally are not reviewed unless a major change in purpose, scope, format, or audience has occurred. Reviews usually are three hundred to five hundred words in length. Views expressed are those of the reviewers and do not necessarily represent those of ALA. Please refer to standard directories for publishers' addresses.

Correspondence concerning these reviews should be addressed to "Professional Materials" editor Karen Antell, Public Services Librarian, Bizzell Memorial Library, University of Oklahoma, 401 West Brooks St., Norman, OK 73019; email: kantell@ou.edu.

Becoming a Reflective Librarian and Teacher. By Michelle Reale. Chicago: ALA, 2016. 124 p. Paper \$57 (ISBN 978-0-8389-1529-5).

Reale opens her thin volume by introducing the notion that learning doesn't come just from experts but from our own experiences, which are a foundation for our learning and teaching. She notes that reflective practice helps us understand not only our world and our place in it, but also how to navigate the "conflation" of our personal and professional selves (xviii).

In the early chapters, Reale explores the need to be reflective both for our own practice and also as a means of inspiring reflective learners. Chapter 3 specifically looks at the necessity and benefit of a reflective practice that allows us to address our doubts, insecurities, frustrations as well as our triumphs and discoveries.

Chapters 4 and 5 discuss the barriers to creating a reflective practice. For many, the question is simply how to start. Significantly, our typical focus on technical rationality, tasks, and metrics crowds out the time we need for reflection and undermines the validity of our intuitions and experiences. Yet, ultimately, Reale argues, we are humans with feelings and personal preferences that we must understand before we can create an authentic practice.

The next two chapters address variations and deeper insights into the concepts introduced in the first four chapters. In chapter 6, Reale focuses on the benefits of journaling for reflection, providing examples to demonstrate the many forms that this practice can take. Chapter 7 looks at tone: While we often use reflection and journals to solve problems, starting with our own strengths ("what's working") can be a more positive approach, enabling us to address the challenges from a position of strength.

Reflection is often considered a personal or isolated practice, but chapters 8 and 9 look at how to engage a wider circle. First, while our own experiences are valid, so are those of our colleagues, so collaborative reflection can broaden our perspectives as colleagues provide feedback and challenge us to see new perspectives. These shared and personal reflections can then be carried into the classroom as we engage students in the same learning processes.

In the final chapter, Reale discusses how reflection has allowed her to see her own practice as one of integration. Instead of compartmentalizing and seeking a balance, she finds the integration of her life into work and vice versa a rewarding experience.

Each chapter opens with insightful quotes from practitioners and theorists to set the tone for the ensuing discussion. Balancing theory and practice, Reale provides relevant examples, checklists, questions, and techniques. Furthermore, she ends each chapter with "Final Thoughts" and "Strategies" sections set off in a gray box. These elements will allow the novice practitioner to return to relevant aspects easily.

This book adds a strong voice to the current conversation about reflective teaching practices. Although it is written for librarians and from a librarian's perspective, its insights

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and techniques are relevant to anyone in the classroom. The book's focus on Reale's own practice is generally an asset, as her experiences and insights serve as a guide for establishing a strong reflective practice. Throughout the book, she emphasizes the importance of finding one's own authentic method, and her rather intense focus on keeping a handwritten journal sometimes seems contradictory to the "find your authentic practice" message. Nonetheless, the call to find one's own best practices through reflection and share those with students is empowering and relevant in our classrooms.—Donna Church, Reference Librarian, Webster University, St. Louis, Missouri

Choosing to Lead: The Motivational Factors of Underrepresented Minority Librarians in Higher Education. Edited by Antonia P. Olivas. Chicago: ACRL, 2017. 151 p. Paper \$38 (ISBN 978-0-8389-8887-9).

Leadership is a topic regularly discussed in library circles. Day-long preconference sessions are dedicated to the subject. Library associations offer webinars and host institutes on leadership development and best practices. Also of continued interest is diversity in the workplace, particularly with regard to recruitment, retention, and promotion of libraries from underrepresented groups, as evidenced by the burgeoning number of residency programs at academic libraries. Yet despite all the institutes and initiatives, minority librarians express frustration in securing leadership roles. *Choosing to Lead* addresses the intersection of diversity and leadership through essays by minority librarians who actively sought leadership opportunities within and outside their libraries.

Based on Olivas's doctoral research, this collection is bookended by chapters on the theoretical framework, the motivation to lead. However, the crux of the collection is in the other eight chapters, in which librarians recount how they created a leadership road map. Readers will appreciate the range of voices presented. Not all hold the title of "Director," and they work in public, private, and community colleges as subject specialists and professors. Additionally, the leadership paths presented vary from the laser-focused plan shared by Shannon Jones to Michelle Baildon's path of progressing from a leadership experience in a minority-focused library association to a position in the association of her subject specialty to a leadership role in her university system.

Several themes emerge from the essays, including the notion of "position-less leadership," self-care, and skillbuilding. Several authors stress that leadership can happen regardless of one's title or position within an organization. Committee members can lead just as much as committee chairs do—what's needed is the willingness to take on a leadership role. As one takes on more and increasingly challenging leadership roles, one must be mindful of self-care, which influences the ability to lead effectively. The authors also remind us that taking on leadership roles is a way to build skills; in fact, building a particular skill may be reason enough to assume a leadership position.

This book is recommended for any librarian who identifies as a minority as well as for library managers. Its stories and recommendations are applicable across library settings. The collection's authors were asked to share their motivation to lead and stay in the profession, and this can be used as a point of reflection for readers, but what may be even more useful is the story of how the authors act on that motivation. Because each chapter includes citations from librarianship, business, and organizational psychology, Choosing to Lead also serves as a reference source for librarians interested in leadership. Librarians will return to the stories offered here for guidance when presented with a leadership opportunity, for inspiration when faced with the frustration of being the sole librarian of color at an institution, and for support during what still may be a long road ahead for minority librarian leadership.—Africa Hands, doctoral candidate, Queensland University of Technology, Brisbane, Australia

Collaborating for Impact: Special Collections and Liaison Librarian Partnerships. Edited by Kristen Totleben and Lori Birrell. Chicago: ACRL, 2016. 270 p. Paper \$60 (ISBN 978-083898883-1).

As academic libraries restructure their services to meet the needs of 21st-century users, librarians and library administrators look to collaborative partnerships as a way increase library usage and visibility. Numerous successful collaborative partnerships between librarians and faculty and other campus stakeholders have been documented in scholarly research, and such partnerships are now commonplace among academic libraries of all sizes. Although these partnerships are undoubtedly beneficial, it is easy to overlook the need for collaborative partnerships within the library. Collaborating for Impact: Special Collection and Liaison Librarian Partnerships makes a strong case for partnerships between public services and special collections departments. In the introduction to this work, Totleben and Birrell argue that in the digital age, access to special collections is one of the most valuable services that academic libraries offer. The book is organized as a series of literature reviews and case studies that illustrate the value of partnerships between public services and special collections, and librarians with experience in institutions with special collections departments will recognize the problems described in these case studies. In some institutions, for example, collections that would serve the research and teaching interests of faculty are underused. In one case study, librarians at Georgia Tech were able to breathe new life into the institution's science fiction collection through collection development and outreach collaboration. In another, an English department liaison and special collections librarian at Oklahoma State University partnered with a faculty member to incorporate early books from the library's collection, including a 1587 edition of Raphael Holinshed's Chronicles of the History of England, Scotland, Ireland and Wales into a digital humanities assignment for undergraduates. Librarians at other institutions

saw structural reorganization as an opportunity for special collections and liaison librarians to collaborate on reference and instruction services. At the University of Oklahoma, an administrative reorganization prompted a new working relationship between the history and area studies librarian and the western history collection librarian, resulting in noticeably improved services to faculty and students. This book will be a conversation starter for librarians at large and mid-sized institutions with established special collections departments. It makes a convincing case for such partnerships and explains how each institution made these partnerships a success. The focus of this work is necessarily narrow, and it does an outstanding job of filling a specific need in academic library publications. Librarians at small institutions, however, will probably find works that take a broader approach to collaborative partnerships more helpful.—Allison Embry, Youth Librarian, Tulsa City-County Library

Collaborating with Strangers: Facilitating Workshops in Libraries, Class, and Nonprofits. By Bess G. de Farber, April Hines, and Barbara J. Hood. Chicago: ALA Neal-Schuman, 2017. 160 p. Paper \$55 (ISBN 978-0-8389-1542-4).

The premise of this book is that talking to strangers should be less frightening and more rewarding than it often is. The authors present a unique collaboration-based program that they refer to as CoLAB, which was originally developed as a workshop on creating partnerships between people and organizations to meet community needs. The authors explain the origins, benefits, and logistics of running this workshop, which has been utilized often at the University of Florida and presented to about six hundred organizations and more than two thousand individuals.

CoLAB workshops typically host between 14 and 120 people and last from ninety minutes to a few days. During the workshop, pairs of people who don't know each other "speed-meet" in three- or four-minute sessions and discuss what they are passionate about, what they specialize in, and what their or their organization's immediate needs are. These workshops create face-to-face connections and enable collaboration and socializing aimed at creating innovation and sparking creativity.

Provided in the book are step-by-step instructions for various situations and groups. The authors discuss the logistics of setting up a CoLAB, from recognizing a need through preparing and carrying out the workshop, addressing budgeting, grant seeking, marketing, setting up the space, trouble-shooting, and creating paths for participants' ongoing networking with each other and the facilitators.

CoLAB workshops can be used for a variety of functions. They can serve as icebreakers, conference sessions, or class assignments. They can give students a chance to find a compatible partner or group for a project. They can facilitate connection-building among nonprofit organizations, enabling them to serve their communities better. The authors point out that this type of workshop can be hosted in almost any space, including an academic or public library, a nonprofit location, or a classroom. CoLAB has great potential for fostering community and individual connections and long-lasting partnerships.

This book is recommended mainly for academic librarians. Although it is possible for public libraries to be involved in CoLABs, the potential noise and the requisite amounts of space, time, and funds will likely be prohibitive for many public library spaces.—*Teralee El Basri, Librarian, La Prade Branch Library, North Chesterfield, Virginia*

Developing Librarian Competencies for the Digital Age. Edited by Jeffrey G. Coghill and Roger G. Russell. Lanham, MD: Rowman and Littlefield, 2017. Paper \$39 (ISBN 978-1-4422-6444-1).

Today's librarians appear to be at a crossroads, offering traditional library services (such as reference) alongside digital library services, with some services overlapping the two areas. Change in the library profession occurs at a rapid pace in the twenty-first century, so how do librarians (particularly academic librarians) embrace this change successfully to serve their users effectively? And what technological changes can academic librarians expect in the next few years?

Jeffrey G. Coghill and Roger G. Russell, librarians at East Carolina University, answer these questions in Developing Librarian Competencies for the Digital Age, a useful volume that identifies and provides assessments for librarian competencies in the digital age. Beginning with a short history of the library profession and its response to changing technologies, the editors (and their contributors) address how technologies have changed library skills in areas such as reference, information technology, library marketing, and library management, and they discuss specific skill sets that academic librarians will need to confront technological change in their libraries. One interesting chapter deals with online and distance-education students, addressing how librarians can best assist them and what potential trends and outcomes librarians can expect from this growing education area. Each chapter contains extensive references, and the book includes the contributors' contact information.

Change is inevitable in any organization, and Developing Librarian Competencies for the Digital Age is a well-organized, content-rich book that gives academic librarians the necessary tools to adapt to technological changes to serve their patrons effectively. Highly recommended.—Larry Cooperman, University of Central Florida Libraries, Orlando, Florida

The Heart of Librarianship: Attentive, Positive, and Purposeful Change. By Michael Stephens. Chicago: ALA, 2016. 158 p. Paper \$48 (9780838914540).

Having worked in libraries since her undergraduate days, this reviewer found that reading *The Heart of Librarianship* as she approached her fiftieth birthday helped rekindle some professional fires that may have begun to do more

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smoldering than burning. This small volume focuses on the importance of learning, teaching, and fostering the skills needed to meet the ever-evolving needs of library patrons.

The words and concepts that seemed most significant in this book are chaos, playtime, and visibility. Stephens correctly asserts that visibility is and will continue to be a key to a library's success within its community, and that we can longer wait behind our information desks for patrons to come to us. We need to change our roles to join patrons where and how they are working. We also should encourage and enable staff to take playtime to explore new technologies, and we must connect with colleagues not just at conferences but via blogs, libchats, and MOOCS. In one essay, Stephens outlines the notion of "embracing chaos," which is really another way of encouraging library staff to remain ready and willing develop new services and try new approaches to problem solving.

In one of the book's last essays, "Lessons from the #hyperlibMOOC," Stephens outlines the roles identified for librarians by students who participated in Hyperlinked Library, a MOOC offered at Stephens' institution, the School of Information at San Jose State University. These roles included "Guide," "[Open] Access Provider," "Creator," and "Instructor." These roles are reflected in his essay "Listening to Student Voices" and in the book's overall call to engage with our library patrons and listen actively to their voices to ensure that our profession's voice evolves with the needs of the communities we serve.

Previously published in *Library Journal*, the essays in this book flow well together and are united in their focus on transformations in the library profession, were previously published in *Library Journal*. They are organized under section headings in the table of contents; specific topics and authors can also be searched in the index, and a bibliography is included. I would recommend this book to both new and experienced library staff as an easy read that nonetheless provides a lot of food for thought and ideas to incorporate in our own professional practice.—*Laura Graveline, Visual Arts Librarian, Dartmouth College, Hanover, New Hampshire*

Leading for School Librarians: There Is No Other Option. By Hilda K. Weisberg. Chicago: Neal-Schuman, 2017. 176 p. Paper \$45 (ISBN 978-0-8389-1510-3).

Funding cuts to school libraries and librarians are the norm in today's budget climate, and librarians need specific skills to ensure that school libraries survive and thrive. Weisberg's book is an all-in-one guide for school librarians. It is organized in three parts: (1) "Safe First Steps to Leadership," (2) "Building Your Leadership Skills," and (3) "Playing Larger." Part 1 includes information for librarians about developing mission and vision statements, creating a welcoming environment for students and teachers, and understanding the differences between being a classroom teacher and being a school librarian. Part 2 addresses leadership development, from discovery of one's strengths to continuous improvement as a leader to improvement of one's communication skills. Part 3 covers moving leadership outside of the library by developing a strategic plan, staying visible and current, and giving back to oneself.

This is a book that both beginning and experienced librarians will find useful. For new librarians, part 1 will provide the tools to create a positive environment, to consider the mission of the library, to manage classes and students in the library, and to become an expert teacher. For librarians who want to become better leaders, part 2 provides tools for self-reflection and best practices for leading. Part 3 shows librarians how to make themselves visible as leaders, encourages them to grow their network, and to give back to the librarian profession. This is a comprehensive book that includes valuable information for school librarians, no matter their level of experience. Any school librarian or school district could use this book to ensure that their librarians and library program are seen as indispensable.-Melanie Wachsmann, Reference/Teen Librarian, Lone Star College-CyFair Branch Library, Cypress, Texas

The Makerspace Librarian's Sourcebook. Edited by Ellyssa Kroski. Chicago: ALA, 2017. 400 p. Paper \$85 (ISBN 978-0-8389-1504-2).

For those starting up a new library makerspace or those already managing one, this book offers advice to managers and staff on the logistics of running a library makerspace and discusses the requisite interpersonal skills for employees of such facilities. Divided into three parts, this book is organized chronologically, following the progression from creating to operating to sustaining a library makerspace. It addresses both the quotidian and the conceptual, from day-to-day operations to effective pedagogy, and ends with thoughts on the future of library makerspaces.

Beginning with the definition of a makerspace and how this can vary depending on the type of library that hosts it, this book covers public, academic, and K–12 libraries, introducing readers to a broad spectrum of library makerspace models. Equipment lists for all budget sizes and technological foci are included. Part 1 emphasizes the importance of communication with the space's users to learn which tools and programming are most useful and appropriate for them while encouraging a diverse, radically inclusive library makerspace culture.

Part 1 ends with a section on safety, an appropriate segue into part 2, which consists of chapters that overview a makerspaces in a variety of libraries These chapters serve as guides for projects including some of the most popular technology found in makerspaces.

This book concludes with thoughts on the sustainability of library makerspaces and recommendations for ways to ensure their continued success following the depletion of start-up funding and interest. This section emphasizes the importance of fostering the community that embodies a makerspace by acknowledging that everyone is a maker. Makerspace leaders are encouraged to perpetuate this idea by embedding educators of diverse backgrounds into the makerspace and being especially supportive of makerspace patrons and volunteers whose time, effort, and passion are of exemplary nature.—*Cody Taylor, Emerging Technologies Librarian, University of Oklahoma Libraries, Norman, Oklahoma*

The Readers' Advisory Guide to Graphic Novels, 2nd ed. By Francisca Goldsmith. Chicago: ALA, 2017. 215 p. Paper \$54 (ISBN 978-0-8389-1509-7).

Taking Ranganathan's five laws as guiding principles, this new edition of a 2010 work addresses issues of how to effectively discuss and recommend materials in the graphic novel format with readers of all types. It addresses head-on the misconception that graphic works are only for teens and poorly socialized adults and presents a holistic view of the format and the particular challenges that it presents for library workers advising readers.

The first two chapters cover the background of graphic novels' unique attributes and the various channels that workers can use to reach readers. After that, the main body of the work discusses particular patron populations. These are organized by maturity level and familiarity with the format as follows:

- Chapter 3: adults and older teens who know graphic novels well
- Chapter 4: graphic-novel-familiar younger teens
- Chapter 5: adult readers who haven't read graphic novels
- Chapter 6: teen readers just getting into graphic novels
- Chapter 7: tween readers both familiar and unfamiliar with the genre

Although specific title recommendations are sprinkled throughout the text, the focus of these chapters is on understanding the needs of patrons and how best to address them, rather than presenting simple lists of graphic novels. Chapters 8 and 9 do provide that kind of bibliographic information, with chapter 8 presenting recommended children's graphic novels organized by ability level and chapter 9 presenting works for adults by genre.

Chapter 10 addresses crossover appeal between graphic novels and other media such as movies, games, audiobooks, and other sequential art. Finally, chapter 11 provides a listing of recommended readers' advisory tools such as websites, printed bibliographies, etc. An appendix provides "A Short Course for the Advisor New to Graphic Novels," which Goldsmith recommends in her introduction as a starting place for complete graphic novel neophytes.

Goldsmith's writing is lucid and engaging. She clearly explicates the unique problems of stereotyping and pigeonholing that plague the graphic novel format. She works within an established framework of appeal factors that will be familiar to those who have worked in readers' advisory, but also includes additional information about factors unique to graphic works. As these discussions often make reference to particular works as examples, the reader would be advised to have a web browser handy to run image searches for representative pages or panels to refer to.

This new edition contains a significant amount of new content, but a note on specific changes and additions would have been helpful.

This work is highly recommended for public libraries with graphic novel collections of any size. Academic and school libraries should consider purchasing if they see a need based on their collection and patron population.—*Karl G. Siewert, Instructional and Reference Librarian, Northeastern State University, Broken Arrow, Oklahoma*

Stories, Songs and Stretches: Creating Playful Storytimes with Yoga and Movement. By Katie Scherrer. Chicago: ALA, 2017. 112 p. Paper \$48 (ISBN 0-8389-1544-8).

Katie Scherrer, a well-known library consultant and a registered yoga teacher, has combined her expertise in these two fields to provide librarians with a manual to guide them on how to present yoga in storytime "to engage children and families through embodied play" (x). A brief introductory chapter gives a history of the development of modern yoga and explains the benefits of introducing yoga to children. Chapter 2, "Yoga, Movement and Early Learning" demonstrates that yoga and movement enhance early literacy, including the CASEL social emotional learning competencies. The author also discusses the difference between offering yoga classes and integrating yoga into storytime sessions and includes detailed information and resources regarding hiring a yoga teacher. Moreover, she addresses the common perception that yoga is a religion and provides information about yoga's potential role in library programming. This information will help librarians decide whether yoga movement storytimes are appropriate for their community.

Chapter 3, "Yoga Storytime Fundamentals," including a template; tips for selecting books, music, and digital tools; and details regarding planning the logistics, promoting the program, and preparing yourself. Additional information is included in highlighted boxes: one such sidebar is a description of Yoga Play! At Akron-Summit Count (Ohio) Public Library (31). Chapter 4, "Basic Yoga Poses for Yoga Storytime," covers the appropriate yoga poses for storytimes and features easy-to-read diagrams. Chapter 5 includes twelve ready-to-go storytimes that incorporate the basic yoga poses. The yoga poses usually are reflected in one or more of the stories, songs, or stretches, so they flow well with the theme and content of each storytime. Although it would take a little practice to integrate these poses into one's storytime program, it would be well worth the effort to help children with "selfregulation and the promotion of attention and social skills" (3). Images of book covers accompany the lists of recommended books for each storytime, and the majority are either recently published or titles considered storytime "classics."

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Chapter 6 is a comprehensive listing of yoga resources, including books, online resources, and bibliographic information about all of the materials used in the storytimes. Scherrer's clarifies the issues involved in using yoga in storytime and distills the relevant information to present a guide enabling any librarian to present an authentic yoga movement storytime. For the librarian looking for more mindful use of movement in storytime, this book is a must-have. Written for the public librarian to be used in presenting preschool storytime, this book would be helpful to any early childhood educator, parent, or guardian who wishes to use yoga as a movement tool to support early learning.—Jenny Foster Stenis, Readers' Services Coordinator, Pioneer Library System, Norman, Oklahoma

Students Lead the Library: The Importance of Student Contributions to the Academic Library. Edited by Sara Arnold-Garza and Carissa Tomlinson. Chicago: ALA, 2017. 302 pages. Paper \$62 (978-0-8389-8867-1).

Academic libraries, often said to be the "heart of the university," owe their existence and importance to the students they serve. Students are at the core of the library mission, driving decisions in collections, services, innovation, outreach, and research support. However, their direct role in institutional planning is minimal, and their primary role is most often that of library user. Given their importance to libraries, how can students actively participate in library success? *Students Lead the Library* offers several examples of student involvement in action, or, as editors Sara Arnold-Garza and Carissa Tomlinson state, "this book seeks to elevate the act of asking students, but instead putting them into a leadership role, where they will determine what gets improved and how" (vii).

This collection of sixteen case studies demonstrate that student leadership may be developed in many ways that benefit both students and their libraries. Arnold-Garza and Tomlinson establish a theoretical framework for student involvement programs by emphasizing that these initiatives can enhance the student educational experience through leadership development, engagement, experiential learning, and peer learning. Likewise, the benefits to libraries themselves are many: participatory design, transformation of core functions, and demonstration of library value.

The book is organized around six themes: students as employees, students as curators, students as ambassadors, the library as client, student groups as library leaders, and students as library designers. The section on students as curators, for example, contains a chapter on the studentfocused "Leave Your Legacy" program at the Emporia State University (ESU) Special Collections and Archives. Collaborating with ESU's student government, Special Collections and Archives invited students to add to the university's legacy by donating their own personal papers for future researchers. As an example of students as ambassadors, the book highlights McGill University Library's peer support program for international students, focused on engineering students, which offers peer-to-peer support with outreach, reference, and instruction. Duke University Libraries' student feedback program, an example of students as library designers, has yielded student ideas involving spaces and furniture, a device lending program, more flexible room reservation policies, a more intuitive search interface, and so forth.

Each chapter lists resources for further reading, and several offer useful checklists, illustrations, diagrams, surveys, and photographs. Although this book can be profitably used to gather ideas for simple "one-off" student leadership programs, it can also serve as a springboard for more comprehensive, multiyear projects. Packed with best practices and new ideas, *Students Lead the Library* is an excellent resource for academic librarians and other higher education professionals seeking to engage their students more actively in strategic planning and new initiatives.—*Jennifer A. Bartlett, Interim Associate Dean of Teaching, Learning, and Research, University of Kentucky Libraries, Lexington, Kentucky*

Sources *Reference Books*

Anita J. Slack, Editor

50 Events That Shaped American Indian History:
An Encyclopedia of the American Mosaic67
Food in America: The Past, Present and Future of Food,
Farming and the Family Meal68
Human Medical Experimentation: From Smallpox Vaccines to
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RUSQ considers for review reference books and professional materials of interest to reference and user services librarians. Serials and subscription titles normally are not reviewed unless a major change in purpose, scope, format, or audience has occurred. Reviews usually are three hundred to five hundred words in length. Views expressed are those of the reviewers and do not necessarily represent those of ALA. Please refer to standard directories for publishers' addresses.

Correspondence concerning these reviews should be addressed to "Reference Sources" editor, Anita J. Slack, Reference & Instruction Librarian, Ashland University, 509 College Avenue, Ashland, OH 44805; email: aslack3@ashland.edu. **50 Events That Shaped American Indian History: An Encyclopedia of the American Mosaic.** Edited by Donna Martinez and Jennifer L. Williams Bordeaux. Santa Barbara, CA: Greenwood, 2016. 2 vols. Acid free \$189 (ISBN 978-1-4408-3576-6). E-book available (978-1-4408-3577-3), call for pricing.

Eschewing the conventional alphabetical arrangement of entries, this set is organized chronologically, with subjects ranging from the prehistoric mound builders, circa 1500 BCE, to more current concerns like native protest movements and contemporary laws that strongly affect native peoples. Early entries tend to focus on disease, war, revolt, and other violent outcomes of initial contact between indigenous peoples and encroaching Europeans. Later entries explore issues of cultural assimilation, self-determination, and sovereignty, particularly court cases and legislation.

Entries are authored by scholars in various fields-Native Studies, Anthropology, History-whom are often tribal members themselves. Each entry begins with a chronology to provide context for the period. The narrative body of the entry follows, punctuated by sidebars, biographical sketches of notable people, the occasional black and white picture, and finally, a detailed list of Further Reading resources. The latter is especially helpful for further exploration, and numerous online and government resources are usually included. Users quickly learn the background and context of the events, receive a succinct description of the event itself, and ultimately get a feel for how the event has resonated up to the present day. Particularly helpful for historians, entries contain Document Excerpts, allowing users a glimpse into important primary resources, ranging from eyewitness accounts and personal letters to the actual text of laws, legislation, judicial rulings, and congressional hearings.

While some of the entries focus on predictably wellknown historical events, many focus on important subjects likely unknown to most users. For example, the entry on the Violence Against Women Act (2013) is illuminating for the fact that it gave tribal law agencies the right to pursue domestic violence cases on reservations without the permission of the federal government for the first time, allowing for swifter pursuance of presumed culprits. Another entry focuses on the recent Catholic canonization of Junipero Serra, a missionary whose sainthood is considered highly controversial, mainly due to the perceived oppressive tendencies of the mission/conversion model. The entry here clearly outlines the points of contention. Other notable features are a fifteen-page introduction, concisely summarizing ancient to contemporary Native American history, a final list of overall recommended reading, and a detailed index to assist users in finding specific information within entries.

These two volumes ultimately accomplish their goal of serving as an "authoritative and comprehensive resource" on the events covered (ix). Not attempting to cover the entire gamut of Native American history allows a tighter focus on these seminal fifty events.

There are other recent encyclopedia sets focused on

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American Indian History. A few of them are organized differently—for example, the *Native America: A State-by-State Historical Encyclopedia* (Greenwood, 2012) speaks for itself by title. The Facts on File *Encyclopedia of Native American History* (2011) uses the more common alphabetical ordering of entries/topics. ABC-CLIO has previously published the *Encyclopedia of American Indian History* (2008), which is also organized chronologically. All three of these check in at over 1,000 pages, and cover a wider breadth of material, while *50 Events* is able to cover fewer topics in more depth. Even if your library owns one of these other sets, the new *50 Events* is worth considering as a helpful complement.

One of the most prominent strategies utilized by native peoples that is highlighted in this resource is education both of American Indians and non-Indians. Ultimately, 50 *Events* is a continuation of that education, informing the world of the ways in which they have struggled to maintain their land, resources, culture, religion, and dignity. Because of the scholarly nature and detail contained here, this resource seems best suited for college and university libraries.—*Mike Tosko, Associate Professor, The University of Akron, Akron, Ohio*

Food in America: The Past, Present and Future of Food, Farming and the Family Meal. By Andrew F. Smith. Santa Barbara, CA: ABC-CLIO, 2017. 3 vols. Acid-Free \$235.20 (ISBN 978-1-61069-858-0). E-book available (978-1-61069-859-7), call for pricing.

This three-volume set explores the landscape of America in the context of food. The author describes this set as an introduction to thirty current food controversies for undergraduates and general readers. The volumes are divided into three themes: the environment, health and nutrition, and the economy. Each volume is further divided into sections offering a rich history of the given theme, controversies surrounding key issues, and perhaps most interesting, a section of primary source documents highlighting landmark cases that frame each theme in a political and social context. The primary documents are meant to encourage critical thinking of the writer's' perspective, biases, and intentions. A useful chronology of landmark events (that do not necessarily coincide with the landmark documents) is also included so that readers and researchers can quickly track the developments of food issues in America. Provided at the conclusion of each section are extensive bibliographies.

There is no shortage of monographs on the social, political, cultural, and historical aspects of food and food production, but this three-volume collection sets out to offer a concise explanation of a wide variety of food issues from a multidisciplinary approach making for an easy to use reference. The entries are written in plain language, which makes it accessible to researchers just getting started. Each chapter includes a helpful section on ideas for the future, which is an objective that turns up frequently in student writing assignments. A strength of this set is the inclusion of primary documents: it allows researchers to view how the controversies and issues described in the book reflect the legal and political landscape. However, the inclusion of these documents also has a drawback; while the described controversies are outlined in the table of contents, the landmark documents are not, which makes them slightly more difficult to refer to, instead requiring the reader to browse. Overall, this reference would be a fine addition for two- and four-year undergraduate libraries that support curriculums in Environmental, Food or Agricultural Studies as it provides broad but clear and descriptive entry points for beginning researchers to start exploring topics while not overwhelming them with information.—*Amanda Babirad, Instructional Services Librarian, Morrisville State College, Morrisville, New York*

Human Medical Experimentation: From Smallpox Vaccines to Secret Government Programs. Edited by Frances R. Frankenburg. Santa Barbara, CA: Greenwood, 2017. 322 pages. Acid free. \$89.00. (ISBN 978-1-61069-897-9). E-book available (978-1-61069-898-6). Call for pricing.

Tests involving the living human body is a topic with a long and troubling history, yet without these trials, we would all still be living in medical dark ages. In her "Preface," editor Frankenburg states that "This encyclopedia covers some of the key events and people involved in the history of experimentation on humans. The goal is to provide a readable reference for those wanting to learn more about the experiments themselves as well as the researchers who explore health and illness by carrying out tests on human subjects" (xi).

Taking a chronological approach, the editor divides the text into six historical eras: Pre-nineteenth century, nineteenth century, twentieth century to World War II, World War II, Cold War, and post-Cold War to the present. Each section opens with an "Introduction," which provides historical context and background information. This is followed by a "Timeline" of important dates covering medical discoveries, publications, and the like. The bulk of each section is comprised of alphabetically arranged entries concerning physicians/scientists (William Harvey, who first accurately described the circulation of the human bloodstream), documents (Declaration of Helsinki, "the first attempt of the international research community to regulate itself" [185]), events (polio vaccine trials), and organizations (Institutional Review Boards). "Documents" presents a smattering of excerpts from books, diaries, and other primary sources that offer the reader a firsthand account of what has been previously discussed. Lastly, "Further Reading" concludes each section with a bibliography of relevant sources.

It should be noted that Frankenburg is evenhanded in her coverage of personalities and occurrences. There are the expected entries on such well-known incidents as the Tuskegee Institute studies of untreated syphilis in black men and the German experimentation on prisoners-of-war during World War II. However, there are also entries on men such as John Scott Haldane, a Scottish physiologist who would "expose himself to different gases and monitor his responses, at times relying on his children to see if he was still breathing" (38). Many researchers throughout history risked death by experimenting on themselves to advance medical knowledge.

Writing style is clear and direct with a minimum of medical jargon. Editor Frankenburg holds a medical doctor degree from University of Toronto. She is currently a professor of psychiatry at the Boston University School of Medicine and chief of inpatient psychiatry at the Edith Nourse Rogers Memorial Veterans Hospital in Bedford, Massachusetts. She has been ably assisted here by nine contributors, all of whom hold doctoral degrees, although only one, Jack McCallum, MD., has a background in medicine. The others, interestingly enough, are historians.

This title fills a void in the reference literature. Multivolume works such as *Bioethics*, 4th ed., (previously titled *Encyclopedia of Bioethics* [Macmillan, 2014]), are bulky, expensive and have a much broader scope than the work under review here. On the other hand, a WORLDCAT search using LCSH "Human Experimentation in Medicine," yields a plethora or narrative works, but no other compact encyclopedic publications.

Overall, this is an engaging, informative book that is well written and well researched. It is recommenced for purchase by all public libraries and should be a core collection item for medical libraries and academic institutions having strong ethics/medical collections.—*Michael F. Bemis, Independent Reference Book Reviewer, Oakdale, Minnesota*

The Powers of U.S. Congress: Where Constitutional Authority Begins and Ends. Edited by Brien Hallett. Santa Barbara, CA: ABC-CLIO, 2016. 298 pages. Acid free \$71.20 (ISBN 978-1-4408-4323-5). E-book available (978-1-4408-4324-2).

This book offers an overview and analysis of the twentyone powers of the US Congress as enumerated in the Constitution. It is organized by the powers of Congress in the order that they appear in Article I Section 8, Article II Section 2, and the enforcement provisions in the Thirteenth, Fourteenth, and Fifteenth Amendments. Editor Brien Hallett (University of Hawaii, Manoa) introduces the book with historical background on how the American colonies developed the concepts and structures that led to the Constitution. Most important are social contract theory and the influence of the European commercial revolution in the sixteenth and seventeenth centuries that had an impact on the original design of colonial government in America. Each of the nineteen chapters focuses on powers to legislate and enforce federal laws on issues such as taxes, commerce, immigration, bankruptcies, civil rights, advise and consent of appointments and treaties, and regulation of militia. Chapters begin with definitions of key terms followed by sections on historical development, future implications, and further readings. The strength of the book lies with the analysis of historical development of each Congressional power. It surveys how the powers have been interpreted or used by legislative and executive branches and the federal courts based on precedent from the colonial period to the present time. Relevant federal court cases, legislation, and debates (e.g., Federalist Papers) before the signing of the Constitution are cited to explain the development of the Congress's constitutional powers, particularly as they relate to powers of the President and the states. The volume provides the text of the Constitution and amendments, and a subject index.

Hallett states that this book is the first one volume guide to the congressional powers in the Constitution. A similar guide (Powers of Congress, Washington DC: Congressional Quarterly, 1976) appeared in the wake of the Watergate scandal as Congress sought to use its constitutional powers more vigorously compared with the historical increase in the powers of the president. Compared with Hallett's new book, coverage of historical development is, of course, not as up to date, and it does not offer systematic and thorough coverage of each enumerated power for Congress in the Constitution. The seventeen contributors to the new work are mainly academics in the social sciences and law. Their essays are clearly written and together form a useful reference volume designed for scholars, students, and the interested public. The new book, available in print and e-book, is highly recommended for academic and public libraries.-David Lincove, History, Public Affairs, Philosophy Librarian, The Ohio State University, Columbus, Ohio

The Roots and Consequences of Civil Wars and Revolutions: Conflicts that Changed World History. By Spencer C. Tucker. Santa Barbara, CA: ABC-CLIO, 2017. 529 pages. Acid-free \$80 (ISBN 978-1-4408-4293-1). E-book available (978-1-4408-4294-8), call for pricing.

Here we have an interesting idea for a monograph that is instead presented as a reference book and leaves a reviewer unsatisfied. In his short introduction, Tucker acknowledges the thirty entries are a small sample of all history, but says he has tried to strike a representative balance across time and geography. He further says the selections "have much to teach us about interpreting historical events."

Yet, where is the teaching? The entries are accounts of events followed by assessments of their importance, without comparative analysis or drawing of lessons. There is no essay to tell what can be learned from events as diverse as the Taiping Rebellion and the twenty-first century Libyan Civil War.

Nor is there discussion about the relationship of civil wars and revolutions and why the two subjects are combined in a relatively small volume. For instance, are civil wars just internal revolutions that failed? (Would the American Civil War be called the Confederate Revolution today if Lee had succeeded?) How does a revolution against a foreign power (America's, Hungary's) compare to one against domestic power (France's, Iran's)?

To add quibble to complaint, how were the Peloponnesian Wars between famously independent Athens and

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Sparta either civil wars or a revolution? Presumably the notion is that they were sort of cultural civil wars because both city states spoke Greek, but the argument is not made and would be hard to sustain. As for the Thirty Years War, Prof. Tucker notes it was started by a Bohemian religious revolt, but the monster became Europe's first continental conflict.

On the plus side, the prose is straightforward, as is to be expected from this prolific author/editor. The promise to roam the world across a long span of time is fulfilled, leading to a few entries on such obscure subjects as the Boshin Civil War. (Bet you have to Google that one!) Each entry is completed with a chronology and bibliography. Maps, tables and black and white images are sprinkled throughout.

Tucker's latest work arrives close on the heels of David Armitage's monograph *Civil Wars: A History in Ideas* (Knopf, 2017), which, in part, uses history to examine the muddy relationship of the terms "civil war" and "revolution." A much smaller but still analytical historical assessment is Jack A. Goldstone's *Revolutions: A Very Short Introduction* (Oxford University Press, 2014).

Reference works comparable to *Roots* include James V. DeFronzo's three-volume *Revolutionary Movements in World History: From 1750 to the Present* (ABC-CLIO, 2006) and Goldstone's *The Encyclopedia of Political Revolutions* (Congressional Quarterly, 1998). DeFronzo's project covers a much shorter span of time than Tucker's, but addresses 108 post-Enlightenment revolutionary movements with chronologies, histories, assessments, and biographical sketches. Goldstone, who has made a career focusing on revolutions, used his conventionally formatted encyclopedia to address not only revolutionary movements since the Renaissance, but also revolutionary ideas and actors.

Perhaps the seemingly synchronized arrival of the Armitage and Tucker volumes is the serendipitous answer for someone seeking to understand the nature of civil wars; Armitage for the overview, Tucker for some blow-by-blow details. On its own, *Roots* works for a library filling gaps in accounts of certain conflicts, but as a necessary resource for its subject, it is not well realized.—*Evan Davis, Librarian, Allen County Public Library, Fort Wayne, Indiana*

The Routledge Companion to Digital Journalism Studies. Edited by Bob Franklin and Scott A. Eldridge II. London, UK: Routledge, 2017. 614 pages. \$204 (ISBN 978-1-138-88796-1). E-book available (978-1-315-71379-3).

This work contains fifty-seven scholarly essays, averaging more than ten pages in length that approach digital journalism as a discrete field of study. The work includes ten major topical divisions that include "Conceptualizing digital journalism studies," "Investigating digital journalism," "Financial strategies for digital journalism," Digital journalism studies: Issues and debates," "Developing digital journalism practice," "Digital journalism and audiences," "Digital journalism and social media," "Digital journalism content," "Global digital journalism," and "Future directions." Through content and scope, editors and contributors to *The Routledge Companion to Digital Journalism Studies* clearly conceive of digital journalism as a field distinct from traditional print journalism and broadcast journalism. This sets the work apart from virtually all other journalism reference works. For comparison, the six-volume *Encyclopedia of Journalism* (Sage, 2009) has discrete essays such as "Digital Media Tools" and "Social Network Websites" among topics about journalism more broadly. To be fair, the *Routledge Companion* represents an additional eight years of development in a rapidly changing field.

This brings up a concern about this work that is acknowledged by the editors. *The Routledge Companion to Digital Journalism Studies* risks becoming outdated quickly in such a quickly evolving field. Still, it is reasonable to think that digital journalism is more crystallized as a field and more standardized in practice than it was a decade ago. Franklin and Eldridge have taken the opportunity to boldly create the first work of its kind.

The essays in this work are detailed enough to provide more than a conceptual overview. They approach the ability to serve as secondary, scholarly sources rather than purely tertiary sources. Each essay provides a "further reading" section and a fairly extensive list of references. For example, the essay "Digital Journalism and Tabloid Journalism" lists thirty-five references, and this is fairly typical throughout the work.

Voice throughout is scholarly enough that it might prove moderately thick to beginning undergraduates, but is readable enough to aid in the acquisition of journalistic terminology and habituation to scholarly reading. A thorough index includes people, places, publications, and relevant topics such as "community journalism." As usual, Routledge binds the work in an attractive, but not pretentious, hard cover. The work contains occasional figures and graphs, but not photographs.

One can imagine *The Routledge Companion to Digital Journalism Studies* serving as a textbook in a course about digital journalism, and it could serve as a starting point for advanced undergraduate, graduate, and professional researchers in digital journalism. It certainly belongs on the shelves of any library supporting an academic program in journalism or wherever developments in digital journalism will be an interest.—*Steven R. Edscorn, Executive Director of Libraries, Northeastern State University, Tahlequah, Oklahoma*

The Routledge Handbook of Archaeology and Globalization. Edited by Tamar Hodos. London, UK: Routledge, 2017. 970 pages. \$221 (ISBN 978-0-415-84130-6). E-book available (ISBN 978-315-44900-5), call for pricing.

Tamar Hodos, Reader in Mediterranean Archaeology at the University of Bristol, has assembled a fascinating and unique work in the *Routledge Handbook of Archaeology and Globalization*. Usually considered a modern-era phenomenon, Hodos and her collaborators demonstrate that globalization has been with us since complex ancient societies first developed. In her introduction, Hodos discusses the idea of globalization, and defines it as "processes of increasing connectivities that unfold and manifest as social awareness of those connectivities" (4). Globalization, therefore, is not necessarily modern, Western, or a homogenization of cultures, but instead is a "development of shared practices and values that contribute to the idea of the world as one place, while recognizing cultural and other differences" (5). Hodos and her contributors argue that globalization theory, therefore, partnered with material culture studies, can be used to discuss and better understand connections between people and cultures in the past as well as the present.

Unlike many "handbooks," this volume is not linear in timeframe nor is it a synopsis of scholarship. Instead, scholars studying various cultures are geographically divided into continental areas, and each article discusses a particular case study of globalization within a particular culture. Most articles address cultures of the past, such as the Olmec of Mesoamerica or Iron Age Asian societies, but some focus on more modern phenomena such as cell phone use in Africa. Five introductory chapters discuss basic theory and definitions, and a final chapter summarizes the evidence and makes the case for globalization as an ongoing process from the Bronze Age forward. The end result is a resource that is wide-reaching and thoughtful in its discussion of how societies and individuals both adapted and redefined their culture due to globalization processes, and how they maintained their own unique identities within the "complex connectivities" that resulted from it.

This resource is highly recommended for any library supporting an anthropology, archaeology, world history, or sociology program, and is most useful for upper level undergraduates, graduate students, and scholars.—*Amanda K. Sprochi, Cataloger, The University of Missouri, Columbia, Missouri*

The Spanish Empire: A Historical Encyclopedia. Edited by H. Michael Tarver and Emily Slape. Santa Barbara, CA: ABC-CLIO, 2016. 2 vols. Acid free \$198 (ISBN 978-1-61069-421-6). E-book available (978-1-61069-422-3) call for pricing.

Although a small, fractured kingdom during the fifteenth century, Spain's interest in exploration and expanding resources led to a more unified kingdom and later the largest Empire in the world. This early history has shaped the world significantly. The exchange of foods, animals, and natural resources throughout the world, the introduction of diseases to new territories, and the blending of indigenous and European cultures continues to shape our world in unique ways.

The Spanish Empire is both its own work and part of the Empires of the World series which looks at influential empires that have defined history. While other works have addressed the Spanish Empire, this one balances the variety and larger scope of James Olson's Historical Dictionary of the Spanish

Empire (Greenwood, 1991) with the longer, more detailed entries of Merriman's *Rise of the Spanish Empire* (MacMillan 1925) while updating key issues and concepts.

Also, in contrast to the traditional alphabetical format of Olson or the chronological format of Merriman, this set is organized into seven areas of significance: Government and Politics; Organization and Administration; Individuals, Groups and Organizations; Key Events; Military; Objects and Artifacts; and Key Places for more integrated research studies. Each category includes an overview essay that provides a summary of key issues and ideas covered, and the glossary at the end of the second volume clarifies key terms.

While using a topical focus could detract from the historical understanding, the early timeline and the chronological organization of more than thirty primary documents provide a structure for placing the various sections and ideas within the historical context. Furthermore, cross-referencing at the end of entries provides connections to additional internal resources while "further reading" guides the researcher to additional resources. Also, the selected bibliography offers important works for research based on geographical regions, and the extensive indexing allows research on topics that cross various sections.

Following each section introduction, several entries are presented in alphabetical order. These individual entries are about two to three pages long with strong overviews and insights from a variety of specialists and scholars. The addition of black and white photos and illustrations provides both information and visual appeal to the overall layout, and inset boxes add further specifics on key ideas, people, and locations related to the section texts.

Overall, while students can find resources that discuss the Spanish Empire and its various impacts around the world, few resources can provide the same currency of information and scope of time, depth of content, and broad geography with the primary and secondary resources combined in this two volume work. Therefore, this set would be an asset to larger public libraries as well as high schools, community colleges, and undergraduate programs that include coursework in Spanish history, colonialism, or Latin American studies.—Donna Church, Reference Librarian, Webster University, St. Louis, Missouri

The State and Federal Courts: A Complete Guide to History, Powers, and Controversy. Edited by Christopher P. Banks. Santa Barbara, CA: ABC-CLIO, 2017. 513 pages. Acid free \$105 (ISBN 978-1-4408-4145-3). E-book available (978-1-4408-4146-0), call for pricing.

This volume provides a very matter-of-fact overview of the American judiciary system at both the state and federal level. The first half is comprised of three "regular" book chapters covering the history and structure and fundamental roles, functions, and powers of the courts—not exactly quick reference material, but these considerable reads could actually make for suitable course material for an American

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Government class (high school or undergraduate level).

The entire second half is comprised of chapter 4 where the real "referencey" section begins. It is here where the many issues and controversies surrounding the judicial branch are discussed. It is not a chronology of events or rulings, but rather a compendium of some of the more complex and often controversial aspects of the courts, giving examples for each. Topics here include: "Judicial Review" "Public Access to Courts," "Judicial Campaigns and the First Amendment," and "The Role of the American Bar Association." The final section of the chapter gives a rundown of the most polarizing issues that the courts have dealt with over the years. Included here are all the "hot topics" one would expect, such as: "Same-Sex Marriage," "Religious Freedom," "Gun Ownership," "Capital Punishment," "Abortion Restrictions," etc. The currency is evident throughout, with examples drawn from cases as recent as 2016, and by the inclusion of "The Affordable Care Act" as one of the topics discussed. The "Further Readings" also include some very recent articles and reports along with seminal work. Back matter includes a "Glossary of Concepts, Laws, and People" and an "Annotated Bibliography."

While there are many other reference works dealing with some aspect of the US courts, most often the Supreme Court, none are quite like this in its organization and content. I guess you could say that it is without "precedent," primarily for its treatment of the state courts. For broader coverage of "landmark cases" at the national level, I would suggest either Supreme Court Drama: Cases That Changed America, 2nd ed (Gale, 2011) or Landmark decisions of the United States Supreme Court (CQ Press, 2008), although both already suffer slightly from datedness. Other somewhat comparable reference works include Guide to the U.S. Supreme Court (CQ Press, 2010) and Encyclopedia of the Supreme Court of the United States (Gale, 2008), but again, these do not cover the state courts.

Overall, I would say that this book would make a nice addition to any high school or undergraduate library, especially if on a tight budget and in need of a concise single volume to fill a subject gap in the collection. Admittedly, one could achieve a pretty good grasp of the subject matter contained here in various places around the free web, but as a single stop location for introductory and supplemental material on everything "American courts," this book does deliver the goods.—Todd J. Wiebe, Head of Research and Instruction, Van Wylen Library, Hope College, Holland, Michigan

We Did What?!: Offensive and Inappropriate Behavior in American History. Edited by Timothy B. Jay. Santa Barbara, CA: Greenwood, 2016. 458 pages. Acid free \$89 (ISBN 978-1-4408-3772-2). E-book available (978-1-4408-3773-9), call for pricing.

We Did What?!: Offensive and Inappropriate Behavior in American History is a work that thoroughly covers topics in American history and culture that have at some point been a source of frustration or contention. Although there are only approximately 150 entries that are between 500 and 1,000 words, the entries are organized alphabetically, well researched, and provide balanced coverage of each topic. It is intended for use by a variety of researchers, but would be best suited as introduction for students in history or social sciences.

To use this volume, it is important to understand how the editors defined "offensive" and "inappropriate." They essentially defined it using two standards. First it is anything that causes "anger, frustration, resentment, displeasure, or they affront us" (xiii), but for it to meet the criteria of this work, it must also defy the cultural standards of the period that it was considered offensive. Students from a variety of disciplines would consider this a valuable tool when beginning their research because Jay has done an excellent job of balancing the factual information with the more interesting analysis of how these behaviors and the response they elicited have shaped our modern behavior. An example of this treatment can be seen in the entry for Slavery. Jay begins the section by providing historical context of the beginnings of slavery in the United States and continues by outlining the path from the abolishment of slavery all the way to Brown v. Board of Education of Topeka. He ends the section by discussing how we are still fighting to eliminate the symbols of slavery in the United States by discussing hate crimes and the decisions to remove confederate flags from state facilities.

Although this volume is interesting and provides objective and thoughtful entries, it is not the only volume that covers this type of topic. However, it is difficult to compare this volume to them because the tone of this volume is academic rather than comedic and the format is encyclopedic. Overall, this work is an easy to use reference resource that provides an interesting perspective on offensive incidents in history and provides discussion on how these events still influence the present. Because this volume is relatively inexpensive and the topic has not been heavily covered in recent publications, I would recommend this work for community colleges and smaller universities with relevant majors.—*Marissa Ellermann, Head of Circulation Services Librarian, Morris Library, Southern Illinois University Carbondale, Carbondale, Illinois*

Women in American History: A Social, Political, and Cultural Encyclopedia and Document Collection. Edited by Peg A. Lamphier and Rosanne Welch. Santa Barbara, CA: ABC-CLIO, 2017. 4 vol., 1828 p. \$415 (ISBN: 978-1-61069-602-9). E-book (978-1-61069-603-6) available, call for pricing.

To this day, high school and college students rarely learn about the role of women in American history, cultures, or politics. Teachers and textbooks still focus predominantly on the white Christian heterosexual males that continue to take most of the credit for building the United States of America. While it is fact that, for most of American history, only white men could own land, vote, and serve in government, women of all races, religions, and sexual orientations have done a great deal to advance American culture, fight for justice, and impact the laws, businesses, scientific research, and education systems that have developed in the United States over time. Several women make an appearance in traditional American social studies classrooms: Sacajawea, Harriet Tubman, Susan B. Anthony, Helen Keller, and perhaps now Hillary Clinton—but there are so many stories and events left untold. An up to date encyclopedia about American women just might help those teachers, professors, and students who are searching for more. For those who wish to go beyond the typical American history curriculum, I highly recommend *Women in American History: A Social, Political, and Cultural Encyclopedia and Document Collection.*

Editors Peg A. Lamphier and Rosanne Welch are not the usual suspects for writing a women's history encyclopedia. While Lamphier integrates women's issues into the American history courses that she teaches at the California Polytechnical Institute of Pomona and Mount San Antonio College, her co-editor Rosanne Welch has a background in television and documentary film. Before working on this project, however, Welch edited the well-regarded Encyclopedia of Women in Aviation and Space (ABC-CLIO, 1998), which compiled the scattered bits and pieces of women's history in these maledominated fields into one publication. This was no easy feat; the encyclopedia was praised for its comprehensiveness but critiqued for the structure of its entries. Welch appears to have learned from her first encyclopedia editing experience, and Lamphier and Welch worked together so well on Women in American History that they are working on another encyclopedia series together about technology and innovation for ABC-CLIO, which will also include the female impact on science and technology.

The main editors of this encyclopedia series, as well as the ninety four contributors from around the world, have done an extraordinary job capturing all things female-identified in American history, from berdaches to third wave feminism. The strength of this series lies in its attention to the diversity of women's issues, cultures, and histories within the United States. The four volumes, arranged in chronological order, contain more than 750 entries and over 195 primary source documents. Each volume is divided into three historical sections. Volume 1: Precolonial America to the Early Republic, covers precolonial North America (pre-1607), colonial North America (1607–1754), and Revolutionary America and the New Republic (1754–1819). Volume 2: Antebellum America through the Gilded Age, spans the Antebellum Era (1820–1860), the Civil War and Reconstruction (1861–1877), and the Gilded Age (1878–1899). Volume 3: Progressive Era through World War II, surveys the Progressive Era (1900–1929), the Great Depression and the New Deal (1930–1941), and World War II (1939–1945). Finally, Volume 4: Cold War America to Today, addresses Cold War America (1946–1962), Second-Wave Feminism (1963–1989) and Third-Wave Feminism (1990-Present). The first volume of the series begins with a timeline of major events accomplished by or impacting women, and each section begins with a well-researched historical overview of entries associated with the featured period.

Primary source documents, including speeches, cookbooks, and laws that have impacted women—including sodomy laws and slave codes—accompany a significant percentage of the entries. It would have been terrific if the series had included a resource list for those interested in searching for more primary source documents about American women, or at least a credited source for each document. This could motivate someone to do more research outside of the encyclopedia. The breadth of the entries, however, and the sensitivity to multiculturalism, religious diversity, and recognition of women and movements from Native American, African American, Latina, Asian American, Jewish, and queer populations in every volume, however, more than make up for that omission.

While other strong encyclopedias on women in the United States exist, most are now at least fifteen years old. The Encyclopedia of Women's History in America (Facts on File, 2000) has over 500 entries for significant women, laws, court cases, organizations, and publications with some omissions of more controversial topics. A frequently praised work, Handbook of American Women's History (Garland, 1990), is now nearly thirty years old and only focuses on the nineteenth and twentieth centuries. Great Lives from History: American Women (Salem Press, 2016) covers the lives of prominent, diverse American women from colonial times to the present, but does not include the historical background, laws, and other information included in Women in American History. Yes, librarians, it is time to update that moldy reference collection and add this volume, whether in print or as an E-book.—Rachel Wexelbaum, Associate Professor/Collection Management Librarian, St. Cloud State University, St. Cloud, Minnesota