# INFORMATION LITERACY AT THE CROSSROADS: THE CONVERGENCE BETWEEN THE RESEARCH AND THE WRITING PROCESSES

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#### **INTRODUCTION**

Whether they know it or not, librarians who assist students engaging in scholarly dialogue in their research also contribute significantly in helping them become stronger writers. This paper aims to benefit those who are interested in broadening the impact of information literacy pedagogy by examining their role in the writing process. Information literacy involves the promoting of critical thinking skills that are directly akin to the writing process itself as students learn to do the following: identify and select manageable topics; formulate research questions; set up a search plan; identify and evaluate their sources; and cite their sources appropriately. This paper discusses the intersection between rhetoric and information literacy and the implications for the classroom, including the strong theoretical connection between the processes of writing and research, along with the librarian's role as educator in these processes. The paper also highlights ways to offer information literacy instruction in an impactful and compelling way by: comparing the writing process to the research process; discussing where they overlap and merge; and specifically identifying the role information literacy plays in these processes and in the collaborative relationships librarians have with academic faculty. Included in the discussion will be instructional tips about how to "scaffold" the research and writing process through information literacy instruction.

### **CHARACTERISTICS OF THE WRITING PROCESS**

Like many freshman in college in the 1960's, I was taught how to write by looking at models of excellent professional writers and then told to imitate them. At the time, students edited their papers using Strunk and White's *Elements of Style* and a book with rules of grammar in it. In the 1970's and 80's composition instruction changed when researchers

such as Janet Emig, Linda Flowers, Peter Elbow, and many other experts in writing and composition theory, explained that writing is a very complex cognitive process and that instructors, instead of giving students writing models to emulate, should be guiding students through that process to facilitate their success. In general, writing experts defined the writing process as consisting of three to four stages: prewriting (brainstorming), drafting, revising, and editing. In putting to use the idea that writing is a process and not just a product, researchers looked at how best to scaffold student learning through that process. For example, prewriting or brainstorming is often defined as everything writers do to prepare themselves to write, whether it is talking to a trusted friend, outlining, creating concept maps, etc. Instructors teaching the writing process normally tell students not to edit during the drafting process, since that can interfere with the flow of ideas, and to get feedback during the revision process. They also explain that writing is not a linear process but one that is recursive in nature. As one author put it, "As students move from phase to phase, they are really doing all four phases simultaneously. They are drafting while brainstorming. They are brainstorming while revising" (Emborg, 2005, p. 8).

#### **CHARACTERISTICS OF THE RESEARCH PROCESS**

The steps in the research process defined by the ACRL Information Literacy Competency Standards (2000) include:

- Determining the extent of information needed
- Accessing the needed information effectively and efficiently
- Evaluating the information and its sources critically

- Incorporating selected information into one's knowledge base
- Using information effectively to accomplish a specific purpose
- Understanding economic, legal and social issues surrounding the use of information, and access and use information ethically and legally. (p.1)

If one translated these steps as they relate to the writing process it would look more like this:

- Identifying & selecting manageable topics (information need)
- Creating research questions (adding focus)
- Setting up a search plan (accessing needed information)
- Matching questions/search terms to resources (accessing needed information)
- Identifying & evaluating relevant sources (incorporating into a knowledge base)
- Citing sources appropriately (using information ethically)

## WHERE WRITING AND RESEARCH PROCESSES OVERLAP

Like the writing process, the research process, too, is recursive. As Kuhlthau puts it, "A person's information need changes and evolves with each new piece of information he or she encounters and thinks about...information need often begins with a vague notion that changes with the information found (2013, p.93). Kuhlthau's critique of the ACRL Information Literacy Competency Standards for Higher Education is that the standards do not reflect this enough. "In the 2000 Standards, information need sounds like a concrete, fixed thing" (2013, p. 93). Most librarians have experienced the recursiveness of library research in action: as students change their topics after obtaining background information, when searching the literature, if they come to the library with topics that are unfocused or too broad, when they are looking in the wrong database for information, and each time they report to librarians that there is "nothing on my topic." Thus, if we understand the true nature of the research process as recursive, we can adapt teaching information literacy to not be a fixed hierarchical series of steps giving students the false impression that it is simpler than it is.

When students write research papers based on academic sources, much of what they do before they write, or the prewriting phase of the writing process, is engaging in the research process. It may begin as they explore topics before settling on one for their assignments. When librarians assist students in their search for manageable topics either by helping them broaden or narrow their topics, they are engaging in the prewriting process with the student. Another activity related to the writing and research

process is helping students set up a search plan using concept mapping, which can include creating a pre-searching plan that allows students to identify keywords and controlled vocabulary they may use when searching databases. Librarians also educate students on how to evaluate the quality of their sources, which is part of the critical reading phase of academic writing. As students revise and edit, they often become aware of an information gap in their research and come back to the library for help in filling those gaps; so librarians, whether they know it or not, are indirectly involved in the drafting, revising, and editing part of the writing process as well. Later, as undergraduates polish their papers, they come back to library professionals to ask for help about documenting their sources. This is where many librarians assist in the writing process directly, either in library instruction classes or helping them individually, teaching students the "hows" and "whys" of citing their sources within the documents they write, along with the use of assigned citation formats such as APA or MLA, and, ultimately how to avoid plagiarism. Many academic librarians also teach students how to use citation management tools such as Endnote or RefWorks and thus they are showing them software that helps them document their sources as they draft their papers.

#### THE PROBLEM OF BOUNDARIES

What may be confusing to students is that, as they work through the research and writing processes, they experience it as one process, not two; thus, when the business of teaching research and writing to students becomes bifurcated and fragmented, students may become puzzled as they navigate that terrain. Many good rhetoric books such as The Bedford Researcher (Palmquist, 2006, p.5), lay out the research/writing steps as a single process (see Figure 1).

#### Figure 1: Research/Writing Processes reprinted with permission from Bedford/St. Martin's

Choosing, exploring, and narrowing a topic (Chapters 1 and 2)	• • Pick a topic; talk about it with others and browse sources; focus on an issue within the topic.
Developing and refining a research question (Chapter 3)	•••• Ask a question that will guide your collection and use of information.
Collecting information [Chapters 4–7]	•••Use print and electronic resources and field research to locate appropriate, relevant sources.
Reading critically, evaluating, and taking notes [Chapters 8–10]	•••• Read and evaluate with a critical, questioning attitude; mark and take notes on key ideas and information.
Organizing and planning {Chapter 11}	••• Map the shape of your document, refine your thesis statement, and prepare to draft.
Drafting (Chapters 12–14)	••• Create a document that helps you achieve your purposes and address your readers.
Revising and editing (Chapter 15)	•••• Review and refine your document.
Designing (Chapter 16)	••• Use document design to enhance the effectiveness of your document.
Documenting sources (Chapters 17–21)	•••• Cite your sources accurately and appropriately.

FIGURE 1.1 Research Writing Processes As you learn about your topic and reflect on your progress, you'll move back and forth among these processes.

Although it might seem like extra work now, creating a research log as you begin your project will save time in the long run.

Notice that in the caption under Figure 1 the author of this book indicates that the steps are not linear. It says, "As you learn about your topic and reflect on your progress, you'll move back and forth among these processes," (Palmquist, 2006, p. 5) even though the steps are visually presented in a somewhat hierarchical structure. Steps 1-3 in Figure 1 are those in which librarians are most engaged with students, particularly the general "Collecting Information" part of things, which, as we know, is not one simple step. One area not often included in either the research or the writing process is teaching students how they should use their sources once they locate them. As Veach puts it, "Perhaps this is because a mental line between librarians and writing professionals has kept the librarians on the practical side of the line and yielded the theoretical side to compositionists." (2012, p. 111). Because of the overlap between processes, it is unclear where the instructional boundaries lie between librarians and teaching faculty when offering instruction about the research process. Some librarians (and instructors) see librarians as only providers of information based on point of need, in a traditional reference, "information gathering" role rather than in an instructional one; other library professionals are more integrated into the educational process and feel more comfortable crossing those boundaries from research to writing. Barbara Fister points out that librarians and writing instructors have different perspectives about the research process: "for librarians the process is, ideally, a logical and controlled one with a sequence of distinct tasks. Writing instructors may be more inclined to view the research process as a recursive and exploratory one" (1995, p.45). Understanding the writing process as it relates to research allows instructors and librarians to be more cognizant of the boundaries and more able to discuss clearly what the librarian's role will be. Certainly understanding that research and writing are recursive activities is crucial in assisting students more effectively.

## COLLABORATING TO CREATE AND SCAFFOLD BOTH PROCESSES

Other than being aware of the ways in which research and writing overlap, how can librarians facilitate both processes for student success? Clearly, the first strategy is to collaborate with teaching faculty to integrate as much as possible research process/information literacy content within courses. It is next to impossible to understand the student writing/research processes well if librarians are not privy to the assignments, syllabi, and context for the courses in which they teach information literacy and library-related research; so the first order of business is to become versed with the curriculum in which research is placed and then, if possible, to become embedded into it. Generally it is a good idea to request access to the course management system so that library instruction/information literacy content can be placed into it both before and after library instruction, in order to scaffold student retention and learning. Embedded librarians can thus reach out to students before they meet them in library instruction settings, making it more possible to teach

information literacy concepts. If the basics and mechanics of library instruction (such as how to connect to the library from off-campus, get library assistance, and navigate the library Web site, and even provide point-of-need database tutorials) are embedded into a course with course modules, screencasts, or videos, that allows librarians to "flip" basic instruction. The flipped model gives librarians more precious class time that can be devoted to more complex tasks. These may include assisting students in exploring their proposed topics, helping students expand and narrow them to a manageable size, finding background information, setting up a search plan and then beginning to locate and evaluate sources from appropriate search tools. The embedded librarian can create a workshop environment where information literacy, and not just mechanics of locating information, is the focus. It also allows the librarian to have access to students over a longer period of time so that information-literacy-as-process can address the needs of the research process. After a class session, librarians can place handouts, PowerPoints, and other materials into the course management system so students can always go back and review materials they may need once they begin working on their research. They can be a presence inside a class so that students can readily contact them either through the course management tools or email. Beyond the actual instruction, it's important for librarians to include as part of their instruction a discussion about the research process itself, its complexity, its recursiveness, and the librarian's willingness to assist students along the way--not just in a brief one-shot class session. That way students do not get unrealistic views about the simplicity of conducting research, because if they do think it is a simple process, they will likely procrastinate or curtail the important components of the research process. As Veach (2012) puts it:

While graduate students do often allow their writing process to influence their topic choice, undergraduates rarely leave themselves enough breathing room to do this kind of exploration. When they start the paper twenty-four hours or less before its due date, reading, summarizing and learning will be sacrificed to efficacy and word-count inflation. (p.114)

The author goes on to state that many first-year students "do not read most sources they cite. Far from being current in the conversations within a discipline, these students have yet to realize that a conversation even takes place" (p. 115). Indeed, academic procrastination often results in a poor choice of sources, a cursory reading of them, and a shallow use of them in student writing; it sometimes produces instances of plagiarism, intended or unintended, because of an inability to cite or integrate sources very well.

### CONCLUSION—LOOKING FORWARD

In the past, some information literacy experts such as Barbara Fister have accused librarians of being too focused on information retrieval through access tools in library instruction classes to the detriment of the bigger picture, particularly what she calls the "rhetorical dimensions of research" (1993, pp. 211-212). Fister writes, if librarians fail to place their advice to students in the rhetorical context of research, they may "reinforce the misconception that the main point of research is to report on knowledge found elsewhere" (1993, p. 212). One attempt to remedy that problem is the ACRL draft of the new Framework for Information Literacy for Higher Education, which proposes to replace the Information Literacy *Competency Standards for Higher Education.* The *Framework* recognizes students as "creators and participants in research and scholarship" with more holistic goals that focus attention on the "vital role of collaboration and its potential for increasing student understanding of the processes of knowledge creation" with a "deeper more integrated learning agenda focused on academic courses, undergraduate research, service learning, digital projects" etc. (2013, pp. 3-4). The insistence that information literacy is highly contextual resonates with the theme of this paper about the need for a closer integration between the research and writing processes. Just as one cannot teach students how to write by having them write one successful paper for a composition class, neither can one learn to conduct a review of research based on fragmented one-shot, library instruction classes. Every writing and research task, from the student's point of view (and from what cognitive scientists tell us) is a unique challenge within the context of an assignment, that is, a writing task, in a specific discipline or disciplines. This is why the new Framework draft touches on the complexity of research tasks as they occur within what is called various "information ecosystems" (ACRL Framework, 2013, p. 1). The continuing shift from coordinating library instruction efforts to authentic collaboration between librarians and academic faculty entails that understanding the writing process and integrating the role of the librarian in that process will become more important than ever.

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