

**Multiple Visions of the Research Paper: How Compositionists and Librarians Understand,
Represent, and Teach the Research Process**

by

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Abstract

This thesis project examines how composition and library science scholars understand, represent, and teach the research process. Librarians and instructors have been similarly affected by technology, so they must discover how students are currently writing and researching in order to improve instruction. While this similarity can encourage collaboration and communication between librarians and compositionists, differing opinions on the relationship between writing and knowing can lead to conflicts. With librarians focusing more on the research process and with compositionists focusing more on the writing assignment, it is not surprising that even in recent scholarship their view of the relationship between writing and knowing remains slightly different. An initial step toward creating effective instruction for students involves understanding their different views of writing and knowing in relation to the research paper.

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Chapter 1 – Needs, Breakdowns, and Calls: Why More Research is Needed

This thesis project examines how composition and library science scholars understand, represent, and teach the research process. Since both composition and library science instructors share the job of teaching first year composition students how to research and to write, the research paper serves to connect these seemingly disparate fields. In the past these fields have each addressed issues of how students gather, view, and interpret information during the research process from their own perspectives. More current scholarship has called for increased collaboration. As one key step towards such collaboration, the goal of this project is to identify the conflicts and connections in the research uniting librarians and compositionists. Ultimately, this thesis seeks to assist both librarians and composition instructors in understanding how the other views the research process as a way to improve and facilitate not only communication but also the quality of instruction in both fields. I am dividing the thesis into four chapters. The first chapter offers an introduction of the topic and a review of the literature. In this introduction I briefly discuss the similarities and differences between how library science and composition scholars view the research process by citing current literature, problems, and calls made by librarians and compositionists. The second chapter discusses how technology has similarly affected both fields. The third chapter examines how the two fields view the process of writing and knowing. The fourth chapter explains what my findings suggest for future research and pedagogy.

The research process is an equally important issue for both fields. It is in freshman level composition classes that students are first introduced to research at the university level. What students learn in this class will remain useful as they continue through higher level courses that require more thorough research and more developed research writing. Because composition instructors and librarians are often jointly involved in this process, an understanding from the other's perspective is crucial for successful librarian/faculty collaboration and instruction. This thesis illustrates how librarians and instructors possess similarities and differences concerning the research process. If a librarian is to successfully teach an instruction session to a composition class, the librarian will need to know the actual assignment in order to prepare a session tailored to the students' needs. Accordingly, if a compositionist wants the library instruction session to directly assist students in completing their assignment, the compositionist must discuss or present the assignment to the librarian.

Library science and composition scholars are already recognizing the need to increase collaboration. This can be seen in the work of Joyce Lindstrom and Diana D. Shonrock and Celia Rabinowitz. In "Faculty-Librarian Collaboration to Achieve Integration of Information Literacy," Lindstrom and Shonrock address the importance of collaborating with faculty. They define four behaviors required to make this collaboration successful: shared understood goals; mutual respect, tolerance, and trust; competence for the task at hand by each of the partners; and ongoing communication (Lindstrom and Shonrock 19). They also make suggestions to improve the collaboration process such as having subject specialist librarians serving as library liaisons for departments. Lindstrom and Shonrock focus on improving library instruction for all subjects. They acknowledge that "the goal is to bring departmental faculty and librarians together to improve student learning through course-integrated information-literacy instruction" (Lindstrom

and Shonrock 19-20). The article concludes that the library is an integral part of the entire university, and it must be a campus-wide collaboration to reach information literacy goals.

Perhaps one of the first and most explicit acknowledgments for the need to increase the research in faculty-library communication comes from Rabinowitz's "Working in a Vacuum: A Study of the Literature of Student Research and Writing." In this article Rabinowitz acknowledges the work of Kuhlthau and expresses the need to increase communication and collaboration between librarians and composition instructors: "Empirical evidence of such misunderstandings between teachers and students is readily available, but neither Kuhlthau nor most other librarians have integrated it into their own research" (Rabinowitz 341). She sees two fields which have similarities but lack the information exchange. Rabinowitz believes faculty often misunderstands how librarians help students with research. Rabinowitz addresses the study by Schweger and Shamoon in 1982 which establishes a need for faculty "to clarify their expectations of student writing" (Rabinowitz 341). Ultimately, Rabinowitz argues for a need to revise pedagogical goals on student research and learning and for experts in both fields to collaborate in order to improve student research and writing.

The works of Lindstrom and Shonrock and Rabinowitz establish the need for increased communication and collaboration. While Rabinowitz cites sources from composition and library science, neither article directs how this need can be satisfied. Also, both articles do not acknowledge that more than just increased collaboration or communication is necessary. In addition to current scholarship illustrating the need for increased collaboration and communication between librarians and faculty, there is also current scholarship which discusses problems both fields have faced due to breakdowns in communication. Problems that librarians face include compositionists not being aware of students' library anxiety, not understanding how

librarians can help students with writing assignments, and not knowing how librarians actually help students during the research and writing process. Problems that compositionists face seem to be more directed between them and their students, but increased communication could help compositionists solve these problems. These problems include how students select and evaluate sources, how students view Internet sources, and problems instructors have teaching research writing.

For librarians these breakdowns can often affect students. Rabinowitz discusses how “students generally do not tell faculty that they are afraid of the library for fear of seeming incompetent, and that they are often reluctant to ask faculty for clarification when assignments are unclear” (339). Rabinowitz argues that while librarians are familiar with the above findings, “[t]he challenge of familiarizing faculty with these findings remains” (339). From her example there are two problems present: one, the students are afraid to ask questions; and two, faculty are still unaware that students have this anxiety. Another problem librarians face is that “[f]aculty will not encourage students to consult with librarians if they themselves do not understand how we can contribute to the student research process beyond helping with mechanics of searching or the location of sources” (Rabinowitz 340). One way for librarians to help faculty to better understand their role in academia is either to increase communication or for faculty members to familiarize themselves with current library science scholarship related to student research writing. Another problem librarians face is that faculty are “unaware of how often librarians actively participate in the topic focus stage of student research because the library is still where many students come to start their research because librarians are available at times when teachers are not, and because librarians are often viewed by students as non-judgmental and safe”

(Rabinowitz 343). Faculty can better understand how librarians help students through increased communication and collaboration.

Compositionists are also discussing problems with student research writing, and they are also arguing that some of these problems could be alleviated with increased communication or collaboration with librarians or other researchers. Vicki Tolar Burton and Scott A. Chadwick discuss problems students face when researching in “Investigating the Practices of Student Researchers: Patterns of Use and Criteria for Use of Internet and Library Sources.” One issue they cite in their work is that students are not particular with the sources they use, which “both devalues and places at risk a central assumption of academic writing: that a writer will support claims with appropriate, valid, and authoritative evidence” (Burton and Chadwick 310). Another problem they discuss is that “[s]tudents who view technology as self-determining and a freestanding agent may hesitate to question the authority of sources they find on the Internet, just as believers in the autonomous text may hesitate to question sources in the library” (Burton and Chadwick 312). In their work they hope that more studies will be conducted by researchers in various fields on how students actually research in order to solve these student problems. Linda Adler-Kassner and Heidi Estrem discuss problems instructors face when teaching students research writing in “Rethinking Research Writing: Public Literacy in the Composition Classroom.” They begin their article with horror stories on plagiarism, and how struggling “instructors who are 'required' to assign research papers [are] seeking advice about how to manage the process, how to make research writing meaningful for students, [and] how to work with the conventions associated with researched writers” (Adler-Kassner and Estrem 120). For Adler-Kassner and Estrem, instructors solve their anxiety through increased communication.

Current scholars in both fields are making calls for the need to increase communication and collaboration between librarians and compositionists. This can be achieved by studying how students' research habits affect research writing and by increasing research and scholarship on the aforementioned communicative and collaborative efforts. Examining library science scholarship, in "How Do You Know That?: An Investigation of Student Research Practices in the Digital Age," Randall McClure and Kellian Clink suggest that problems "are best solved through collaborations between the information experts (librarians) and writing experts (EC teachers) in order to develop alternative approaches to information instruction" (131). They end their article by asking, "[W]hat can college/university librarians and EC teachers do to improve students' information literacy practices?" (McClure and Clink 131). This question was one of three questions that began their article proving that while they produced some information regarding the question, more work needs to be done. Aligning with McClure and Clink's suggestion in "Why Teach 'Research as a Conversation' in Freshmen Composition Courses?: A Metaphor to Help Librarians and Composition Instructors Develop a Shared Model," Paula S. McMillen and Eric Hill call for "ongoing collaboration between library and composition instructors in order to more successfully teach students to participate in the discourse of their disciplines" (20). While acknowledging that much work has already been completed on information literacy, Claire McGuinness claims that "IL remains an undiscovered country for academics" (580). McGuinness does not make any calls to individuals, but she does suggest that journals, conferences, workshops, and seminars ask for publications and presentations on information literacy development (580).

Compositionists are also making calls for more research on increasing faculty/librarian collaboration and communication. Vicki Tolar Burton and Scott A. Chadwick realize that

students are having problems with library research skills and they encourage researchers “to turn some of our electronic and intellectual energy toward developing a theory and pedagogy of source evaluation that will help students across the disciplines embrace the idea that careful evaluation of research sources is vital to their construction of healthy arguments, healthy writing, and healthy academic lives” (Burton and Chadwick 326). In “Developmental Gains of a History Major: A Case for Building Theory of Disciplinary Writing Expertise,” Anne Beaufort discusses how sources can affect student research writing, and she believes “our task as educators is to give our students the very best that research and practice have demonstrated can increase individuals’ writing literacies in multiple discourse communities” (178). She goes on to make a call for “[a]dditional studies [on] the development of writing expertise in a variety of discourse communities and the influence of curriculum and instruction on that development would aid in our efforts” (Beaufort 178).

While communication and collaboration are important steps in improving student instruction, examining past scholarship to understand the fundamental differences and similarities is crucial because a simple meeting to discuss an upcoming assignment will not illustrate to either field their disparate beliefs of writing and knowing. In order to answer the aforementioned calls of both fields, this thesis contains two crucial arguments: it illustrates the differing beliefs of librarians and compositionists on the relationship between writing and knowing, and it discusses how technology has affected both fields in similar ways. This thesis is significant to both fields because it investigates the disparities and commonalities between the fields that could potentially alleviate future problems due to breakdowns in communication between the fields. For example, one of the problems librarians face is students suffering from library anxiety. Library anxiety is something librarians have been writing about since the mid-

1980s. If compositionists read scholarship on library anxiety and discuss it with their class' librarian, the compositionists could understand and discuss the library with their students and potentially reduce students' anxieties about research. This would benefit the students and the librarians. Through the work my thesis proposes, topics like library anxiety and others can be brought to the foreground.

Alternatively, one of the problems compositionists face is how students select and evaluate sources. If compositionists familiarize themselves with library science scholarship on this topic, they could improve and adapt their instruction techniques to make the processes of selecting and evaluating clearer for students. While selection and evaluation is a problem for composition instructors, how technology affects this process is a problem both librarians and compositionists face. Examining how technology affects both library science and composition is significant because we live in a world where information is becoming continually more available. It becomes more important to be able to categorize appropriately and organize all that material in a way that maintains some type of logic. The first step in this process for a college educated person comes in the composition classroom where a standard assignment is the "research paper." The research paper and the research process are important because students will learn how to read critically, evaluate information, synthesize that information, develop their own arguments, and create valid knowledge for others to learn from and build upon. While the research paper appears to be just an assignment with only academic purpose, it really is training students how to develop new information from past works. For students learning to research effectively and to communicate, the research paper prepares them to be creators of information in any field or in any job after college. Therefore, during the process of writing the research paper students will be engaging with the vastness of a university library for the first time. It is a

worthy task to begin teaching students the processes of selecting, organizing, and evaluating sources of information in a digital age. We cannot properly instruct students how to successfully research in this digital age unless we are aware of what they find difficult during the research process and of what types of information they are most likely to use. The following chapter of this thesis will expand upon how technology has similarly affected both library science and composition. To do this I will discuss how librarians and compositionists are investigating the types of sources students are using and how both are redesigning instruction sessions and assignments.

Chapter 2 – A Starting Point: Where Librarians and Compositionists Agree

While the fields of library science and composition appear to be quite disparate, current scholarship reveals that both fields have been affected by advances in technology in similar ways. Each field is currently researching and publishing in order to discover the type and quantity of electronic sources students are using to complete research assignments and are also investigating ways in which to redesign or rework assignments and/or instruction sessions in light of technological advances. At the most basic level, both fields want to teach students skills they will be able to use throughout their collegiate careers and beyond. Separating the job of the reference librarian and the composition instructor becomes challenging when examining the students' work. Because the skills they are teaching students can overlap, both are preparing students to write an effective essay by teaching strategies for reading critically, analyzing, and evaluating. Even though a student may learn research skills in a library instruction class, the same student may need to ask his or her composition instructor a question about research at a later date. This means an instructor or a librarian may teach the same student the same skill for the same assignment.

Recognizing that overlap between the two jobs can occur for students only helps to legitimize why major similarities are appearing in current scholarship. In this chapter I will discuss how technology has affected library science and composition in similar ways. By investigating the scholarship of librarians and then compositionists, I will illustrate that librarians are examining the types of sources students are using and redesigning instruction sessions.

Compositionists are also discussing these two issues along with student writing. Ultimately, in this chapter I will argue that because librarians and instructors have been similarly affected by technology, they must discover how students are currently writing and researching in order to improve instruction.

Librarians are conducting studies to discover what sources students are actually using to complete their assignments. In Randall McClure and Kellian Clink's article, "How Do You Know That?: An Investigation of Student Research Practices in the Digital Age," they study "student research habits in light of today's standards for information literacy" (115). They investigate how students select and evaluate sources for their research papers now that gathering research on the internet via search engines is so easy. The focus of their project is on how technology has changed the way students research. Traditional sources take more time and effort for students to locate and use. Their study confirms "that students are becoming increasingly reliant on the Internet for the information," which proves that student research habits have changed with the onset of technology (McClure and Clink 18).

McClure and Clink's study helps to confirm suspicions concerning the Internet and how students actually conduct research. This is important research for scholars in both fields because if we can understand what research choices students are making, then we can inform students that these choices might not lead them to the best information available. This source also highlights the fact that students are comfortable with the Internet, so they may choose to find sources using search engines or commercial websites simply out of convenience. This source also illustrates how students' research habits have changed with the onset of technology. While students may still have tried to find the information they needed in the quickest way possible, perhaps by simply fact-finding quotes in traditional print materials such as reference books, prior

to the Internet they never before had the ease of availability for information like they do now. Because publishing information on the Internet is unregulated, the risk of students locating unreliable information has exploded almost as fast as the Internet itself. Studies like this that count the types of sources students are citing can help librarians and instructors focus on what types of sources they need to stress and which sources they need to steer students to use less.

Another study conducted to investigate the types of sources students include in their papers was conducted by Anna M. Van Scoyoc and Caroline Cason. They illustrate how technology has changed students' research habits in "The Electronic Academic Library: Undergraduate Research Behavior in a Library Without Books." Their study focuses solely on digital libraries in order "to examine undergraduate students' research habits in the campus' electronic library (information commons) environment" (Scoyoc and Cason 47). They briefly discuss the function of learning commons and define the difference between a computer lab and a digital library. As with McClure and Clink's research, Scoyoc and Cason examine how students actually gather research on the Internet; specifically, they investigate if students actually use the sources available to them in a digital library or if they still rely heavily on Internet search engines. The study found that while students did have Internet library sources available to them, there was a "low-level usage of actual electronic library resources within the electronic library [which] may be due to the novel environment" (Scoyoc and Cason 55). This means students may not yet understand that a digital library serves a larger purpose than simply as a place for them to access computers and the Internet.

Understanding the importance of digital libraries and digital collections is becoming increasingly more significant as they are rapidly growing in numbers and size. Some online universities' library collections may only be available via the Internet. With Internet courses and

online degrees increasing in popularity, understanding how students use these sources is important to librarians and instructors. However, on-campus students also have the opportunity to access digital collections and/or digital libraries. This means instructors and librarians will still need to be aware of student research habits in these types of environments in order to instruct students on proper research behaviors. If a student has never been taught why sources from a scholarly journal accessible through a library's digital collection may be more reliable than searching Google and finding someone's website on a particular topic, the student will continue to use the Internet without ever accessing the library's sources simply because he or she does not know any better. Also, locating information in a search engine can be much easier and faster than locating an article on a database. Instructors and librarians need to read and conduct studies such as Scoyoc and Cason's so they will be prepared to instruct students according to students' current research behaviors. As technology continues to advance, students' behaviors will continue to adapt and to evolve.

Librarians are reworking the way they teach instruction sessions to suit technological advances and newer versions of the research paper. In "Evidence vs. Anecdote: Using Syllabi to Plan Curriculum-Integrated Information [(CII)] Literacy Instruction," Anna VanScoy and Megan J. Oakleaf research syllabi to discover what types of research skills freshman composition students need in order to successfully complete required assignments. One issue they discuss in their literature review is "that CII programs tend to have multiple tiers ranging from basic to advanced. There is no consensus on which skills are 'basic' and which ones are 'advanced,' and there are no recommendations on how to distinguish the two" (VanScoy and Oakleaf 567). Examining syllabi will help librarians gauge which skills students at various levels of their universities need to be taught. The article concludes by encouraging librarians to study syllabi in

order to teach CII sessions that address the students' needs; accordingly, "this study demonstrates that first-semester, first-year students have required research needs: they must be able to find articles, Web sites, and books to complete their assignments. For some incoming students, all of these skills are mandatory. Therefore, the basic tier of CII should [at least] include" the above listed skills (VanScoy and Oakleaf 573).

VanScoy and Oakleaf's study is helpful when redesigning library instruction sessions. While every freshmen composition class may have slightly different assignments, this study illustrates how librarians can investigate syllabi to tailor each instruction session to match a particular class' assignment. This aids the librarians in gauging which types of sources will be required in order to complete particular assignments. The investigation of syllabi is something that will remain important as technology continues to advance. Compositionists will continue to change assignments and requirements, and librarians will need to adjust instruction sessions according to these changes.

It is important to know that both librarians and compositionists are being affected similarly by technology; specifically, it is important for librarians to know how and what types of sources students are gathering in order to design instruction sessions according to student needs. Librarians are becoming more concerned with student learning outcomes as technology continues to advance. Librarians often design or use pre-designed quizzes to evaluate what students learned in library instruction sessions during their freshman year of college. Assessment of this type can be informative because it reveals which skills students have mastered and which skills students still need to learn. However, assessments like this do not show what kind of research students are conducting in their work. Librarians cannot assume that if students know how to locate reference books, then they will automatically locate and use

reference books for assignments. Studies like McClure and Clink's and Scoyoc and Cason's can help librarians more than using assessment exams alone because it allows librarians to see specific types of sources students are most likely to use in their work. This information makes tailoring instruction sessions for students more precise. If students seem to be gravitating towards one source when another type of source may be more effective, then librarians will know to focus on why one type of source is more reliable than another type.

Knowing librarians are currently changing how they teach instruction sessions is also important for librarians and compositionists. VanScoy and Oakleaf's work shows that librarians are currently trying to increase collaboration and communication in order to improve library instruction sessions. Librarians are trying to meet with faculty members, read over assignments, and/or read syllabi before planning and teaching the instruction sessions. This type of work has helped to improve sessions but more can still be done. Continuing to research how students are using sources and how librarians are reviewing assignments, examining syllabi, and meeting with faculty can help to further improve instruction sessions.

Compositionists are also examining students' work but with an interest in writing. In "Writing in the 21st Century," Kathleen Blake Yancey describes how perceptions and practices of writing have changed since the twentieth century. She explains past opinions of writing such as: children were often seen more "as receptors than as producers of the written word," "writing was associated with unpleasantness," and "teachers should test students not in speech but on paper" (Yancey 2). She describes the transformations of writing from the 1930s to today and acknowledges the past work of "Janet Emig and Sondra Perl, Lucy Calkins and Nancie Atwell, Donald Graves and Mina Shaughnessy" (Yancey 4). With digital technology innovations, Yancey claims that people now "want to compose and do – on the page and on the screen and on

the network – to each other” (4). Yancey asserts that “we have moved beyond a pyramid-like sequential model of literacy development in which print literacy comes first and digital literacy comes second” because they now occur alongside one another (6) . Yancey’s work displays how the writing process has changed because of technology, and she concludes with a call for the need to design a new model for writing. While Yancey’s report does not discuss the research process in relation to writing, it is quite clear technology has drastically changed how and where people are writing.

The significance of work like Yancey’s is that she illustrates how and where students are writing. Instructors need to be aware of students’ writing patterns to teach them relevant skills that will be useful inside and outside of the classroom. For example, if students mostly write outside of class by Facebooking, Twittering, and blogging, how can we as instructors re-envision writing instruction to coordinate with students’ interests? While a seasoned instructor may believe that students’ writing interests are irrelevant from a classroom environment, many businesses and universities are utilizing these modes of communication as well. This implies that now it is our duty to instruct students to professionally communicate researched information in formats other than the traditional research paper.

Compositionists are also investigating what sources students are actually using in order to complete assignments. In “Investigating the Practices of Student Researchers: Patterns of Use and Criteria for Use of Internet and Library Sources,” Vicki Tolar Burton and Scott A. Chadwick examine college writers’ “ability to locate, select, evaluate, synthesize, and cite outside sources in their own writing” (309). Based on the research questions presented in the article, two of the main goals of this study are to determine “what percentage of [students] used the library and/or the Internet to conduct research for the paper” and to discover “the relationship between library

and Internet training and actual use of the library and Internet” (Burton and Chadwick 314).

Burton and Chadwick’s “data contradicts the lore among teachers that most university students are now avoiding library research altogether. Conversely, it also indicates that teachers assigning research papers need to be aware that a significant majority of students will seek sources on the Web as well as in the library” (Burton and Chadwick 320). However, they do point out that students prefer Internet sources (Burton and Chadwick 321).

Burton and Chadwick’s study is significant because it depicts how students are researching in relation to how they are being trained to research. Their research also succeeds in dispelling rumors that students are no longer using the library. Unlike other studies, this one is attentive to how students learn to locate and evaluate sources. Studies like this are crucial to both library science and composition because they reveal what students are actually learning and what students need to be learning. However, this study concludes “with a call for researchers in composition studies to turn some of our electronic and intellectual energy toward developing a theory and pedagogy of source evaluation that will help students across the disciplines embrace the idea of careful evaluation of research sources” (Burton and Chadwick 326). What is unique about this study is that Burton and Chadwick call for composition scholars only to develop a theory and pedagogy even though they suggest faculty/librarian collaboration two pages earlier.

Another composition study conducted to illustrate the types of sources students are using when completing assignments was conducted by Mary Ann Gillette and Carol Videon. In “Seeking Quality on the Internet: A Case Study of Composition Students’ Works Cited,” Gillette and Videon are librarians who share “faculty concerns about how to combine opportunities afforded by the World Wide Web without losing the quality and security of more traditional

research” (189). They conclude by suggesting that students be given a guideline to accompany assignment instructions. A summarized version of their suggested guideline is listed below.

- Be vigilant about credibility of author and/or sponsor.
- Inform students in class about the *types* of Internet sources acceptable for the assignment.
- Inform students of the minimum amount of pages which will be accepted.
- Agree in class on the exact format for all electronic citations.
- Consider providing a checklist of criteria for evaluating the quality of Web sites.
- Consider asking students to annotate the citation to the Web address with a sentence or two describing the site. (Gillette and Videon 193)

Gillette and Videon’s case study examining the types of Web sites used by students is significant because it shows the quality of sites being used by students and provides instructors with a suggested guideline that may help students. In order to improve the effectiveness of composition and library instruction, studies like this will have to continue to be conducted in order to understand what students are actually doing during the research process. If instructors can discover a trend in the types of sites students normally include in their research papers, then instructors can also encourage continuing or discontinuing the use of these particular sites depending on whether they are considered credible or not.

Lastly, compositionists are redesigning assignments to follow current trends in technology or to simply revamp the traditional research paper. In “Creating Possibilities: Embedding research into Creating Writing,” Jason Wirtz illustrates that research and research writing assignments must continue to evolve. Instead of discussing ways that research has changed, he re-envision “the traditional research paper” requiring “students to write a short

story that embeds their research to enhance the narrative” (Wirtz 23). His main argument for revamping the research paper is that if aspects of the assignment become too formulaic “then the research paper has successfully been turned into a multiple-choice text” (Wirtz 24). By using his method, students learn how to creatively use the information they learn instead of simply plugging facts into a paper.

Wirtz’ work illustrates how instructors can convert the traditional research paper into a project that is more current and exciting. While he does not illustrate the need for new methods of research, his work does show how successful new versions of the research paper can be. He is teaching his students a new way of incorporating research into their own writing. His work represents just one of the many ways instructors can revamp traditional composition assignments.

In “Rethinking Research Writing: Public Literacy in the Composition Classroom,” Linda Adler-Kassner and Heidi Estrem also re-envision the process of writing research papers. They take a broader look at how people incorporate research into writing and acknowledge that it is not only students but also major authors who have been caught plagiarizing. Adler-Kassner and Estrem suggest that not all writing teachers know how to teach the research process. As other compositionists have suggested in the past, they discuss how students become experienced at discovering what teachers want them to do. Completing an assignment becomes more of a mindless task than a learning experience for students; students “could point to very few moments in this year and a half of English courses when they had either felt a sense of personal engagement or imagined an audience beyond the instructor” (Adler-Kassner and Estrem 121). While Wirtz felt genres could be constricting, Adler-Kassner and Estrem seem to follow the same beliefs because they design a new essay “that asks students to see, understand, interpret,

and know a subject through multiple genres. In employing genres as both a lens and a rhetorical tool, the multi-genre research paper asks students to be explicitly creative and scholarly, to pay close attention to matters of style as well as matters of research” (Adler-Kassner and Estrem 124).

From Wirtz to Adler-Kassner and Estrem, the view of research and research writing has clearly evolved from the traditional research paper. Their work proves that changing the way students conduct and incorporate research into writing can actually help students to have a clearer grasp on the information they are learning and producing. Inventing new ways to assign research assignments requires students to also begin reimagining their own personal ideas of research and research writing. When comparing the works of McClure and Clink, Scoyoc and Cason, and Yancey, we can begin to develop assignments that not only focus on proper research habits but that also take advantage of current technological trends. If our students are already composing in new ways on the Internet, why not take advantage of their technological knowledge and skills and show them how their interests can be used in academics and beyond? Whether we are librarians or compositionists, we should always aim to challenge our students with current trends of technology, research, and writing. We should also aim to continually collaborate and communicate in order to continually improve instruction sessions and scholarship.

Knowing these key similarities is important to both fields. When arguing for the need to increase communication and collaboration, having a starting point where the two fields are similar reveals holes in the scholarship where the two can join forces to produce more research that will ultimately benefit students. In the library science scholarship, I cite works illustrating where librarians are currently examining what types of sources students are using and explaining

how librarians are using various documents, such as syllabi, and communicating with faculty in order to improve instruction sessions. This research is being done because technology has affected student research habits and instruction sessions. I also cited composition scholarship revealing that they are conducting similar research tracing what sources students are using, how students are writing, and how to rework current assignments to match technological changes and students' interests.

Understanding these key similarities is important because while these can be starting places for collaboration and communication, they could also serve as points of contention between the fields. For example, a compositionist could take his or her class to the library for instruction. After the compositionist collects the students' finished assignments, some period after the instruction session, the compositionist could notice that his or her students did not include any credible sources in their papers. He or she will grade the papers accordingly and think that the librarian must not have been ineffective, or the students must not have been paying attention that/those day(s) in the library. A situation like this could occur even if the instructor met with the librarian and gave him/her the assignment and the syllabi if both the librarian and the compositionist are unaware of how students are conducting research. Alternatively, if both the librarian and the instructor are reading about student research habits, communicating about the class' syllabus and assignment, and collaboratively designing the library instruction session, then the library instruction session will be tailored to satisfy the class' needs. Compositionists can then transfer what they know about how students are researching from the library scholarship into classroom lectures. Knowing these similarities could potentially benefit librarians and compositionists' future research and scholarship, improve instruction for both fields, and clarify

and help students through the research and writing process in the library, the classroom, and beyond.

The following chapter of this thesis will expand upon the disparity between librarians and compositionists' views of writing and knowing. In order to clearly illustrate their beliefs on the relationship between writing and knowing, I will investigate models of the research process developed by librarians and teaching philosophies developed by compositionists. I will then discuss current beliefs and models, show how these models have changed over time, and explain why it is important for librarians and compositionists to be aware of this difference and how it has changed.

Chapter 3 – Potential Places for Conflict: Where Librarians and Compositionists Disagree

When examining the scholarship completed by both librarians and compositionists, there is one fundamental difference that greatly impacts how they understand the research process in relation to student writing: their view of the relationship between writing and knowing. An instruction librarian's focus is to ensure that students learn how to research in order to locate the information needed to complete assignments. Librarians are attentive to how students select and evaluate sources. Whether in library instruction sessions or at the reference desk, librarians come into contact with students during the beginning of projects or when additional information needs to be gathered in order to complete assignments. Because librarians focus on the process of research, they do not normally have a reason to examine the finished assignment.

Conversely, freshman composition instructors establish the requirements of the class' research paper. This research paper could range from a traditional research paper to a re-envisioned concept of a research paper; either way, the assignment is created and presented to students by the composition instructor. The instructor will normally meet with a librarian to discuss what the library instruction sessions need to teach students in order to meet the assignment requirements. Students may ask librarians for help when gathering sources, but they will discuss the process of incorporating their sources into their papers with their composition instructors. While librarians focus on the research process, the composition instructors will focus on the submitted assignment.

With librarians focusing more on the research process and with compositionists focusing more on the writing assignment, it is not surprising that their view of the relationship of writing and knowing is drastically different. In this chapter I will illustrate how librarians and compositionists view the relationship between writing and knowing. For librarians, the process of knowing and writing is separate. This can be understood through the elaboration of two main points: one, the research process ends when students have either located the correct answer or when they have located enough material to complete their assignment; and two, students learn by researching, not from writing. For compositionists, students learn by writing. This is visible through three main points: one, there is a relationship between composing and creating meaning; two, the writing process should not end after students submit the assignment; and three, writing reinforces learning. Ultimately, an initial step toward creating effective instruction for students involves understanding their different views of writing and knowing in relation to the research paper.

For librarians the process ends once students locate the correct answer or once they compile enough sources and information in order to complete the research paper. This focus on the research process can be seen in a foundational study that was conducted in the 1960s by Robert S. Taylor. While this work does not examine students in freshman composition courses, Taylor does outline research behaviors of information-seekers. In “Question-Negotiation and Information Seeking in Libraries,” he establishes the first popular model of the research process. His focus in this article is how information-seekers only discover their information need through research. A seeker needs to go through some research before he or she realizes what information is actually needed. His research model is listed below.

1. First of all, there is the conscious or even unconscious need for information not existing in the remembered experience of the inquirer. It may be only a vague sort of classification. It is probably inexpressible in linguistic terms.
2. At the second level there is a conscious mental description of an ill-defined area of indecision. It will probably be an ambiguous and rambling statement.
3. At this level an inquirer can form a qualified and rational statement of his questions. Here he is describing his area of doubt in concrete terms and he may or may not be thinking within the context or constraints of the system from which he wants information.
4. At the fourth level the question is recast in anticipation of what the files can deliver. The search must think in terms of the organization of particular files and of the discrete packages available – such as books, reports, paper, drawings, or tables. (Taylor 182)

As can be seen in the above model, Taylor's work successfully discusses the research behaviors of information-seekers and ends with the seeker locating the correct, or desired, "answer."

According to Taylor's model, it is not until the third level that an information-seeker is able to "form a qualified and rational statement of his question" (182).

This study illustrates that the process of knowing occurs when the answer is found. Taylor believes information-seekers cannot state their need in the form of a question until they have begun reading research. The process of knowing clearly happens during the research process and ends once the seeker locates the answer or enough material to complete the assignment. His work could inform academic librarians that students, especially freshman students who are new to the academic environment, could also have an equally challenging time

understanding the upcoming assignment and asking the librarian to help them find the information required to complete the assignment.

Through this work Taylor establishes the still-current belief that patrons never ask for what they need initially because they do not know what they need. For academic librarians to truly understand how to best serve students, they need to understand how students negotiate their research questions with librarians. For librarians, understanding how to conduct the reference interview is a skill he or she must learn. One downfall of Taylor’s article is that he never discusses how the information-seeker will use the located material.

Another illustration of how the process of knowing occurs when the answer is found or the material is located can be seen in a study that was conducted in library science in 1980 by Nicholas J. Belkin. In “Anomalous State of Knowledge as a Basis for Information Retrieval,” Belkin studies information-seekers and the research process related to information retrieval systems (IR systems). An example of his model can be seen below in Figure 1.

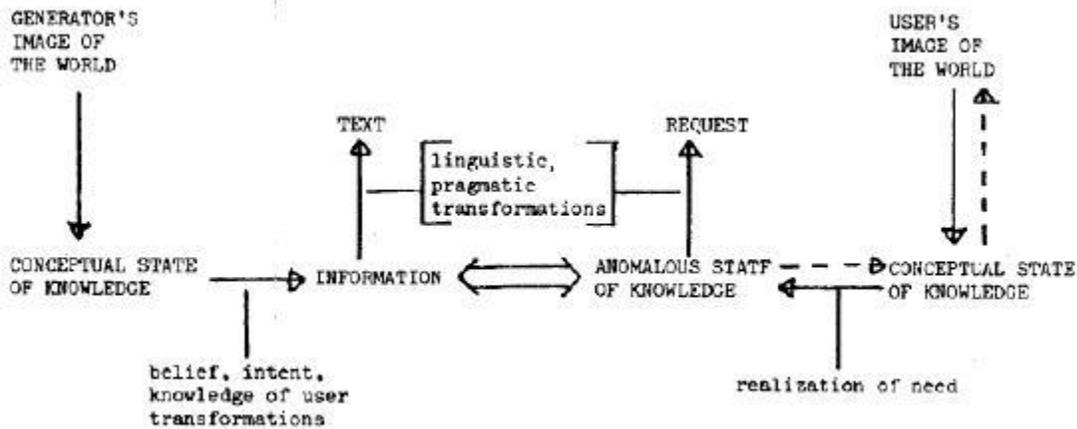


Figure 1: Cognitive Communication System for Information Retrieval (Achananuparp 3)

(Note: Figure 1 was originally developed and printed in Belkin's article; however, I am citing the model via Palakorn Achananuparp's paper.) While Taylor's model was how information-seekers learned how to formulate their needs in the form of a question for librarians or information specialists, Belkin's model is on how information-seekers learn how to formulate their needs in order to question the IR system. Belkin's "basic premise is that information science, and hence IR, is a problem-oriented discipline, concerned with the problem of the effective and efficient transfer of desired information between human generator and human user" (41). Simply stated, Belkin's argument is "the user realizes that there is an anomaly in that state of knowledge with respect to the problem faced. This realization in combination with intent and so on, leads to a recognized anomalous state of knowledge (ASK), which, further modified by linguistic and pragmatic considerations, becomes a request put to the IR system" (Belkin 43).

Both Taylor and Belkin are discussing how users learn to adequately state their research needs or research questions. Both believe that information-seekers learn through researching, not through writing. The process ends once the answer is located. The ASK model was not solely Belkin's original concept rather a development from others' past models such as Taylor's levels of information need (Belkin 136). Information-seekers' information needs are difficult for them to coherently express "because inadequacies in a state of knowledge can be of many sorts, such as gaps or lacks, uncertainty, or incoherence, whose only common trait is a perceived 'wrongness'" (Belkin 137). This model presents a way for researchers to "account for [the] mismatch between [the information-seeker's] request and need" (Belkin 138). The process of knowing ends once the seeker locates the information that bridges the gap from uncertainty to certainty.

For current librarians research on querying IR systems remains helpful and relevant because many academic libraries are continuing to build their online collections. Understanding how students are searching the libraries' databases for information is critical if librarians are going to identify students' difficulties in researching and to develop new methods for teaching students to research more effectively on IR systems. Students may experience more difficulty searching databases than search engines because they are often indexed differently.

For example, many library databases are indexed via controlled vocabulary, while search engines such as Google utilize free text indexing. This means that students will have to know how to query both types of IR systems in order to locate information in both places. This could lead students to research on Google instead of databases. Librarians will have to teach students how to search both types of systems, and they will also have to spend more time addressing how to evaluate sources than in the past. Belkin is illustrating that if students can locate one useful source, then they can discover their information need from that source and locate other materials via an IR system. The process ends once the needed information is located. It is during the research process that the seeker moves from not knowing to knowing.

While Taylor and Belkin's works display how the process of knowing is satisfied through research, the work of Carol Collier Kuhlthau goes on to illustrate how students learn through research and then write. While Taylor and Belkin focus on the research process in general, Kuhlthau's work actually focuses on the research process of students; however, she does build off of their research models. In the 1980s, Kuhlthau developed her own model, which originally consisted of six stages:

1. Initiating a research assignment
2. Selecting a topic

3. Exploring information
4. Forming a focus
5. Collecting information
6. Conclusion of the search for information (Kuhlthau 8-9)

Kuhlthau argues that “feelings of anxiety and confusion are common at the beginning stages” (7). Kuhlthau then makes an argument that effective library instruction sessions should implement a process approach like the one she developed.

Kuhlthau’s work became a model for teaching the research process for instruction librarians. Taylor, Belkin, and Kuhlthau’s models can all be applied to the methods in which students learn to gather information for writing research papers. Kuhlthau’s model is especially important to the field of library science since she examined how students researched to complete the research paper. Like Taylor and Belkin, Kuhlthau does not focus on the final product. Unlike Taylor her work suggests that research is not always a process conducted in order to find answers, but that research is a process which requires learning, understanding, evaluating, and analyzing information in order to complete research papers. From Kuhlthau’s model it is clear that students learn from the research process before they write their papers or present their findings.

Compositionists have a differing opinion of writing and knowing. In “Writing as Process: How Writing Finds Its Own Meaning,” Donald M. Murray discusses how writing creates a continual evolution of meaning. A writer does not know what he is trying to say until the words themselves inform the writer: “writing is a significant kind of thinking in which the symbols of language assume a purpose of their own and instruct the writer during the composing process” (Murray 3). This type of thought transfers the power and meaning of writing from the

writer to the writing itself, and it is “the writing itself [that] helps the writer see the subject” (7). When it comes to the research paper, the forces of “collecting and connecting, writing and reading” all interact with each other during the writing process but not necessarily before (7). Murray claims that there are three stages of writing: rehearsing, drafting, and revising. It is during revision that the writer hopes to discover what he intends to say.

Murray’s findings directly oppose the views presented in the above mentioned library science scholarship. He believes a writer does not even realize what he or she is trying to say until the writing process begins. So, even if a student was writing a research paper, the student would not discover what he or she was trying to say until they begin writing and trying to incorporate the research material. According to library science scholarship, the process of knowing ends once the information is located and read. Conversely, Murray’s work suggests the process of knowing starts when the student begins writing. In the same way the librarians outlined the steps to the research process, Murray outlines the steps for instructors to teach writing as a process instead of a product. Below is a summarized version of the list which was printed in “Teach Writing as a Process not Product.”

Implication 1: The text of the writing course is the student’s own writing.

Implication 2: The student finds his own subject.

Implication 3: The student uses his own language.

Implication 4: The student should have the opportunity to write all the drafts necessary from him to discover what he has to say on this particular subject.

Implication 5: The student is encouraged to attempt any form of writing which may help him discover and communicate what he has to say.

Implication 6: Mechanics come last.

Implication 7: There must be time for the writing process to take place and time for it to end.

Implication 8: Papers are examined to see what other choices the writer might make.

Implication 9: The students are individuals who must explore the writing process in their own way.

Implication 10: There are no rules, no absolutes, just alternatives. (5-6)

In the list above Murray illustrates that the process of learning and knowing develops for students during the writing process. It is the students who are in control of their own learning process, not the instructor. The students' learning is inhibited if the instructor tries to take control.

This relationship of composing and meaning-making can also be seen in the work of David Bartholomae. In "Inventing the University," Bartholomae illustrates that students do not always know how to compose and create meaning that is acceptable at the university level. While Bartholomae's article does not specifically address the research paper, he does discuss how students' writing must change and improve once they begin creating and submitting work in college and beyond. He argues that "every time a student sits down to write for us, he has to invent the university for the occasion – invent the university, that is, or a branch of it, like history or anthropology or economics or English. The student has to learn to speak our language, to speak as we do, to try on the peculiar ways knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community" (Bartholomae 623). His argument is

that students must continually write at the university level in order in order to learn to create meaning beyond simply imitating or mimicking what they think they should be writing.

Bartholomae's work focuses on the writing itself. He acknowledges that writing at the university level requires new knowledge and skills that students may not have been exposed to in high school. He states that during their freshmen year students must learn "to write, for example, as a literary critic one day and as an experimental psychologist the next; to work within fields where the rules governing the presentation of examples or the development of an argument are both distinct and, even to a professional, mysterious" (Bartholomae 623-4). With or without research, learning to write papers at the college level will require students to recognize, understand, and write in this way. Bartholomae also argues that it requires a writer to know his audience: "One of the common assumptions of both composition research and composition teaching is that at some 'stage' in the process of composing an essay a writer's ideas or his motives must be tailored to the needs and expectations of his audience" (Bartholomae 628). This quote illustrates that writers do not necessarily learn from gathering the research, but they learn from incorporating the research into their own writing. Writers must learn to not only create meaning from research but to create meaning while also satisfying their audiences needs.

Bartholomae's piece is important because he illustrates the situation freshmen writers face when they begin writing in college and what feelings they may have concerning writing at the university level. A concern for students' feelings also appears in Kuhlthau's work, which means students may feel almost a "double anxiety" towards university writing when it comes to completing the research paper. Students are trying to not only write in a genre that is still new since they are just entering the university, but they are also trying to research at a new level. It takes time for students to understand that research is not just gathering facts, quotes, and

statistics to plug into an already finished paper. It is important for instructors to realize that students are uncomfortable with writing at this new level, and they become even more uncomfortable when researching and writing on an unfamiliar topic.

Even though it was written the same year as Bartholomae's piece, Charles Bazerman's *The Informed Writer: Using Sources in The Disciplines* is moving towards viewing writing and researching as a united process. Bazerman's work is a book-length source, which outlines the ways in which writers work through the writing and the researching processes at the same time. Instead of an essay with a clear argument, this work is more of a textbook explaining the two processes. He discusses skills such as writing, paraphrasing, summarizing, developing, analyzing, and evaluating. Then he goes on to discuss the actual synthesizing of sources and the writing of the research paper. Finally, he has a section on the writing process and on documenting sources. While he published earlier than Kuhlthau, Bazerman was one of the first to begin combining the fields. Even though he did not discuss or address library science as a field, he still made direct connections between the two.

Bazerman's work is still quite different from Kuhlthau's because even though he illustrates the research and writing processes, he discusses the fact that meaning is created through composing: "this book explains the skills of digging more deeply into your reading and then using that reading to develop your own original statements" (5). Bazerman's work illustrates that research may lead students to better understand their topics, but it is through incorporating this research into their own writing that they formulate meaning and discover their voices: "the assignments in this book give you practice in gaining control over the knowledge you are acquiring in all your courses and reading, so that knowledge can help you formulate and express your own thought" (5). Bazerman is illustrating his belief that research and writing lead

to learning and creating, which is opposite of Kuhlthau's belief that learning comes from the research and then the writing process begins.

The process of knowing does not end when the assignment is submitted. In "Process Pedagogy," Lad Tobin discusses how students can discover their own voice if given the chance: "my primary job was not to tell the writer where she had gone wrong or right but to help her see what she had accomplished and what the essay might become in its next incarnation" (6). Here Tobin illustrates that knowing or discovering comes through the process of writing and rewriting. His work seems to build from where the librarians' models end. He no longer believes "that successful writing was the result of some sort of process: think, outline, gather evidence, write, proofread" (Tobin 7). The aforementioned scholarship addresses this very process to illustrate that students learn before they write; however, Tobin disputes the idea of knowing and then writing from a process, even though at one time he too believed that is how it worked. He now "devotes most class time to workshops, group work, writing activities, and discussions of invention and revision strategies" (Tobin 16).

Tobin's work illuminates the idea that knowing comes from writing because he recognizes that the learning process does not end at the time of assignment submission. Writing seems to be a cyclical process where knowledge continues to increase with each draft instead of ending after the initial draft. Because most of the library science scholarship previously cited ends once the seeker locates the needed information, it does not address the idea that students can continue to learn long after the initial discovery of material.

Writing can also reinforce learning. In "Writing as a Mode of Learning," Janet Emig establishes a point that does not entirely mesh with Murray's claim that writing should be a process not a product because she claims "writing as process-and-product possesses a cluster of

attributes that correspond uniquely to certain powerful learning strategies” (Emig 7). To support this claim she notes that “Lev Vygotsky, A.R. Luria, and Jerome Bruner, for example, have all pointed out that higher cognitive functions, such as analysis and synthesis, seem to develop most fully only with the support system of verbal language” (Emig 7). According to Emig, the most “efficacious learning occurs when learning is re-inforced, then writing through its inherent re-inforcing cycle involving hand, eye, and brain marks uniquely power multi-representational mode for learning” (10).

From Emig’s work, it is evident that writing reinforces learning. Besides the fact that Emig believes writing is a product and process, she also seems to make a more scientific hypothesis between the connection of writing and knowing. She believes that students learn through writing, and she supports this claim by citing John Dewey and Jean Piaget. Both Murray and Emig still agree that there is a relationship between knowing and writing. Even though Emig published first, her article goes one step beyond Murray’s research to illustrate writing not only leads to learning, but that it actually reinforces learning.

This research illustrates that librarians and compositionists were simultaneously discussing the relationship between writing and knowing around the same time with the exception of Tobin; however, they had opposing views on this relationship. While Tobin’s piece is more recent, he cites and discusses work from the 1970s and 1980s. In order to improve instruction for students, librarians and compositionists need to be aware of what the other was and is still currently saying about research and research writing. Current scholarship for both fields is making new arguments for the process in which students research and write. In the remainder of this chapter, I will discuss how research and research writing processes have changed by examining current work in library science and composition. My argument in this

section of the chapter will reinforce my argument for the chapter as a whole; current scholarship also illustrates that both fields still disagree on the relationship between writing and knowing. To illustrate this I will discuss two main points associated with library science scholarship: one, there are multiple ways to formulate queries; and two, guided inquiry can help students research and learn more effectively. Both of these points were developed from the past library science sources previously discussed in this chapter. Then, I will discuss two main points from the composition sources: one, students can find their own voice through writing; and two, a new way of writing can help students realize what they know.

Examining library science scholarship, Belkin continued working on his ASK model until 1986. His more recent work was composed in 1995, and it focuses on multiple query representations for information retrieval. Palakorn Achananuparp argues that even in Belkin's more recent work he is still re-examining the user's information problem, which is the same problem that motivated his ASK research. Achananuparp accurately summarizes Belkin's recent work below.

Belkin discussed that if one has available several different representations of a single information problem, then it makes sense to use all of them in combination, in order to improve retrieval performance rather than trying to identify and use only the best query. In addition, although the comparison of performance between single best query and the combination of query formulations is still undetermined, particular combinations of multiple query representations often give a better performance than the single best one. Thus, in the cases where knowledge of the query performance is not available, it is always a good idea to combine the formulations. Even in the cases where such knowledge is available, it is almost as

effective to use it for weighted query combination as it is to use choose the best single query. (Achananuparp 11)

Because Belkin's work highlights the information retrieval process, he does not elaborate on how seekers use the located information. While Kuhlthau's work seems to focus more on the information research process and not simply the information retrieval process, Kuhlthau and Belkin's works complement one another. However, Belkin's work still shows the seeker knowing from the research process, not from what the seeker does after located the research.

In Kuhlthau's most recent book, *Guided Inquiry: Learning in the 21st Century*, she continues working with her information search process model. While Kuhlthau discusses guided inquiry in this work, she argues that "the terms can be used interchangeably" (*Guided Inquiry* 22). She now presents and elaborates on the inquiry process. She cites Janet Emig's work on the prewriting stage of the writing process. Kuhlthau is transitioning closer to the compositionists' view of writing and knowing, but she also reinforces her belief that students research and then write: "The inquiry process precedes the writing process to prepare students for writing by giving them something to talk about and in turn write about. It is during the inquiry process that students build constructs for writing, composing, and creating" (*Guided Inquiry* 22). Kuhlthau's extends Ogle's KWL framework when she discusses quided inquiry; the questions Kuhlthau suggests include:

- What do I know? – K
- What do I want to know? – W
- How do I find out? – F
- What did I learn? – L
- How do I use what I learned? – U

- What will I do next time? – N (*Guided Inquiry* 4)

Kuhlthau believes that guided inquiry offers unique benefits for students, teachers, and librarians.

Even with the above listed questions accompanying Kuhlthau's information search process model, she has further developed but not changed her argument. Like a compositionist, she does stress that students learn more effectively when they synthesize information into their own ideas; however, she clearly argues that students cannot write until they know what they are going to write about through the research process. Kuhlthau's main argument is that "Guided Inquiry provides ways for students to develop their ideas through the interpretation of the facts they collect" (*Guided Inquiry* 90). Conversely, a compositionist would argue that students develop their ideas through writing. It is interesting to note that both Belkin and Kuhlthau continued building off of their original models for years. Their continual dedication shows they both understand that their models are still working towards understanding how students research and/or incorporate that research into writing. While Belkin branched away from his original model slightly after six years of publishing, Kuhlthau has produced twenty-three publications since 1985 discussing and elaborating on her information search process model.

Current composition literature shows that compositionists also still agree that knowing comes from writing. In "Between the Drafts," Nancy Sommers argues that students need to learn to find their own voice through writing. This article is actually a response to earlier works including Bartholomae's "Inventing the University." One of her main points is that "revision does not always guarantee improvement; successive drafts do not always lead to a clearer vision. You can't just change the words around and get the ideas right" (Sommers 26). Sommers is not arguing against the notion that writing leads to knowing, but instead she thinks that sometimes

when research writing we can give “authority to someone else, to those other authorial voices” (28). She goes on to argue that when “students write about their lives, they write with confidence. As soon as they begin to turn their attention toward outside sources, they too lose confidence, defer to the voice of the academy, and write in the voice of Everystudent to an audience they think of as Everyteacher” (Sommers 29). Her ultimate goal is to help students in the drafting stages to help students to learn how “to work with sources of their own that can complicate and enrich their primary sources, they will find new ways to write scholarly essays that are explanatory, thoughtful, and reflective” (Sommers 30).

Sommers is elaborating on the trouble students have with research writing not with writing in general. She clearly explains how students write with confidence and voice when they are free to write about something personal, but it is when they try to use other sources that they lose both. For Sommers, students may still be discovering what they know from sources when they write, but the problem, for her, is that while they may be learning, they are also losing their voices. Her work shows that the relationship between writing and knowing may actually be more complex for research essays than other essays.

A more current composition source focuses on the relationship between writing and knowing from a new perspective. In Bruce Ballenger’s chapter, “The Importance of Writing Badly,” he argues for teaching students to “write badly” (87). By writing badly he means for students to have “the absolute freedom to write absolute crap” (Ballenger 87). It is through this process of writing badly that he believes students can “discover what they think” (Ballenger 87). Next, he discusses that one of the problems students face when writing a research paper is that they “fall back on what they know” (Ballenger 87). Ballenger criticizes how students often research on the web because “they may miss the crucial review of the literature or summary of

the current conversation about a topic typically found in the beginning of an academic essay” (Ballenger 89). He argues that “the campus library will remain the best place to cast a net for term papers, but [he’s] coming around to see that the Web may be an even better place to practice how to evaluate” (Ballenger 91).

Like the other composition sources cited in this paper, Ballenger agrees that students discover what they know through writing. More specifically, he thinks a good way to do this is through writing badly. It is clear that like Sommers, Ballenger shows that the relationship between writing and knowing becomes more complicated when research is involved. His work also shows this relationship being further complicated by technology. Because the Internet separates information, he thinks new ways of evaluating Web information need to be developed.

Research on writing and knowing is important because it helps to illustrate that while there is scholarship in both fields calling for increased communication and collaboration, the scholarship on writing and knowing does not seem to be calling for either. The sources do not suggest communication and collaboration between the fields even if they do mention the other field. For example, Kuhlthau discusses Emig’s work; however, she goes on to state that her “inquiry process precedes the writing process,” and her inquiry process is what prepares students “for writing, composing, and creating” (*Guided Inquiry* 22). So, while Kuhlthau seems to be reaching towards Emig’s work, Kuhlthau’s work challenges Emig’s argument on writing and knowing in some ways. It is also interesting that she uses such a dated composition source since her book was published in 2007, nearly thirty-six years later; perhaps this only further illustrates the reason for more research to be completed. An example can be found in Ballenger’s chapter as well. Ballenger discusses student research habits by discussing how students value Web research while he emphasizes the importance of the library. He also suggests a need for more

work to be done on how to evaluate Web sources. Ballenger believes the library is important and hopes for research on evaluating criteria, but he does not suggest that to improve the research process we should collaborate with librarians. Even if the aforementioned sources do not call for increased communication and collaboration, one effective way to respond to their works would be for both fields to spend time reading past and present scholarship on writing and knowing in terms of the research process and begin, if they have not already, communicating and collaborating with one another. While some composition programs are starting to teach research writing through inquiry, more research and increased communication is still needed.

Knowing these key differences between the fields is equally as important as knowing the key similarities as presented in the previous chapter. While the key similarities provide librarians and compositionists a reason to work together and to read each other's works, knowing the differences can be beneficial when they encounter disagreements. For example, if a librarian and a compositionist work together to collaboratively write a journal article discussing student research habits, then they may come to disagree on how the student came to know his argument. The librarian may feel that the student learned his argument during the research process, and the compositionist may feel the student learned his argument while writing. Understanding that librarians and compositionists disagree on some aspects of writing and knowing can help them to work through their differing opinions to create a new and helpful article. Increasing communication and collaboration between the two fields to produce new research, scholarship, and instructional methods is beneficial to librarians, instructors, and students.

Chapter 4 – What Happens Next: Future Implications for Research and Pedagogy

This thesis project traces a trajectory of library science and composition scholarship ranging from the late 1960s to the present in order to identify conflicts and connections between these different fields. This project helps to illustrate how librarians and compositionists understand, represent, and teach the research process. The goal of this thesis is to bring awareness to both fields by describing how they are similar and different in terms of the research process in order to improve and facilitate communication and instruction. This project is divided into four chapters moving from identifying calls for more research on collaboration and communication, to discussing similarities and differences found in the scholarship, and ending with describing future implications in terms of future research and the teaching of research.

Chapter one began with a discussion on how the research paper served as a uniting factor between librarians and compositionists. Current scholarship in both fields called for increased communication and collaboration. Joyce Lindstrom and Diana D. Shonrock and Celia Rabinowitz called for increased communication and collaboration in their articles. There were problems due to breakdowns in communication between the fields. For library science Rabinowitz discussed faculties' lack of awareness of library anxiety and of how librarians helped students research. As compositionists, Burton and Chadwick focused on issues students faced when researching, and Adler-Kassner and Estrem talked about problems instructors encountered when teaching students to research. Library science scholars McClure and Clink, McMillen and Hill, and McGuinness all either made calls for further research or for increased communication

and collaboration between the two fields. Similar calls were found in composition scholarship by Yancey, Burton and Chadwick, and Beaufort. This chapter answered their calls by illustrating the differing beliefs of librarians and compositionists on the relationship between writing and knowing and by discussing how technology had similarly impacted both fields.

Chapter two discussed how changes in technology affect library science and composition. Librarians studied the types of sources students were using in their papers and reworked library instruction sessions to match students' needs. Compositionists also examined student sources and redesigned the student research paper. While more studies need to be done investigating student research habits, these similarities provided a starting place for librarians and compositionists to unite and discuss ways to redesign how they instruct students.

Chapter three illustrated how librarians and compositionists viewed the relationship between writing and knowing differently by chronologically tracing scholarship in both fields. Introductory library science research from Taylor, Belkin, and Kuhlthau led to a discussion of composition works by Murray, Bartholomae, Bazerman, Tobin, and Emig. These works were selected due to subject matter, popularity, and year of publication in order to make more valid connections between the fields. The second half of the chapter focused on current scholarship by Belkin and Kuhlthau because both revised their models. Sommers and Ballenger were also investigated. This chapter helped to illustrate that while librarians and compositionists may still disagree on the relationship between writing and knowing, if both fields are aware of how they may disagree, communication and collaboration will be easier and more successful. Also, when disagreements occur, knowing how they disagree helps to resolve future conflicts more easily.

This chapter summarizes discussions and reiterates my main arguments for the three previous chapters. For the remainder of this chapter, I will explain what my findings suggest

about future research and teaching. Based on my research, suggestions for future inquiry include looking at other kinds of documents, interviewing compositionists and librarians, understanding how students understand and represent the research process, and conducting ethnographic or empirical studies of interactions among students, librarians, and compositionists. In terms of teaching my work suggests the need to develop consistency in regard to the key terms and concepts used by librarians and compositionists, for librarians and compositionists to become more aware of the differences between the fields, and for librarians to re-envision the research model to better fit compositionists' view of the relationship between writing and knowing.

Examining documents other than published articles may bring light to information that scholars are not currently discussing in publications. Documents such as orientation materials, training materials, handouts, and online tutorials may reveal new methods or views about the research process. These materials could offer a differing picture on how librarians and compositionists understand, represent, and teach the research process. These materials could reveal that while this thesis does paint an accurate portrait of the views of both fields, they are currently working in a direction that is not indicated in the scholarship or in this thesis.

Conducting interviews with compositionists and librarians would improve the understanding of how they both currently view the research process. While arguments and conclusions can be drawn from the source materials included in this thesis, interview results could help to expand my discussion. Interviewing both compositionists and librarians could help to discover more similarities and differences, or it could reveal that changes in views described in this thesis exist.

Discovering how students understand and represent the research process when examining the effects of technology between the two fields will also be helpful. The research cited and

discussed in chapter two aided in understanding how librarians and compositionists see technology affecting their fields. It does not show us how students view the research process in light of the scholarship that was and is being produced by librarians and compositionists. Students' perspectives on the research process can help both fields recognize if their scholarship correctly portrays this relationship or if more scholarship needs to be produced that accurately addresses how students view the process.

Ethnographic or empirical studies of students, librarians, and compositionists interacting will also help to clarify the relationship between the way students conduct research and write research papers and the way librarians and instructors view this process. Understanding how students view the research process will help librarians and compositionists produce scholarship and improve instruction sessions. Conducting ethnographic or empirical studies is another way to show inconsistencies between the students' views of the research process and the librarians and compositionists' views. These types of studies could also help to improve instruction methods in the library and the classroom if discrepancies are found.

There are suggestions for pedagogy as well. Librarians and compositionists need to be consistent in regards to the key terms and concepts they use. This need for consistency is applicable to librarians, compositionists, and a discourse between those two fields. Information literacy is a term that is heavily used in library science scholarship. While compositionists are also discussing this topic, they do not use the term information literacy as often as librarians do. For students learning the research process, it is important that librarians and compositionists use the same terms because students may otherwise become confused. Students could have problems locating needed materials to complete their research papers if a compositionist tells

them they must consult at least one book, but during the instruction session the librarian uses the term monograph instead.

It is also important for compositionists and librarians to be aware of the differences between the two fields. Students will be working with both a composition instructor and a librarian to complete the research assignment. If compositionists and librarians are unaware of how they both view the process of knowing and writing differently, then students will be coached during the research writing process in different ways when trying to complete one assignment. This could make writing the research paper more challenging and confusing for the student.

There is also a need for librarians to re-envision the research model to better fit the compositionists' belief on the relationship between writing and knowing. From writing this thesis, it has become even clearer to me that writing does lead to knowing, so incorporating writing into an earlier stage of the research model, such as Kuhlthau's information search process model, could produce a more realistic representation of students' research and the research writing process. A redesigned model will help both compositionists and librarians improve instruction sessions.

Works Cited

- Adler-Kassner, Linda and Heidi Estrem. "Rethinking Research Writing: Public Literacy in the Composition Classroom." *WPA: Writing Program Administration – Journal of the Council of Writing Program Administrators* 26.3 (Spring 2003): 119-31. *Education Research Complete*. Web. 9 Sept. 2009.
- Achananuparp, Palakom. "Anomalous State of Knowledge in Information Retrieval: A Synthesis of Nick Belkin's Research." *Google docs*. Google, n.d. Web. 2 Mar. 2010.
- Ballenger, Bruce. "The Importance of Writing Badly." *Genre By Example: Writing What We Teach*. Ed. David Starkey. Concord, MA: Boynton Company, 2001. 86-101. Print.
- Bartholomae, David. "Inventing the University." *Cross-Talk in Composition Theory: A Reader*. Ed. Victor Villanueva, Jr. Urbana: NCTE, 1997. 623-54. Print.
- Bazerman, Charles. *The Informed Writer: Using Sources in the Disciplines*. Boston: Houghton Mifflin, 1985. Print.
- Belkin, Nicholas J. "Anomalous State of Knowledge as a Basis for Information Retrieval." *Canadian Journal of Information Science* 5 (1980): 133-43. Print.
- Beaufort, Anne. "Developmental Gains of a History Major: A Case for Building a Theory of Disciplinary Writing Expertise." *Research in Teaching English* 39.2 (2004): 136-85. *National Council of Teachers of English*. Web. 9 Sept. 2009.
- Burton, Vicki Tolar and Scott A. Chadwick. "Investigating the Practices of Student Researchers: Patterns of Use and Criteria for Use of Internet and Library Sources." *Computers and Composition* 17.3 (2000): 309-28. *ScienceDirect*. Web. 9 Sept. 2009.
- Emig, Janet. "Writing as a Mode of Learning." *Cross-Talk in Comp Theory: A Reader*. Ed. Victor Villanueva. Urbana, Illinois: National Council of Teachers of English, 2003. 7-15. Print.
- Gillette, Mary Ann and Carol Videon. "Seeking Quality on the Internet: A Case Study of Composition Students' Works Cited." *Teaching English in the Two-Year College* 26.2 (1998): 189-95. *National Council of Teachers of English*. Web. 9 Sept. 2009.

- Kuhlthau, Carol Collier. "Developing a Model of the Library Search Process: Cognitive and Affective Aspects." *Reference Quarterly* 28.2 (1998): 232-43. *Academic OneFile*. Web. 11 Mar. 2009.
- Kuhlthau, Carol Collier, Leslie K. Maniotes, and Ann K. Caspari. *Guided Inquiry: Learning in the 21st Century*. Westport, CT: Libraries Unlimited, 2007. Print.
- Lindstrom, Joyce and Diana D. Shonrock. "Faculty-Librarian Collaboration to Achieve Integration of Information Literacy." *Reference & User Services Quarterly* 46.1 (2006): 18-23. *Library and Information Science Full Text*. Web. 24 Jan. 2009.
- McClure, Randall and Kellian Clink. "How Do You Know That? An Investigation of Student Research Practices in the Digital Age." *Libraries and the Academy* 9.1 (2009): 115-32. *Project Muse*. Web. 9 Sept. 2009.
- McGuinness, Claire. "What Faculty Think – Exploring the Barriers to Information Literacy Development in Undergraduate Education." *Journal of Academic Librarianship* 32.6 (2006): 573-82. *ScienceDirect*. Web. 9 Sept. 2009.
- Murray, Donald M. "Teaching Writing as a Process Not Product." *Cross-Talk in Comp Theory: A Reader*. Ed. Victor Villanueva. Urbana, Illinois: National Council of Teachers of English, 2003. 3-6. Print.
- Rabinowitz, Celia. "Working in a Vacuum: A Study of the Literature of Student Research and Writing." *Research Strategies* 17.4 (2000): 337-46. *ScienceDirect*. Web. 24 Jan. 2009.
- Scoyoc, Anna M. Van and Caroline Cason. "The Electronic Academic Library: Undergraduate Research Behavior in a Library Without Books." *Libraries and the Academy* 6.1 (2006): 47-58. *Project Muse*. Web. 9 Sept. 2009.
- Sommers, Nancy. "Between the Drafts." *College Composition and Communication* 43.1 (1992): 23-31. *JSTOR*. Web. 9 Sept. 2009.
- Taylor, Robert S. "Question-Negotiation and Information Seeking in Libraries." *College & Research Libraries* 29 (1968): 178-94. Print.
- Tobin, Lad. "Process Pedagogy." *A Guide to Composition Pedagogies*. Eds. Gary Tate, Amy Rupiper, and Kurt Schick. New York: Oxford UP, 2001. 1-18. Print.
- VanScoy, Amy and Megan J. Oakleaf. "Evidence vs. Anecdote: Using Syllabi to Plan Curriculum-Integrated Information Literacy Instruction." *College & Research Libraries* 69.6 (2008): 566-75. *Library and Information Science Full Text*. Web. 24 Jan. 2009.
- Wirtz, Jason. "Creating Possibilities: Embedding Research into Creative Writing." *English Journal* 95.4 (2006): 23-7. *National Council of Teachers of English*. Web. 9 Sept. 2009.

Yancey, Kathleen Blake, A Report from the National Council of Teachers of English. "Writing in the 21st Century." (February 2009): 1-9. *National Council of Teachers of English*. Web. 11 Mar. 2009.