Is It Really on the Web and What Does That Mean for Instruction and Reference?

Aline Soules[1]

[1]California State University, East Bay

Abstract: Assumptions are frequently made about what is available through the Web and those assumptions are often voiced by librarians as well as users, affecting collection decisions, information literacy instruction, and reference interactions. Based on a spring 2011 project comparing biographical information for literary authors writing in English in two commercial databases, *Wikipedia,* and through Google searches, the author changed her approach to her information literacy courses and reference interactions, not just her collections work. The author will briefly outline the project and offer implications for collections, information literacy, and reference, and emphasize the value of a continued generalist approach to librarianship.

1. Introduction

Assumptions are frequently made about what is available through the Web and those assumptions are often voiced by librarians as well as by users. These assumptions on the part of librarians affect collection decisions, information literacy instruction, and reference interactions. One such assumption contributed to a decision to cancel a database that was important to the English Department at California State University, East Bay (CSUEB). This, in turn, led to a sabbatical project by the author, who confirmed that reliable, authenticated biographical information is not all available through the Web, but who also found that both *Wikipedia* and other sources available through Google searches have information to offer if used appropriately. This has important implications not only for collections decisions but also for information literacy instruction and reference interactions.

CSUEB is classed in the U.S. as a "comprehensive" university, offering undergraduate and Masters' degrees to approximately 13,000 students. It is considered a "teaching" university, although CSUEB faculty engage in the traditional combination of teaching, research, and service. The university also offers a strong First Year Experience (FYE) that includes a required two-credit information literacy course for all incoming first-year students (sections are F2F, hybrid/blended, and online).

Below is a brief outline of the sabbatical project; how those factors have influenced the author's collections decisions, information literacy instruction (credit courses, embedded information literacy, and one-time classes), and reference interactions (F2F and online); and how this process has re-emphasized the value of "holistic" librarianship where librarians avoid specialization and participate in collections, instruction, and reference in order to enable learning and research in one area to inform and improve work in related areas.

2. The Project

An example of a librarian assumption about the availability of information on the Web arose in the 2008-2009 academic/budget year, during yet another California budget crisis. After several rounds of cuts in previous budget crises, librarians were forced to decide what core databases would not be renewed. Decision-making criteria included the need to cover all disciplines taught at the university, the relative cost of various databases, and use statistics; however, assumptions about what was and was not available through the Web also came into play.

First to be cut was a core database for the English Department called *Literature Resource Center* (Gale/Cengage) that offers both biographical and critical information on authors. A key factor in this decision was the opinion that the critical information could be covered by the *MLA International Bibliography* and that the biographical information was largely available through the Web.

Despite the cancellation, the author decided to test this assumption during a sabbatical project in spring 2011. To set parameters, searches were limited to biographical information for literary authors writing in English. A pilot was conducted in fall 2009/winter 2010 with fifty names taken from CSUEB Masters' theses. Biographical content was compared in the biography portion of the database that was cancelled (*Contemporary Authors Online*, part of *Literature Resource Center*), a comparable database called *Biography Reference Bank (Wilson* at the time of the project, now *EBSCO*), *Wikipedia*, and the Web resources other than *Wikipedia* as searched through Google.

In fall 2010/winter 2011, the names of five hundred authors were gathered by reviewing curricula and textbooks from across U.S. higher education institutions. In spring 2011, the names were searched in the same sources as in the pilot, and results were tabulated and compared. The conclusion was that reliable authenticated biographical information is not all available through the Web; however, the author gained increased respect for *Wikipedia* and found that both *Wikipedia* and other sources available through Google searches have information to offer if used appropriately.

For example, while commercial databases offer researched and vetted information, open sources can provide more current information, updating what is found in commercial sources or providing unique information that does not fall into the parameters of coverage by commercial databases. There are also some primary open sources available through the Web, such as authors'

personal Web sites, although these should be evaluated for their PR elements and the self-editing aspects in which authors sometimes indulge. In addition to the critical need to evaluate open sources, there is also the question of copyright and what may or may not be used or cited and under what conditions. Another major consideration is the stability of various sites as compared to commercial databases. There is no control over what goes up and down on the Web; with commercial database, the issue is budget and whether the databases can be re-rented the following year.

Ultimately, this suggests a combination approach to information gathering, which has important implications not only for collection decisions, but also for information literacy instruction (formal courses, embedded information literacy, one-time classes) and reference interactions. Further details about the project itself can be found in the article in *New Library World* (2012).

3. Collections Implications

Selection and de-selection have always involved checking on the framework of the library's existing collection. For selection, this involves checking for duplicates in the library or consortium catalog, checking OCLC or *Worldcat* to determine whether it would be better to purchase a copy or let students use interlibrary loan. Now, added to that, is the very real need to see what is available through the Web, whether through search engines like Google or through one of the many other Googles (Scholar, Books, etc.) or in an open source such as the *Directory of Open Access Journals* or *Highwire*.

De-selection is even trickier. After checking the same sources plus circulation statistics, selectors may discover that the library is the only holder of this particular item. What then? Keep? Discard? Alternately, there may be other sources for that information, but will they remain or disappear or no longer be accessible if there is a shift to an e-format of that information?

The traditional collection process is clearly more complicated than it used to be.

Another consideration is the creation of content. Libraries are creating more content than ever, in the same way as the world at large. Whether through a commercial product such as LibGuides or library-created content through its own Web site, a Wordpress blog, or some other source, the librarian must engage in a new form of collection process that brings together sources into a "package" for users, whether generally or on a particular topic for a course or project. The actual materials may be much more scattered than in previous settings.

4. Information Literacy Implications

The distinction between information literacy and library skills is even more critical as users view open source materials. The same roadmaps are no longer in place. Instead of pre-publication authorization by editors or peer reviewers,

for example, the user must evaluate every single item that shows up in a results set and must be also be able to identify its source—a database, a scholarly journal, a commercial Web site, an ephemeral publication, something that will be in place the next time it is searched, something that may exist but may only be retrieved through an entirely different route. While evaluation has always been critical for information literacy, there are fewer anchors. In a database, a student can check "scholarly peer reviewed" and rely on the results meeting that criterion and usually remaining in the same place when they are sought again. If the same search is conducted in Google Scholar, these anchors are missing, whether all the results contain scholarly peer reviewed articles or not. If the search is repeated on a different day, the results may have shifted either slightly or significantly. For information literacy instruction, this puts even more emphasis on the need to teach evaluation and identification.

Evaluation and identification, therefore, are even more important "threshold concepts" than they were before. Threshold concepts were originally developed by Meyer and Land (2003). They offer a potential way of describing levels of understanding in a subject that could be used in assessment for learning. Meyer and Land define threshold concepts as having five characteristics. They should be transformative, shifting perception of the subject; irreversible, making it impossible to return to viewing the concept as previously; integrative, exposing the previously hidden interrelatedness of something; bounded, helping to define the boundaries of the topic; and, possibly, counter-intuitive or leading to knowledge that is inherently counter-intuitive. In grasping a threshold concept, students move from common sense understanding to an understanding which may conflict with perceptions that have previously seemed self-evidently true. Ultimately, the intent is to provide a pedagogical framework to teach foundational concepts in a particular discipline.

Townsend, Brunetti, and Hofer (2011) have applied threshold concepts to information literacy. Their identification of these concepts is still evolving; however, these concepts include the following:

- Information formats result from how they were created and shared. Shifting the focus from the end point to the process helps to clarify differences between books, articles, journals, and various types of formats delivered over the Web.
- Authority is constructed and textual, based on evaluative criteria specific to the context in which the information is both found and delivered.
- Information is a commodity. This helps students to understand the difference between what is free and what is paid for, which subsequently leads to discussions about proprietary databases, intellectual property, open access, and citation.
- Primary and secondary sources differ. This is particularly important when students move from one discipline to another because each discipline creates and uses these sources differently.

Discussions with the authors of this article have led to the identification of a number of possible additional threshold concepts. For this author, the fundamental difference between information gathering and a research question has emerged as critical. The use of the word "research" has proliferated to the point where it becomes important to differentiate between "research" on where one might go to dinner and a "research" question that requires original exploration.

While some of these concepts apply regardless of the shift in where information resides, an argument can be made that, in some cases, their significance has shifted and, in others, there are new concepts to consider. The importance of evaluation and identification, for example, have gained in stature as more evaluation must now be conducted post-publication and students need more awareness of the actual nature and format of the information. This circles back to the sabbatical project and the beginning of this section.

As a result of the sabbatical project, a number of elements in the credit course were scrapped. More exercises and attention were given to activities from analyzing and evaluating *Wikipedia* articles through decoding citation, that is, identifying the type of information format represented by various citations. Less concern and attention was given to basic library skills because students may consult a librarian at the reference desk for such specifics.

In addition, an anecdotal exploration of faculty perceptions about *Wikipedia* revealed a range of approaches from "never" to a final exam called HistofCalipedia. Based on her belief that students over-used *Wikipedia,* Dr. Linda Ivey embedded this final in BlackBoard, CSUEB's learning management system. She required them to read *Wikipedia's* disclaimer about research and create a *Wikipedia*-like entry for various topics she developed for them to use. Requiring references, a bibliography, and other *Wikipedia* elements, students gained a better understanding of the strengths and weaknesses of this encyclopedia as they created entries and classmates "adjusted" them.

An example of embedded information literacy resulted from collaborative work between the author and Dr. Sarah Nielsen, coordinator of the MA TESOL program at CSUEB. Dr. Nielsen became frustrated with her students' lack of understanding about certain information literacy fundamentals when they reached their thesis stage. To address this, information literacy concepts, particularly evaluation, were embedded in all core courses of the program. Assignments and some of the results of those assignments can be viewed on the course Google site at http://sites.google.com/site/tesolcsueb/information-competency-tools/threshold-concepts. Of particular note are the Web evaluations, of which there are now over fifty (50). This assignment not only requires students to evaluate various TESOL-related Web sites, but also positions them to begin sharing their evaluations as part of the larger world of academic discourse. These evaluations are shared on the Google site, thereby adding content to the Web.

In various discipline-related classes, emphasis on evaluation and identification have also taken preference over basic library skills. Even when

students are anxious to get "shortcut" ideas for the assignments that have prompted the information literacy class in the first place, focusing on foundations and threshold concepts ultimately proves more efficacious.

5.   Reference Implications

Reference at CSUEB is a teaching endeavor, not a place where students and faculty visit to get answers to problems. Of course, efforts are made to ensure that students will identify the necessary information for their papers and projects; however, the primary goal is to ensure that they can repeat these processes when they leave the library and are working on their own at home or elsewhere.

Since the sabbatical project, the same redirection to evaluation and identification has been taken. Whether working with students on search terms, explaining the features of various database platforms, exploring search engines or even *Wikipedia* references, ensuring that students know what they are viewing and helping them to evaluate both the information and the source of the information are primary goals.

Overall, references transactions of this sort take longer. If it is busy, more juggling among reference questions takes place; however, it is important to encourage students to explore these concepts while still at the reference desk. That way, there are opportunities for further conversation about these issues and for more in-depth teaching. Students are also encouraged to conduct searches at reference desk terminals in order to ensure that they have a better chance of being able to replicate the search or conduct a similar search on their own.

There are also more questions directed to the student: "Are you sure that's the right source for your paper?" "Where is that information coming from?" What might be your next step? Can you develop a citation for this information, both in-text and in the end bibliography? These questions must be placed carefully into the conversation in order not to drive students away.

6.   Conclusions

Information is shifting, both in format and location. More is electronic and not necessarily in traditional format; more and more is available through multiple paths. An article may be found through a commercial database with full text available through a subscription journal, but its preprint could be on the open Web for free. Conversely, free information, such as conference proceedings, can sometimes be picked up and reprinted by subscription journals, such as IFLA papers. Students search through Google and get stopped by a request to pay. Some, desperate at a last minute deadline, may do so and may later find out that the library pays for a subscription to that journal, but the path they followed didn't take them in that direction. The author's sabbatical project emphasized just how tortuous some of these paths can be and how critical it is to figure out how to blend these various sources and paths to gather the full range of available information on a particular topic.

Perhaps more critical is the re-affirmation of librarians as generalists. In this age of specialization, librarians need to know as much as possible about the processes and patterns of various disciplines in order to help students understand how some of the basic concepts of information literacy are applied in a particular discipline and how they shift from one to another.

Another aspect of being a generalist is within the field of librarianship itself. The author's sabbatical project began as a collection project, but ultimately influenced other areas of librarianship—instruction and reference particularly. In this age of specialization, where librarians specialize in one or another of these areas, CSUEB librarians have insisted on maintaining a foothold in collections, liaison work, instruction, and reference. Some areas, such as systems and technical services are handled in a more specialized way, but even these are under the aegis of small librarian committees that include a wider range of librarians.

There is also the practice of applying research in one area to inform and improve work in related areas. This not only speaks to the generalist approach, but also emphasizes the importance of applying research to make a difference. Results may be written up and shared, which is laudable, but some overt outcome validates that the research has made a difference. In the end, that is what most librarians strive to achieve.

References

Meyer, J., Land, R., & ETL Project, (2003). *Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines*. Edinburgh: University of Edinburgh.

Soules, A., (2012). Where's the bio? Databases, Wikipedia, and the web. *New Library World,* Vol.113, No.1/2, 77-89. 10.1108/03074801211199068

Townsend L., Brunetti, K., and Hofer, A. R., (2011). Threshold Concepts and Information Literacy. *Portal: Libraries and the Academy,* Vol.11, No.3, 853-869. 10.1353/pla.2011.0030
http://scholar.googleusercontent.com/scholar?q=cache:jSmlqT1YeXIJ:scholar.google.com/&hl=en&as_sdt=0,47 offers a free preprint version.