Transforming Information Literacy Through

Librarian/Course Instructor Collaboration:

A Case Study

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Abstract

This paper looks at librarian/course instructor collaboration in higher education and draws specific lessons from the two-year experience of a librarian embedded into an advanced college writing class. The case study pays particular attention to how collaboration influences students' development of research and writing skills and attitudes, and the instructional design of the course.

Keywords: information literacy, librarian/faculty collaboration, academic libraries, embedded librarian

Teachers and librarians occupy different terrain on a university campus, yet they fight the same academic battles and share tactical and logistical goals and concerns. Both librarians and English teachers "want to enhance students' literacy, particularly information literacy [IL], and help students become writers, problem solvers, critical thinkers, and self-directed, lifelong learners. Lastly, both want to build the social and learning community on campus" (Hollander, Herbert & DePalma, 2004, para. 4).

Ironically, while librarians recognize the importance of cooperation between themselves and their teaching colleagues, teachers seem less committed to close collaboration. This is unfortunate since "neither library nor composition instruction alone [yields] the strongest student writing, but [...] close collaboration between the two, in both creating the assignment and delivering instruction, is essential to supporting good student writing and research" (Barratt, Nielsen, Desmet, & Balthazor, 2009, p. 37). This paper responds to a call for greater cooperation between librarians and faculty and analyzes a librarian and a composition instructor's team-taught, source-based writing course as a case study instance where this cooperation is achieved. Particular attention is paid to how cooperation influences students' development of research and writing skills and attitudes, and to the instructional design of the course.

Literature Review

Differing attitudes between teaching faculty and librarians often discourage close cooperation. Time, habit, resistance to change, and what is referred to by Hardesty (1995) as "faculty culture" were found to be important factors affecting teaching faculty's willingness to collaborate with librarians (Badke, 2005; Hollander et al., 2004; McGuinness, 2006; Yousef, 2010). Faculty often don't think formalized IL training is necessary because they believe students acquire these skills on their own, over time, by being exposed to a variety of assignments and getting help from peers and teachers (McGuinness, 2006); or teachers simply don't want to take time from their classes (Touchard & Helms, 2003). Hollander et al. (2004) suggest that another important factor contributing to the lack of librarian/faculty collaboration is that teaching faculty sometimes "underestimate librarians and view them as subordinates" or feel that their students are "more knowledgeable and accomplished than typical undergraduates" so don't need training (para. 1).

Collaboration between librarians and faculty who were teaching separate courses in a learning community was studied by Rapchak and Cipri (2015), a librarian and writing instructor at Duquesne University. Four learning goals were identified which both the IL class and the freshman writing class emphasized: "[1] Students will find scholarly resources independently. [2] Students will evaluate information to find the best sources for a topic. [3] Students will integrate and cite information sources appropriately. [4] Students will use relevant sources that complement and complicate their own ideas" (p. 666). The writing teacher reported that their collaboration led to a greater degree of student engagement in research and writing and a carry-over to the next-level writing class.

The sort of collaboration often seen between librarians and faculty is delivered as "one-shot" or single-class collaboration where librarians respond to specific requests for assistance with some aspect of library usage. One such collaboration took place at the University of Georgia where composition teachers and librarians analyzed citation patterns in four sections of the first-year composition class (Barratt et al., 2009). Each class section received a different treatment with respect to librarian involvement and teacher directions. Barratt et al. concluded that "library instruction and carefully constructed teacher assignments—in particular written instructions—do have a positive influence on the quality of the research," but also noted that "good writing and scholarly research are not always interdependent" (p. 54).

In some courses which utilize the librarian as a resource, the "one-shot" library session has been replaced by a librarian's becoming "embedded" into a class. Dewey (2005) describes the process of embedding as "a more comprehensive integration of one group with another to the extent that the group seeking to integrate is experiencing and observing as nearly as possible, the daily life of the primary group" (p. 6). Abrizah, Inuwa, and Afiqah-Izzati's (2016) analysis of the roles of embedded librarians identified four types of roles: IL instruction and promotion, research collaboration with course instructors and campus entities, creation of IL web tutorials and support for online courses, and integration into academic departments for increased visibility and service. IL instruction is the primary focus of embedded librarians in the academic setting according to Shoemaker (2012). Shoemaker explains that embedded librarian-course instructor collaboration can involve full partnership in which the librarian participates in planning, application of IL skills to assignments, class discussion, teaching, and assessment of student work, or a partial partnership in which the librarian presents some IL lessons, attends some classes, and consults with students as needed.

Helms and Whitesell's 2013 case study describes their four-year process toward a full partnership in teaching a senior capstone business management class. Beginning with a one-shot training class, they progressed to a partnership in which the librarian was involved with evaluating and redesigning the course and its assignments, giving IL lectures, creating web sites and guides to business topics, and helping with assessment of the students' final project. The authors write, "By integration into the classroom in this manner, students are provided a direct contact—an individual they can be assured has detailed knowledge of their subject area, as well as course requirements. The librarian is then able to interact in a more productive and beneficial manner with students" (p. 406). Their close collaboration led "to increased self-efficacy among students about their research skills and abilities" (p. 406).

Background

Over the last five years a librarian and composition instructor at Andrews University, a small, private university in Berrien Springs, Michigan, have been collaborating on teaching the second semester of a two-semester college writing course. This course requires students to write a series of four to six source-based, analytical essays, ranging in length from 1600 to 1800 words. The course is thematically based with general topics chosen according to instructors' interests.

The "one-shot" approach typically characterizes library instruction at Andrews University. Teachers of various courses in which research plays some role bring their students to the library or invite librarians to attend their classes and provide instruction in identifying library resources and conducting database searches. The instruction usually occurs in one- or two-day workshops in the library's instruction lab, where students can search for sources under the librarian's (or the instructor's) careful watch.

In the class reported on here, the librarian and course instructor's cooperation increased and the librarian's contribution to the class expanded significantly. Initially their collaboration was quite traditional. The composition instructor set aside several class periods for students in his composition course to listen to lectures from the librarian on how to use library resources and to practice gathering materials to use in the required research project. Although no research was conducted to verify the hunch, both the composition instructor and the librarian concluded that despite the library lectures and related activities, and despite suggestions that they should consult with the librarian, students made little contact with the librarian beyond the library lectures. The process of embedding the librarian in the composition course evolved gradually but naturally as a response to this reality. To begin with, the instructor began including the librarian's contact information (office number, email address, phone numbers) in the course syllabus. In subsequent courses the librarian began visiting the course on the first day to be introduced to the students. A mutual curiosity about the effect of having the librarian more frequently present in the classroom led to frequent discussions of how the two professionals might collaborate. The librarian began to attend all class periods, participating in writing conferences, leading out in class discussions, and contributing suggestions to, or in many cases planning course activities, to reinforce research concepts the composition instructor and librarian wished to emphasize. This more intensive collaboration progressed through a two-year cycle.

Year 1 - 2015

Increased presence by the librarian in the course led to schedule changes. The course instructor began incorporating topic and source conferences where the librarian reviewed with students the databases they had consulted and sources they had collected and where necessary, assisted students who were having difficulties locating sources.

In several ways—through increased contact with students, participation in class discussions, and providing materials and relevant articles—these modifications raised students' awareness of the librarian as a co-instructor vital to their success. The embedded librarian, unlike the "one-shot" librarian whose appearances in the course are limited to a lecture or a single workshop, can answer questions at the point of need, inserting information about a relevant resource into the course instructor's lecture or answering student questions after class.

The composition instructor and librarian agreed to conduct more class sessions in the library instruction lab where students could discuss research strategies, then immediately reinforce them with practice. At the first class period students were invited to write two or three paragraphs commenting briefly on their prior research experiences. Many of their reflections suggested that they had spent little or no time in the library or that they had visited the premises only as part of freshman orientation tours or to look up isolated information for a class. Students' research experiences seem to be limited primarily to books and Google searches. For a computer savvy group, today's students are remarkably limited in their knowledge of and willingness to use scholarly databases and academic journals. Training in using EndNote, the software the university provides to assist students in citing sources, was also added.

Perhaps the most important consequence of embedding the librarian into the composition course is the potential for positively influencing students' attitudes toward, and assumptions about, research. In one instance the librarian shared an article relevant to the course topic that expressed a different view from the material presented by the instructor the previous day, and the instructor and librarian discussed their reactions to the article. This dialog encouraged students to see research as a conversation among interested scholars. In class discussions as well as through instruction, the librarian and teacher not only introduced research skills but also modeled attitudes toward research that they wanted students to adopt.

Year 2 - 2016

Teaching is a dynamic process. Every year is different and every class is unique. In the second year of the study, some activities were changed, causing improvements; others may have been less successful the second year. Because the students' skills and attitudes were not assessed in the same way as during the first year, they could not be compared between years to ascertain the impact of changes in specific teaching techniques from year to year.

One change that was important to the librarian during the second year was gaining access to the class management system so she could download and read all of the students' written assignments. This gave the librarian new windows into student writing and helped her grasp to a greater degree the challenges students faced in learning source-based writing. It also led to increased participation by the librarian in class assessment, specifically with the bibliographic essay, which was jointly assessed. Another change involved joint participation in student conferences. Three-way conferences involving the student, writing instructor, and librarian were conducted on the last writing project.

Method

This is a qualitative investigation using the case study approach to assess the influence of the embedded librarian model on an academic writing course. Prior to the beginning of the 2015-2016 school year, the investigators obtained IRB approval to assess and report on the project from the students' point of view. Students wrote an essay describing their research history at the beginning of the semester. This essay served as a baseline against which growth and improvement in research and writing skills, as well as changes in attitude toward both processes, could be measured. Out of this essay three hypotheses emerged: Collaboration between the librarian and writing instructor will result in

- Increased student awareness and use of library resources, particularly academic journal articles;
- Positive connections with the librarian as a research consultant equal to the writing instructor; and
- Maturing attitudes and understanding of research and the research process.

Participants

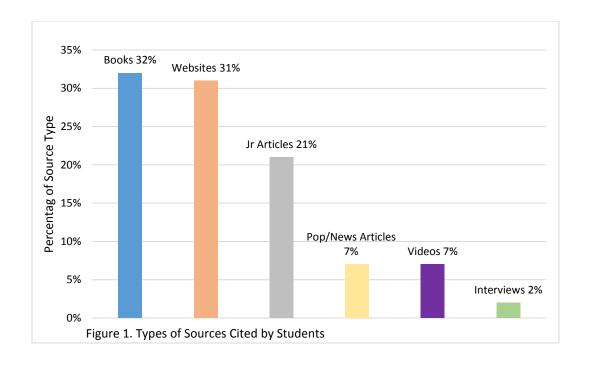
The subjects consisted of nineteen students enrolled in the Spring 2016 ENGL215 College Writing II course. The sample included one freshman, one sophomore, seven juniors, and ten seniors. All students completed an anonymous survey of class activities given at the end of the term, and most signed a statement giving permission to have their comments included in this report. Three of the nineteen preferred not to be included. Two students did not complete the citation analysis paper and were omitted from that portion of the data analysis. For each aspect of the assessment, percentages were figured on the number completing the assignment.

Data Collection

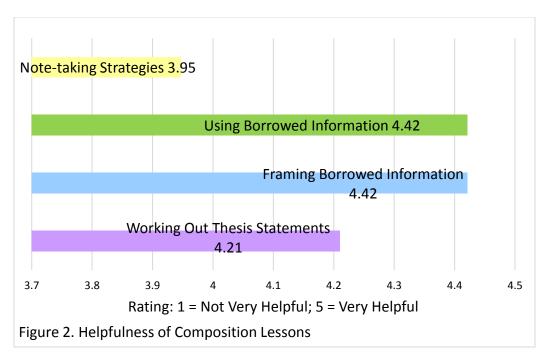
Data for this project was collected in three phases. An analysis was conducted on the bibliography from each student's final project to determine the number and types of sources cited. Students were given complete control over the sources they used in this project. Second, each student wrote a pair of essays, one at the beginning of the semester and one at the conclusion of the semester. In the essays students examined their attitudes toward research and the strategies they used to conduct research at the beginning and the end of the semester. Third, all students completed an anonymous survey appraising the value of specific class activities at the end of the term, and most signed a statement giving permission to have their comments included in our report.

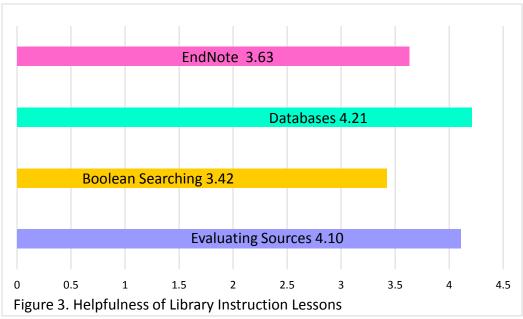
Results

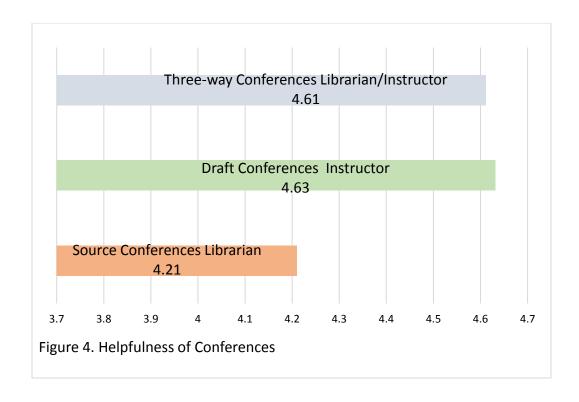
The validity of hypothesis I was assessed through an analysis of citations from the students' last writing assignment to determine the number and types of sources cited. The results of the citation analysis show that the average student cited 10-16 sources. Sources were divided by type as follows: books 32%, websites 31%, journal articles 21%, popular or news articles 7%, videos 7%, and interviews 2%. All students cited books, and all but one student cited at least one peer-reviewed journal article; most students cited 2-4 academic articles. This indicates that most students had learned skills needed to find academic literature. Positive comments from the students' research history essays corroborated their increased knowledge about library resources and confirmed hypothesis I (see Figure 1).



A survey of specific class activities was given to students on the last day of class. The results of this survey were used to assess the validity of hypothesis II. The survey was divided into three sections: Composition Lessons, Library Instruction, and Conferences. Students rated the helpfulness of each activity using a five-point scale with one indicating "least helpful" and five indicating "very helpful." The composition lessons rated highest were "Using borrowed information" and "Framing borrowed information;" both rated 4.42 (see Figure 2). "Learning to use databases" was rated highest of the library instruction lessons at 4.21. It was interesting to note that library instruction lessons were rated a little lower overall than composition lessons. The lowest rating on the entire survey was given to "Boolean searching" (see Figure 3). Conferences were also evaluated. "Draft conferences with the writing instructor" received the highest score of the entire survey at 4.63; "Three-way conferences with both instructors" was close behind at 4.61 (see Figure 4).







To further ascertain whether positive connections were made with the librarian, the end of term research history essays were analyzed for comments about the librarian. Several students indicated that they had learned about the roles, functions, and expertise of librarians as well as learning research skills. In the words of one student, "Without the usage of a properly trained and credentialed librarian, I am confident that my success would have been limited." Another student commented, "It had never actually dawned on me that it is possible to get help from the librarian to find information on what I was looking for. I now know that they have knowledge that I do not have that can help me do my research better."

Students were instructed in the use of the library catalog, databases, MeLCat (a statewide delivery system), and the EndNote bibliographic management computer program. Most students were unaware of the many resources available to them. One student wrote, "I now have a better idea of what each of the individual search databases are for." Another student commented, "As we worked in the library, I found it easy to use the many databases to find topics related to my thesis. It was very helpful that I could easily narrow down the source type that I was interested in (book, article, etc.)." MeLCat was a new experience for many. A

student exclaimed "I had no idea that MeLCat existed before this semester and when I found out, I got very excited!"

The majority of the comments about library skills training were positive; however, there were some negative comments, such as: "I would have preferred not spending class time reviewing how to use EndNote;" "There may have been too much time spent in the library. I'm speaking on behalf of someone that learns pretty quick and gets bored rather easily;" and "Better organization for the web will help [the] student navigate through the web page better leading the student in better research experiences."

Students' end-of-term reflections suggest that they had begun to grasp a sense of what the research process requires. Their comments support hypothesis III. They left the course knowing and, hopefully, understanding how to conduct a library search, consult databases, gather sources, and assess the sources' value. They developed or refined strategies for taking notes and for documenting and citing sources in their chosen styles. They practiced drawing connections between sources, locating patterns of information, supporting claims with sources, and putting sources into relationships with one another.

Students hopefully developed or improved on existing skills and processes, but perhaps equally important, they identified and adopted for themselves a researchers' attitude toward successful scholarship. This attitude manifested itself in several student comments. One attitude students admitted developing in class was a recognition of the value of peer review. One student wrote, "Having peers review your paper is also very important because they will find things that you did not see firsthand."

Students' comments suggest that after spending time conducting research of their own, they came to recognize and accept that successful research grows out of a caring attitude and an attention to detail. Students commented on "the importance of being very specific and careful with everything [they] chose to reference, because everything has an exact way that it is intended to be." Students understood that researchers develop a sense of thoroughness and care and demonstrate honesty and respect toward their sources. They came to understand the necessity for scholars to take research sources seriously and search out strong sources. The end result of the course, for some students at least, was a growing comprehension that success in research is a form of power. One student reflected, "Knowledge makes you feel powerful. I think that I enjoy research more now than I did at the beginning of the semester because I understand it better."

Students comprehended and developed respect for the demands of conducting effective research. One student admitted a growing respect for the researcher,

I have learned to respect researchers and their research more than I had before. I did not realize all the work that went into the research and how thorough the researchers have to be. Before coming into this class I saw research as just another chore that had to be done and was not looking forward to doing a research project. However, I have come to enjoy research and see[ing] all the different information that is out on the internet and in a library.

While many students came to enjoy (to one degree or another) doing research, they recognized that "research can be quite tedious depending on what you're researching. ... And if you want to get published, you absolutely have to be careful that you take careful notes and keep track of every source or else you may jeopardize your project." Students came to recognize that new research grows out of published research. As one student said, "I now understand that research is a tool that can bring to light new findings not just merely elaborating old discoveries."

The overwhelming theme shared by students' comments related to the exhausting time demands of doing research. Here is a typical time-related comment: "I have learned how important it is to not procrastinate with research projects; the best research is not done in a hurry, it takes time." The most satisfying comments were those which reflected that students had begun to see themselves as capable of joining the conversation, to value their personal experience as researchers, and to understand that they could shift their perspectives on an issue while considering the views of others.

Many students seemed to have completed the course with an understanding of what motivates scholars to do research and a growing recognition that they had begun to develop some of these same motivations. One student wrote, "The most important thing that I have learned about research this semester is that it leads to endless possibilities. It can give you insight to things that others may not know; things that could potentially better our society and world."

As the course progressed, students noted that well-developed research skills are often critical to success in one's chosen career as well as to current and future projects at the university. In the words of one student, "I had to do a research project for another class this semester and I was very excited to start working on it because of this class. I was able to incorporate everything I learned here into my research for the other project."

Discussion

Hypothesis I stated that *Librarian/Instructor collaboration will result in increased student awareness and use of library resources, particularly academic journal articles.* The citation analysis showed that all students used library resources, and all but one student cited academic journal articles. Additionally, student comments corroborated this hypothesis.

Hypothesis II stated that *Librarian/Instructor collaboration will result in positive connections with the librarian as a research consultant equal to the writing instructor*. Excerpts from the research history and class activities evaluation showed that the librarian's value increased from the *beginning* to the end of the term with most students, but students gave a higher degree of value to the composition lessons and conferences with the composition instructor. Thus, this hypothesis was partially supported.

Hypothesis III stated that *Librarian/Instructor collaboration will result in a maturing attitude and understanding of research and the research process*. This hypothesis was supported by many comments made on the final research history self-evaluation.

Conclusions and Implications

The embedded librarian model described here provides many avenues for closer connections between teachers and librarians, leading to improved relationships between librarians and students. To begin with, it gives students a step forward toward better research and writing by fostering the sense that librarians and course instructors exist to support and facilitate each other's efforts as partners. Moreover, it provides opportunities for students to develop skills needed to achieve their present educational goals and progress along their lifelong learning paths. Perhaps most important, it provides a way for students to begin to develop relationships with librarians.

While this collaboration has functioned reasonably well because the composition instructor and the librarian have a history of collaboration on other projects, implementing embedded librarianship on a larger scale would face many challenges. To begin with, large-scale embedding would likely be by mandate, which would effectively force many personnel into cooperative ventures in which they may have little or no interest. Without question, a high level of interest in and commitment to close collaboration is critical to the success of an embedded class. Librarians and composition instructors must be committed since it takes significant amounts of time to discuss and plan class activities and to seek ways to

implement them. Furthermore, large-scale embedding of librarians into composition classes raises issues of load assignment. Perhaps most critical are funding issues that are sure to arise if such a plan were to be attempted.

The evidence reported here suggests that for librarians and composition instructors who have the support of their respective departments, who are willing to commit the time required to discuss and plan an embedded class, who bring a spirit of cooperation and a willingness to listen to alternative suggestions for accomplishing course objectives, and who are willing to respect the unique skills that each partner brings to the experience, the embedded classroom can offer students an enhanced research experience that helps them form broader conceptions of what it means to be researchers and increased skills to use in the process.

The IL training program at Andrews University is currently undergoing challenges due to changes in general education requirements. The library's primary means of connecting with undergraduate students from 2007-2014 was via the class, Introduction to Information Technology, the only class in which IL training was built into the curriculum and students were graded on assignments presented by a librarian. This class was removed from general education requirements in July 2014; additionally, no standards have existed across majors and schools for inclusion of IL training. Consequently, it is impossible to guarantee that students have been introduced to the resources relevant to their majors or that they have had practice in using these resources.

In an attempt to remedy this situation, the University is now working on a new initiative called The Andrews Unified Framework. The framework consists of six broad categories which contain specialized competencies expected of students at completion of three levels: general education, bachelor's degree, and graduate school. Category 4 in the framework, "Use of Information Resources," applies specifically to IL skills. Librarians and administrative personnel have discussed this category together. It is one category to which the library hopes to contribute in a meaningful way.

After hearing about the collaborative project described in this paper, representatives of the framework committee talked with a small group of librarians and on another occasion the writing teacher to explore ways librarians and faculty can collaborate to improve the use of information resources on campus. It has been suggested that the writing teacher and the librarian conduct a workshop on research and writing for students who need extra help. Other ways to improve IL at Andrews University were suggested. Both the librarian and composition instructor expressed concern that the majority of students taking College Writing II were upperclassmen. They recommended that students be strongly advised to take the class as early as

possible to allow time for maximum implementation of the ideas and strategies taught in the class.

Some other ripple effects of this project have involved the instructor and the librarian sharing their experience with other faculty through the University's "Lunch and Learn" faculty development series and through one-to-one conversations with other faculty members. The writing teacher has encouraged other English and Communications faculty to request library instruction for their classes, including the required freshman class Introduction to Communication Skills.

Connection and collaboration between librarians and instructors can not only lead to student growth in research skills and attitudes, but also inspire students to experience the excitement of becoming a researcher. One student's comment epitomizes the rewards of such collaboration: "I have a new dream after taking this class, and that is to publish a paper someday. I enjoyed this research project so much that it has made me want to continue research in the future."

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