Beyond Tools and Skills:

Putting Information Back into Information Literacy

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For the past 18 years, I have taught information literacy in a variety of educational settings, including P–12, community college, and, for the past six years, a library serving a regional, comprehensive university. My situation is similar to most teaching librarians: Sometimes I teach graduate students or present multiple information literacy sessions to the same class in the same semester, and the typical venue for my instruction is a single 50–75 minute session (known as a one-shot) for students enrolled in an undergraduate course. As a guest instructor, my time with students is limited, and I have little control over the research assignments my instruction is designed to support.

Over time, I became dissatisfied with my inability to accomplish more with my instruction. Despite my best efforts, most students resisted looking beyond the surface of the information they were required to use for research projects; only a few students became passionate about research; and based on comments from a wide range of teaching faculty in multiple disciplines, the resulting research papers and projects typically failed to synthesize information to the degree that course instructors and librarians

desired. A few years ago, I radically changed my teaching style. I was weary of presenting the very best sources and search strategies for students to use for a given assignment, only to observe them typing poorly constructed searches into Google five minutes later. I realized that my approach of modeling information expertise and expecting the students to mimic it was at odds with my desire to empower them to find, evaluate, and use information to solve problems. By simply offering students the *right* tools and techniques to conduct research, I was denying them the opportunity to build upon their prior knowledge to gain new understanding.

I began to experiment with ceding control in the classroom by adopting a less prescriptive, more inductive approach. The results have astounded me. When I give students control and begin with their own experiences, they are much more willing to dialogue with me about information contexts and uses. Together we critically examine their information strategies and the resulting sources. We all learn from each other, and I find that when the students are allowed to have a voice in the process, they are much more willing to listen.

Despite this newfound willingness to take risks in the classroom, I had much to learn. One day when working with a freshman English class, I offered the students 10–15 minutes of time at the start of class to free search using any means they preferred—an activity that has come to be my go-to when working with beginning students because it honors their prior knowledge and usually teaches me as much as it teaches them. This session was no exception. When I asked for a volunteer to come to the front and demonstrate what he or she had found, a young student showed us the website http://www.epilepsy.com. Despite my best intentions, my librarian's heart surged with anticipation of the possibility of delivering a pat lecture about the dubious quality of .com sites.

Thankfully, I held my tongue. It turned out that the site had a listing of recently published journal articles, albeit without links to full text. Following the student's lead, I was able to guide the class to recognize that the listing referred to journal articles by helping them recognize the obvious clues such as title of the journal and volume numbers. Then together we were able to locate the full text of the articles using the library interface. The student went on to explain that she had epilepsy, and she and her mother often used the site not only for medical information but to communicate in forums with other families in similar situations. Clearly it was a valuable resource to her, and I was grateful that I knew enough at that point to withhold my ill-informed value judgments and use the opportunity to spark questions rather than deliver answers.

Eventually, I discovered a body of library literature dedicated to the concept of *critical information literacy*, a teaching perspective that does not focus on student "acquisition of skills" but rather encourages a critical and discursive approach to information.[1] Just as I had found in my own classes, critical information literacy is not about teaching the *right* way to do things, an approach that is bound to be off-putting to young adults. Instead, critical information literacy encourages students "to think of research not as a task of collecting information, but instead as a task of constructing meaning."[2]

As I began a three-year period of working on my dissertation, I became engaged in a formal, systematic study of the literature with the intent of uncovering best practices, while experimenting in the classroom with my own pedagogy. This dual role of practitioner and scholar challenged me to continually take risks, reflect, revise, and, most of all, inquire of my colleagues through the literature. The experience did not leave me with a perfect recipe for effective information literacy instruction, but it did leave me with some interesting and worthwhile ideas for teaching librarians to consider as we embark a new era guided by the new *Framework for Information Literacy for Higher Education*.[3]

Traditional Information Literacy vs. Critical Information Literacy

For my dissertation's literature review, I identified 128 studies related to critical information literacy and selected 42 to comprise the actual sample for the study.[4] As the review was intended to be configurative, the studies for the sample were selected on the basis of their potential to contribute to the best practices of teaching librarians. Almost all of the studies critiqued or criticized traditional approaches to information literacy. Critical information literacy advocates agreed that traditional information literacy overly focuses on tools and skills. Traditional information literacy also presents an overly simplistic model of the research process that is out of sync with the reality that research is a nonsequential, iterative, and messy process. Most called the Association of College and Research Libraries' *Information Literacy Competency Standards for Higher Education* and other definitions of information literacy to account for overemphasis on tools-and-skills-based approaches. Some also held accountable the design and focus of traditional research paper assignments. Various voices from the literature

negatively described traditional approaches to information literacy as technical, mechanical, behavioral, strategic, and skills-based, while positively describing critical approaches to information literacy as critical, problem-posing, multidimensional, creative, intellectual, process-based, and supportive of student agency. Figures 2.1 and 2.2 are word clouds that I created to contrast terms from the literature used to negatively and positively describe information literacy.

Figure 2.1. Word Cloud 1
Negative descriptions of traditional approaches to teaching information literacy. Critical information literacy proponents negatively described traditional approaches to teaching information literacy as technical, mechanical, behavioral, strategic, and skills-based. Larger words represent words that were used more frequently than smaller words in the quotations used to create this word cloud.

Figure 2.2. Word Cloud 2
Positive descriptions of critical approaches to teaching information literacy. Critical information literacy proponents positively described critical approaches to teaching information literacy as critical, problem-posing, multidimensional, creative, intellectual, process-based, and supportive of student agency. Larger words represent words that were used more frequently than smaller words in the quotations used to create this word cloud.

Relinquish Expertise and Efficiency

One of the most striking findings of my study was the idea that librarians must somewhat counterintuitively relinquish their role as efficient information experts in the classroom in order to create an environment where all learners find space to share and act upon their own ideas about information and the knowledge that it represents. There are a number of justifications for this shift in how librarians think about their role in the classroom. For one, the attempt to simply model or transfer information expertise to students is unlikely to be successful with most learners—though you can always reach a small group of ambitious students, the rest are likely to be bored. This is especially true of beginning undergraduate students, who come to today's information literacy classroom with little academic disciplinary knowledge but with a tremendous amount of experience finding and using information. Teaching librarians' knowledge about finding and using information is undoubtedly superior to that of students', but that's a hard selling point given the brief amount of time most have to spend with students.

Perhaps unsurprisingly, given librarian stereotypes, most librarians are introverts.[5] It may be impractical for many to cede authority and expertise to students in favor of interaction with students. It is possible that authority and expertise shield introverted librarians from the very interaction that critical pedagogy is designed to promote. Elizabeth Peterson observed,

> [A] side effect of this lecture-demonstration, cram-it-all-in approach is distance. When I teach this way, I don't have to engage with the students beyond a superficial level. It's all show and tell on my part with no discussion or active reflection with the group. I am the expert at the podium in the front of the classroom and the students are the passive receptacles.[6]

On one hand it may be difficult for many librarians to change their approach in the classroom by ceding efficiency and expertise, but on the other, it is a readily obtainable goal that can be accomplished by an individual gradually through self-reflection and without the need for outside resources. For librarians who seek to increase student engagement, such a goal seems worthwhile, for as Daniel Coffey and Karen Lawson suggest, it is desirable for "successful librarians… [to]…shed their 'expertness' (not expertise, but the attitude of expertise) in order to truly serve, and not alienate, their clientele."[7]

Teach about Information

A second finding of my study is seemingly at odds with the first: Many scholars and practitioners who contributed to the literature of critical information literacy believe that librarians should spend more time teaching about the nature of information itself, rather than, as is common, teaching about specific tools and skills. They feel that students needed instruction about how information is created and organized and that such instruction provides a useful introduction to academia. In view of these two findings—that librarians should relinquish efficiency and expertise about information in the classroom and that librarians should teach more about information—it is fair to question how these two things might be accomplished at the same time. Fortunately, the literature revealed several practical steps for accomplishing these two seemingly disparate goals.

The overarching message from the literature of critical information literacy instruction is that teaching librarians must strive to be reflective practitioners and reexamine taken-for-granted perspectives. One such perspective is best described as the deficit approach to student instruction. If the assumption that students come to our classrooms knowing little to nothing about finding and using information was ever valid, it is certainly much less likely to be valid in the current environment of the almost ubiquitous access current college and university students' have had to information throughout their lives.

Several scholars and practitioners argued this point in the literature and urged teaching librarians to use students' existing knowledge about information sources that are familiar to them as the basis for helping them understand the unfamiliar scholarly information sources that they are expected to use for their coursework. While students' approaches to information differ from librarians', these differences can be celebrated and serve as the basis for rich discussion in the classroom—so long as the discussion starts with honoring the students' prior experiences. Several authors described their positive experiences with this approach. For example, one team of teaching librarians described their experiences integrating critical information literacy into a first-year experience course—experiences that mirrored my own:

> Fighting our urge to deposit knowledge, we are astounded by the quality of student-generated ideas when we allow them to expand in an open-ended, nonjudgmental discussion.… Despite our initial skepticism, after taking a leap of faith and testing out the student-led activity,

we were thrilled to observe students transforming into eager mini-experts who have a great deal to say about searching with variant tools, investigating an author or source, limiting searches and developing new keywords. Indeed the students began to build methods of critical evaluation arriving at precisely the conclusions we previously had attempted to drive home through our woefully inauthentic methods.[8]

Start Where They Are

Along with ceding expertise and building upon students' knowledge about information, another tactic that critical information literacy scholars and practitioners found helpful was to begin by teaching about sources students are already familiar with to form a bridge between their personal lives and academia. Necessarily this involves librarians putting aside cherished value judgments about the quality of sources—value judgments that have been traditionally based on format. Several teaching librarians richly described successful information literacy instruction that embraced sources like *Wikipedia* and Google Scholar—not as examples of poor sources, but as a gateway to discussions with students about the differences between types of sources (not formats) and their purposes. For example, a few teaching librarians found the discussion pages behind each *Wikipedia* article, explaining edits made and why, as fertile ground for helping students understand how knowledge is negotiated through dialogue in our society. Others found discussion with students about how familiar tools functioned to be a great way to help them distinguish similarities and differences when compared to more scholarly tools.

Some scholars and practitioners of critical information literacy pointed out that teaching students to unquestioningly accept peer-reviewed journal articles and other library resources as authoritative, while rejecting outright the sources they are more familiar with using, insults their intelligence and the culture that they live in. In today's world, blanket categorizations of sources by format are overly simplistic. One team of teaching librarians pointed out, "As librarians, we know the situation is much more complex and we have a responsibility to incorporate this murkier landscape into our instruction."[9] Another team envisioned that information literacy should "move away from the

demonstration of technical search processes and simplistic claims that certain sources are *authoritative* because authorizers have decided they are."[10]

Heidi L.M. Jacobs described her use of *Wikipedia* for information literacy instruction and explained her teaching rational:

> Telling students not to use *Wikipedia* and to accept our judgments unquestioningly does not model or encourage the kinds of critical thinking we want our students to learn and practice. This is not to say that librarians and professors need to encourage or allow the use of *Wikipedia.* Rather we need to allow room in our classes and curriculum for critical inquiry into our information sources be they subscription databases, university press monographs, librarian-selected websites or *Wikipedia*.... Whether we like it or not *Wikipedia* is here to stay... many of our students know they will need to negotiate questions related to *Wikipedia* and other similar resources in their lives outside of school. We are doing them a disservice if we ignore the complexities of *Wikipedia*... Further, we need to think about the message we sent to students when we banish, forbid, or ignore a resource in our classes that is firmly of their generation in favor of promoting resources of previous generations.[11]

Jacobs raises a great point: What message *is* sent by librarians who discount the vast range of sources available to today's college student? It is certainly tidy to be able to say that Internet sources are less accurate, but is such a general statement even true? Obviously it would depend on the information landscape for the topic being researched and students' purposes for conducting the research. I wonder how many college professors could make sense of an unfamiliar subject in an unrelated discipline solely on the basis of peer-reviewed journal articles? Yet, that is the charge that is often delivered to students, even beginning college students, in the form of research paper assignments. It can be argued that librarians often have little control over such assignments, but in reality we do wield some influence with course instructors and certainly much influence about discussions with students that take place during library instruction.

Another librarian commented on the harm librarians can unwittingly inflict when they do not honor student experiences:

> Our patrons have been searching online for years, so to assume they know nothing about information seeking is offensive and naïve. Giving these patrons detailed instructions that directly contradict what they have been doing for years is not going to help them or our image. Rather, we must encourage and acknowledge the benefits of experimentation with library tools and demonstrate our appreciation for learning from our patrons' approaches to searching.[12]

Most of my teaching colleagues, both within and outside of the library, have expressed resistance to the idea of not limiting students to academic sources for their research assignments. The general reaction seems to be wariness on the part of instructors that students will run amok, and their assignments will reflect less critical thinking and poorer quality sources. Consider that the opposite may be true. Critical information literacy practitioners who have tried this approach argue that source limitations undermine student criticality. One team of teaching librarians explained their approach:

> We want students to be aware of their information agency and to understand the impact of source selections, but we avoid making value judgments about the sources students select in the activity. Issues of academic authority are often brought up in discussion, and while we encourage these topics, we try to remain neutral. We do not advocate a blind preference for peer-reviewed publications, nor do we dismiss the value of popular sources. We want students to become critically sensitive to issues of legitimacy and power within information systems and environments. Imposing traditional evaluation criteria or norms of authority would contradict our intention to advance students' critical examination of information.[13]

Librarians are likely to find it difficult to resist the urge to help students find quick, neat, and tidy answers to their information questions in the form of library resources. Pamela N. Martin described the tendency of librarians "to direct people away from chaos and toward our subject-specific databases, our lovingly maintained reference collections, and our carefully crafted catalogs."[14] She pointed out,

> While this can no doubt help patrons, especially with their academic research, guiding students away from chaos and to tools to which they will not have lifelong access contradicts the goals of information literacy and undermines mastery of important skills in patrons' lives. Library instruction should help students develop life-long information literacy skills. Knowing how to use databases will not make you information literate, and avoiding chaos does not help you harness the power of information. Instead of guiding patrons in an open-ended exploration through the universe of information, too often the library plays the part of the overprotective parent.[15]

To me, this seems the one of the greatest challenges to the profession. Librarians are by nature helpers—perhaps programmed to jump in and *fix* things, rather than stand back and empower others to find their own solutions. I have heard librarians say that helping patrons to find the *right* answers is what they most enjoy about their jobs. Despite the stereotype of librarians as meek and mild, it's a heady business being the keeper of the *right* answers.

Teach about Information in Terms of Purposes, Not Format

One pitfall that can be easily avoided is the categorization of sources by their physical formats, rather than by what they are intended to accomplish and how the student might use them in support of whatever argument they are trying to make. Joel M. Burkholder commented,

> As part of the information literacy initiative, librarians teach students how to develop a critical awareness of the sources used in their research. Unfortunately, we seem to ignore this particular advice in our current definition of sources. What are *sources?…*

For reasons that appear to be born out of convenience and expedience, most attempts to define sources do so by describing aspects of their physical natures. Due to our increasingly digital environment, these kinds of definitions are becoming much more difficult to defend…. The larger problem with definitions that focus on sources as mere objects is that they neglect their significance as communicative acts.[16]

Troy Swanson argued in a similar vein when he cautioned against defining sources by their physical formats:

> Librarians need to present them [students] with the information landscape and give them the ability to make judgments about particular pieces of information and about appropriate information tools. This model must reflect the ways in which information is created in society. In order to meet these needs, librarians and instructors need to present students with a model of the information world that focuses on the type of information rather than the format (book, website, periodical, etc.).[17]

In an earlier study, he offered this example:

> An article from *Newsweek* may exist in print, it may be on the *Newsweek* website, and it may appear in a subscription database…it is the same article in all three formats, for all intents and purposes. For a searcher, the concern should be that this is a news article, and the fact that it is news tells us something about the credibility of the information. This information would be different than information found in a scholarly publication, in a professional/trade publication, or on a personal website.[18]

From a practical perspective, traditional scholarly sources simply may not be the most effective and appropriate information to answer the students' research questions. Librarians (and course instructors) place themselves in an inauthentic situation when they prohibit students from using sources that may be of value to their development of new knowledge. For example, recently, following a flurry of hastily enacted legislation regarding public education and other issues in North Carolina, a freshman English student chose North Carolina public education funding as his topic and asked for my help. While the blogosphere was buzzing and several state and national newspapers picked up on the topic, traditional peer-reviewed journal articles and monographs had not yet been published. Fortunately, in this case, the course instructor was flexible about the types of sources students used. But sometimes, instructors (and librarians) are not. Ruth Mirtz argues that the practice of redirecting students' topic selections in order to conform to source requirements is a critical missed opportunity for teaching librarians. Using the example of a student interested in extreme sports, she argued,

> Whenever students have to eliminate topics of primary interest to them or adapt topics to fit what they can find literature on (such as switching from the topic of deer baiting to bovine tuberculosis) instead of pointing students to other professional sources of information (such as Department of Natural Resources reports on stakeholders' meetings about deer hunting regulation changes), the library has missed the chance to intermediate with users in a critically supportive way. The search process then fails to engage a citizen in a collective process or in ethical questions that could alter the status quo. The library hasn't encouraged or provided a challenge to disintermediation, but encouraged failure…The library has thus, in this situation, failed to help the students negotiate the movement between scholarly, individual, and public spheres, nor to create a conversation among the data created by researchers, the values a student brings from home, and the potential to enact change in the world. [19]

Challenges Moving Forward

While these seem simple enough perspectives—to relinquish expertise and efficiency, to build upon students' prior knowledge, to teach about information in terms of purposes and types rather than formats, and to teach about all types of information, rather than privileging library sources—such viewpoints are antithetical to traditional approaches. Since its inception, bibliographic instruction has been about teaching students *how to use the library*. And though the reframing of bibliographic instruction as information literacy was intended to broaden those horizons, many think that effort has fallen short of its goals—hence the endless debate over the meaning of information literacy and the recent development of the *Framework for Information Literacy for Higher Education*.[20] While it is much easier to teach students where to point and click than to teach them about the nature of scholarly communication itself, clearly the former approach is no longer sufficient.

Also, there is the problem of librarians' own views about information. Having embraced the *science* aspect of information science, perhaps cherishing it more than the *literacy* aspect of information literacy, many librarians cling to world where information needs can be matched to distinct and correct sources of singular truth—a world where truth is uncontested, one-size-fits-all, and, most of all, neutral. Those that urge a critical information literacy approach reject these notions in favor of teaching about information as scholarly dialogue, truth as evolving, and information sources as having a non-neutral purpose both in their publication and in how the reader might use them to create new knowledge. Certainly the latter presents a challenge to the profession and one that begins with examining and perhaps deconstructing one's own views about a subject that is near and dear to librarians' self-identity.

One of the more promising findings from the literature is that librarians may be able to employ critical pedagogy to ease students' transition into academia. Increasingly, higher education is being called to account for student retention, especially state run institutions. In response, libraries have successfully sought methods to demonstrate the value of library programs and services to student attainment. If, as the literature suggests, taking a critical approach to information literacy instruction can ease student transition into academia, then there is substantial motivation for teaching librarians to experiment with the pedagogies called for by such an approach.

Perhaps most alarming is the idea from the literature that tools-and-skills-based, traditional information literacy instruction may actually discourage

student criticality by stripping information from its context. Much energy is expended by well-meaning librarians who have the goal of helping students become critical consumers of information. The possibility that such efforts might be counterproductive is reason enough for teaching librarians to reexamine their pedagogy to determine which methods they employ in the classroom are actually supporting the long-term goals of information literacy beyond student acquisition of tools and skills and which may be hindering those goals. Certainly, the calls from the literature for greater reflection on teaching practice and continuing discussion among teaching librarians are well grounded and hold promise for the profession.

Notes

1.   Michelle Holschuh Simmons, "Librarians as Disciplinary Discourse Mediators: Using Genre Theory to Move toward Critical Information Literacy," *Portal: Libraries and the Academy* 5, no. 3 (2005): 299.

2.   Ibid.

3.   Association of College and Research Libraries, *Framework for Information Literacy for Higher Education*, accessed June 13, 2014, http://acrl.ala.org/ilstandards/wp-content/up-loads/2014/02/Framework-for-IL-for-HE-Draft-2.pdf.

4.   Beth Allsopp McDonough, "Critical Information Literacy in Practice: An Interpretive Review" (EdD diss., Western Carolina University, 2014), http://wncln.wncln.org/re-cord=b5404335.

5.   Mary Jane Scherdin, "How Well Do We Fit? Librarians and Faculty in the Academic Setting," *Portal: Libraries and the Academy* 2, no. 2 (2002): 237–53.

6.   Elizabeth Peterson, "Problem-Based Learning as Teaching Strategy," in *Critical Library Instruction*, ed. Marie T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 71.

7.   Daniel Coffey and Karen Lawson, "Managing Meaning: Language and Technology in Academic Libraries," *College and Research Libraries* 63, no. 2 (2002): 159.

8.   Caroline Sinkinson and Mary Caton Lingold, "Re-Visioning the Library Seminar through a Lens of Critical Pedagogy," in *Critical Library Instruction*, ed. Marie T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 87.

9.   Scott Warren and Kim Duckett, "Why Does Google Scholar Sometimes Ask for Money?" *Journal of Library Administration* 50, no. 4 (2010): 151.

10.   Jonathan Cope, "Information Literacy and Social Power," in *Critical Library Instruction*, ed. Marie T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 25 (emphasis in original).

11.   Heidi L.M. Jacobs, "Posing the Wikipedia 'Problem:' Information Literacy and the Praxis of Problem-Posing in Library Instruction," in *Critical Library Instruction*, ed. Marie T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 193.

12.   Pamela N. Martin, "Societal Transformation and Reference Services in the Academic Library: Theoretical Foundations for Re-envisioning Reference," *Library Philosophy and Practice*

11, no. 1 (2009): 5.

 13. Sinkinson and Lingold, "Re-Visioning the Library Seminar," 86.

 14. Martin, "Societal Transformation and Reference Services," 6.

 15. Ibid., 6.

 16. Joel M. Burkholder, "Redefining Sources as Social Acts," *Library Philosophy and Practice* 12, no. 2 (2010): 2.

 17. Troy Swanson, "Teaching Students about Information: Information Literacy and Cognitive Authority," *Research Strategies* 12, no. 4 (2007): 324.

 18. Troy A. Swanson, "A Radical Step: Implementing a Critical Information Literacy Model," *Portal: Libraries and the Academy* 4, no. 2 (2004): 262–63.

 19. Ruth Mirtz, "Disintermediation and Resistance: Giroux and Radical Praxis in the Library," in *Critical Library Instruction*, ed. Marie T. Accardi, Emily Drabinski, and Alana Kumbier (Duluth, MN: Library Juice Press, 2010), 301–02.

 20. Association of College and Research Libraries, *Framework for Information Literacy*.