1-1-2011

Guiding Students from Consuming Information to Creating Knowledge: A Freshman English Library Instruction Collaboration

Carolyn B. Gamtso
University of New Hampshire, Manchester, carolyn.gamtso@unh.edu

Susanne F. Paterson
University of New Hampshire, Manchester, Susanne.Paterson@unh.edu

Recommended Citation

Paterson, Susanne F. and Carolyn White Gamtso. "Guiding Students from Consuming Information to Creating Knowledge: A Freshman English Library Instruction Collaboration." Communications in Information Literacy (CIL). 5:2 (2011): 117-126. doi:10.7548/cil.v5i2.91

Communications in INFORMATION LITERACY

Volume 5, Issue 2, 2012

[ARTICLE]

GUIDING STUDENTS FROM CONSUMING INFORMATION TO CREATING KNOWLEDGE

A freshman English library instruction collaboration

Susanne F. Paterson
The University of New Hampshire at Manchester

Carolyn White Gamtso
The University of New Hampshire at Manchester

ABSTRACT

In this paper the authors examine how faculty and librarians' own approaches to and attitudes toward library tools, as well as their assumptions about student research practices, can be transformed to help students view learning as a recursive, creative, and ongoing inquiry. Through a case study documenting a Freshman Composition library instruction session, the authors demonstrate how to collaborate to craft an analytical assignment that stresses knowledge as process. The intent of the session is to transform library instruction from tool-based demonstrations to investigative, problem-based learning exercises. The authors show that the library instruction session moves beyond developing students' information-gathering expertise by focusing on the development of transferable knowledge and critical thinking skills.

INTRODUCTION

As teaching faculty and librarians at the urban branch of a New England public university, the authors collaborate across faculty, librarian, and student constituencies to teach students the information literacy skills they need in college and in the workplace. Despite attempts to develop students' critical thinking expertise, students often continue to have difficulty understanding the acquisition of knowledge as a lifelong process; this is a misunderstanding exacerbated by the tendency of the different constituencies of faculty and librarians to emphasize information retrieval rather than knowledge creation in the library instruction context. This can have negative consequences, as stressing the *tool* of information retrieval runs the risk of distracting the student from learning the *process* of generating knowledge from retrieved information, a process crucial to teaching lifelong learning skills (Grafstein, 2002, p. 200).

Moreover, faculty and librarians' own approaches to and attitudes toward library tools, and their assumptions about student research practices, impede students' ability to view learning as a recursive, creative, and ongoing inquiry. The authors have tried to overcome these impediments by collaborating to craft a Freshman English Composition library instruction session that moves beyond developing students' information-gathering expertise by focusing on the development of transferable knowledge and critical thinking skills.

THE CHALLENGE OF LIBRARY INSTRUCTION: FACULTY, LIBRARIAN, AND STUDENT EXPERIENCES

Challenges for faculty

Faculty and librarians tend to emphasize the mechanics of information retrieval in the library instruction context, rather than focusing on the acquisition of knowledge as a process; this arises because of a series of assumptions held by different university constituencies. Faculty members, for example, understand implicitly that knowledge is an ongoing process in their profession; unfortunately, they tend to assume that students will simply absorb the process of critical and analytical thinking on their own (Cannon, 1994, p.528). Assuming that students arrive at the university with such skills complicates the already difficult process of teaching critical thinking. Faculty need to recognize that students often enter college with little or no knowledge of the university's various disciplines (Simmons, 2005, p. 298). In fact, students need to be taught the skills of critical thinking and evaluation explicitly and systematically, preferably beginning in the gateway course to college—Freshman English Composition—and these skills need to be reinforced in every subsequent course. It is dangerous for faculty to assume that students will pick up these skills simply because *faculty* did so during the course of their own education.

Students' ability to think critically is impacted by perceptions that faculty members have of information literacy, as well as by certain impediments, both real and perceived, that prevent faculty from introducing this essential set of skills into their classes. Larry Hardesty's (1995) famous exploration of faculty culture (p. 344-354) has demonstrated that some teaching professors are reluctant to collaborate with librarians in delivering discipline-specific information literacy in their classroom. A sense of territoriality may come into play here, whereby the

faculty member feels that the librarian's expertise is best showcased in the library, and the faculty member is best qualified to deliver content in his/her subject area (Hardesty, p. 352; Schulte, 2009, p. 59). Furthermore, conceptual confusion around what faculty members think librarians actually do places barriers in the way of their addressing information literacy in their own courses. Many faculty view librarians not as classroom educators or pedagogical collaborators, but rather as service professionals exclusively (Schulte, p. 59).

One of the most pervasive obstacles to faculty incorporating information literacy into their teaching is the conceptual blurring of content-based knowledge and process-based skill. In this environment, faculty may see library instruction simply as one more unit that needs to be covered in their course. In practice, this means that faculty members often want library instruction to address very specific course- and assignment-related research issues (Badke, 2005, p. 66). Moreover, faculty members frequently assume information literacy entails the ability to navigate a specific library's resources, for example, locating the reserve desk or finding a book on the shelves (Manuel, 2005, p. 150). In asking the students to go on the proverbial library treasure hunt, faculty assume they have now taught the unit on "how to use the library" without understanding that the process of information literacy skills acquisition is ongoing and recursive.

Faculty themselves may be unsure of their own information retrieval skills, conscious, perhaps, that they are not keeping up with the latest academic search engines and retrieval models. Therefore, faculty members' conception of what *students* need from a bibliographical instruction session may be shaded by what *faculty* need from it; thus, when a librarian is invited to give such a session, it might be skewed toward presenting the latest tools for retrieving secondary research, rather than techniques for analyzing, evaluating, and critically engaging with the research.

Challenges for librarians

Often, librarians must work within the curricular and pedagogical boundaries set up *a priori* by the faculty member. Typically, this resembles a 50-minute, one-off bibliographic instruction visit in the course of a semester, which may not be tied to a specific assignment. It is crucial, however, that the librarian's instruction be delivered on an as-needed basis, so that it provides students with the tools necessary to complete the current assignment and so that it illustrates the process of how information-gathering leads to knowledge acquisition (Hearn, 2005, p. 221). Potentially further complicating matters, the faculty member might schedule the class visit when he or she cannot or chooses not to attend, leaving the librarian to negotiate the substitute-teacher syndrome (Paterson & White, 2005/2006). The disadvantages of these arrangements are obvious: a lack of coherence between the information literacy skills presented and the content of the course; a disconnect between the hands-on tool-based research and the process of writing the paper; static between the faculty member and the librarian in terms of classroom autonomy, authority, and credibility; and the unnecessary compartmentalization of both university constituencies—librarians and faculty.

Librarians, however, are often complicit in the focus on delivering information rather than lifelong-learning skills in the information literacy context. Various librarian assumptions about faculty sharpen the scenarios described above: First,

librarians may assume that the faculty member will teach students critical thinking and lifelong learning skills *outside* of the information literacy session. Second, as with faculty, librarians' own level and type of knowledge may shape the focus on tool-based instruction in these sessions. Librarians are skilled in the use of multiple retrieval platforms and databases; however, they may lack the subject expertise to delve deeply into critical thinking and knowledge analysis in a specific field. Their library instruction presentations, therefore, might be focused on information—that is, on how to navigate the latest academic databases to retrieve research—instead of on the evaluation and application of this research in different contexts.

STUDENTS MAY BE ABLE TO NAVIGATE ONLINE ENVIRONMENTS AND DATABASES; WHAT THEY LACK IS ADEQUATE GUIDANCE ON WHAT TO DO ONCE THEY *RETRIEVE* A SCHOLARLY SOURCE FROM THE DATABASE.

Challenges for students

Students may be able to navigate online environments and databases; what they lack is adequate guidance on what to do once they *retrieve* a scholarly source from the database. Students desperately need *more* instruction and guidance on how to *analyze* the barrage of information that they retrieve; they need *less* instruction on how to *navigate* the scholarly and research databases (Hinchcliffe, 2000, p. 283). Faculty and librarians need to understand that no amount of retrieved material understands itself. If searching for information becomes an end rather than a means, students are likely to lose interest in and motivation to discover more about the subject (Small et al., 2004, p. 115). To minimize this outcome, the librarian and faculty member must collaborate to help students see that when they are doing research, they should not be exclusively focused on hunting for information, but rather they should conceive of the research process as way to contextualize and organize meaning (Simmons, 2005, p. 299).

A Collaborative Approach to Freshman English Information Literacy Instruction

By transcending traditional academic barriers to achieve the mutual aim of student educational empowerment, progress can be made toward weaving information literacy into assignments and curricula in a meaningful, practical way. As classroom instructors and librarians, the authors have collaborated to provide library instruction for students in literature classes, folding information literacy into the sessions through the use of active learning strategies and evaluative exercises (Paterson & White, 2004, 2005/2006). When the classroom instructor taught Freshman Composition for the first time in six years, she met with the librarian to discuss how best to approach the research assignment from an information literacy standpoint.

Fortunately, the University of New Hampshire at Manchester's (UNH Manchester) small size and collegial environment lend themselves to such collaborative efforts, and the authors took advantage of the encouragement of

colleagues and administration to forge an academic alliance. The authors also profited from the talents of the institution's diverse student body. The college's students come from a variety of backgrounds and therefore bring a variety of life experiences and academic competencies to the classroom and the library. This diversity brings a richness and depth to academic discussions and personal interactions, with students, instructors, and librarians all learning from one another's varied viewpoints. UNH Manchester's students are also diverse in their level of preparedness for college: Many incoming freshmen have little or no experience with in-depth academic research, and some students suffer from technophobia and "library anxiety." While such differing competencies can create challenges in an information literacy session, they also provide classroom and library instructors with an opportunity to explore new pedagogical techniques and approaches that can benefit all students. These approaches include active and/or inquiry-based projects and exercises that appeal to multiple learning styles and that encourage student engagement and collaboration.

To ensure that all students receive high-quality research instruction, the college's librarians partner with other campus constituencies to create programs and pedagogies that reach students at their individual educational developmental levels. Grafstein's (2002) contention that the critical analysis of information is a skill that transcends academic subjects, and even academia itself, animates the mission of UNH Manchester: Such critical thinking is a truly inter-disciplinary process that will be used in various situations throughout students' lives (p. 198), and the college's collaborative activities reflect this. For example, the librarians work with classroom faculty to transform traditional library orientations into active information literacy workshops by tailoring instruction sessions to particular courses or assignments, by incorporating hands-on group work and critical thinking exercises into instruction sessions, and by using specific research questions in class to encourage student interest and inquiry. For example, rather than mentioning or displaying relevant reference materials for a particular assignment, librarians ask students in groups to use a reference source to answer a specific research question, to evaluate the usefulness of the source in answering the question, and to present the source to the class as a whole. Librarians have also collaborated with the college's Center for Academic Enrichment (CAE) to train peer writing tutors in library skills, thus enabling them to serve as "research mentors" who clarify for students the vital link between solid library research and sound academic writing (White & Pobywajlo, 2005).

Designing the Assignment and the Instruction Session

The classroom instructor and librarian agreed that, for all of the creative information literacy initiatives available at UNH Manchester, many Freshman Composition students are still disconnected from the research process. They are unable to see the relevance of library work to their own lives and instead approach their research tasks in a tool-based and mechanical manner. To rectify this situation, the classroom instructor crafted a Freshman Composition assignment that would give students a personal stake in the topic under investigation and in the outcome of their inquiry (Appendix). She wanted to take advantage of her students' varied academic and personal experiences by building on knowledge they already possessed while also focusing on transferable skills that they will need

throughout their college careers as well as in their personal, professional, and civic lives. The assignment used an inquiry-based model in which students were asked to solve a local problem.

Building on the strengths of the different campus constituencies enhances student learning. In particular, as Simmons (2005) notes, collaborations between classroom instructors (with specialized subject expertise) and academic librarians (with broad experience in information seeking) create a pedagogical synergy that enhances students' information literacy skills (p. 299). Therefore, in addition to capitalizing on her students' existing knowledge base and technological expertise, the classroom instructor decided to take full advantage of her good collaborative relationship with library staff and with the Library/CAE research mentor program. The classroom instructor met with the librarian and with her class-linked writing tutor/research mentor from the CAE to discuss the assignment in-depth and to plan the multiple, point-of-need information literacy sessions that would give students the tools they needed to engage fully with the project. The classroom instructor and the librarian decided to provide three workshops in which the librarian, research mentor, and instructor would model the arc of the research process, inviting students to formulate probing questions about an issue of local concern and to brainstorm solutions to the problem. By asking students to begin the research process by asking specific questions, the authors hoped to demonstrate the often uncertain and recursive nature of scholarly inquiry (Bodi, 2002). The class would then move on to the essential demonstration of library databases. It was hoped that students would see the library's resources as tools, not as ends in themselves, and would be motivated to learn the intricacies of these tools to illuminate further the issue at hand and discover the information necessary to solve the problem under discussion.

Delivering the Instruction

The first 90-minute instruction session introduced students to the library's online newspaper databases, resources they would need to master in order to find articles about local and regional issues. Rather than simply demonstrating the library's web-based search tools, the librarian presented students with a research problem: mercury pollution in New Hampshire waters and its health effects. She guided the discussion by introducing the topic with a personal anecdote and gave them a brief article about the topic from the local paper. She asked them to read it actively, highlighting key phrases and names, specifically noting any individuals, organizations, or concepts that might be used later as keywords in an online search. The research mentor then led students in a brainstorming session that taught them how to read an article analytically and evaluate the information it provides. She listed the names, organizations, and concepts that students had underlined in columns and drew idea trees on the board, connecting related ideas visually with arrows. She also accessed their new understanding of the mercury problem by asking what they now knew about the issue and what questions remained. For example, students learned from the article that women who are pregnant or plan to become pregnant should not consume certain fish due to potential harm to a developing fetus, but students wondered what the specific effects of mercury exposure might be. The research mentor and librarian pointed out that such questions are relevant avenues of further research and inquiry.

The librarian then used the keywords the students had themselves generated to lead the class through an online full-text newspaper database. Because they were motivated to find out more about a topic with potential personal health ramifications, the students carefully followed the demonstration and helped the librarian select appropriate articles. Dividing the class into groups, the librarian gave each group an article to mine for additional information, while the classroom instructor, librarian, and research mentor worked with the students as needed. The class then reconvened and each group reported its findings, adding new information to a growing understanding of the topic. The groups named relevant organizations and corporations mentioned in the articles they analyzed, so the class as a whole took the time to visit the websites of these institutions. Because the students were now very wary of how various entities presented the issue of mercury pollution, they carefully studied the websites for evidence of bias.

By the end of the class period, students were genuinely interested in (and nervous about) the topic. They spontaneously asked relevant questions that led their groups or the class as a whole onto new research avenues. For example, noting that most of the articles spoke about the negative effects of mercury consumption on women of child -bearing years, one young man voiced his concern about the health effects of mercury on men; his group took that research path, locating articles that discussed why men should avoid some fish. Furthermore, another student was motivated to ask a question about carbon trading based on the title of an article that was retrieved during the group exercise. As a result of her curiosity, her group pursued the topic of carbon trading as a method of regulating toxic emissions and described their findings to the class as a whole. The facilitators did not foresee or drive these lines of inquiry: They were specifically student-driven, situationally specific, and unreproducable.
What could have been a dry demonstration of library materials was instead a group inquiry into a serious regional issue, with the library's resources serving as springboards to enhance a communal grasp of the scope and immediate impact of the problem. Thanks to this critical engagement with the material, the authors were able to achieve their information literacy goals: The students themselves identified their information needs, used the online databases to find the information, appraised the sources, and used the material located to answer their questions. Follow-up workshops built on the students' new research expertise. The librarian returned to class to answer students' questions, demonstrate new library resources, and work with students as they researched their own local topics.

The Results of Our Collaboration

The results of this new pedagogical model for information literacy were overwhelmingly positive for all of the parties involved. The level of motivation and engagement of students was particularly satisfying and supports the findings of Ruth V. Small et al (2004), who observe that students respond well to interactive, hands-on, dynamic learning environments that relate directly to course objectives (p. 98). The research mentor noted that as a result of the cooperative teaching style, students in the class were able to see that they had different "points of access" when seeking research assistance, a significant observation, as it suggested that students viewed themselves as members of a learning

community whose members were all engaged in the process of intellectual inquiry. She also indicated that the gradual introduction of resources through scaffolded workshops led to students having a high comfort level with library resources. Finally, she observed that the students' finished papers presented well-crafted recommendations; indeed, several students planned to extend the results of their endeavors into the community by writing letters to politicians and interest groups (Dorothy Sherman, personal communication, June 1, 2006).

The classroom instructor was struck by the fact that her students sustained their interest in the material for the entire semester, indicating a high level of student commitment to the entire project and its outcome. The close collaboration between librarian and faculty models the importance of library research in the academic classroom and integrates information literacy into course content. She was gratified by the quality of the finished papers, which she found to be compelling works devoid of plagiarism. Anecdotal comments from students in the class indicated that they found the library session to be beneficial; indeed, one of the students subsequently trained as a research mentor herself and carried the lessons learned in her Freshman Composition class to other students in the college. The librarian was pleased to be a partner in the educational process and found that the collaboration with the instructor and the research mentor made the class engaging to teach. The animated class discussions and active participation by students and instructors alike created a dynamic learning environment that has inspired her to try such techniques in other library instruction classes.

The Way Forward

The authors' classroom collaboration took a small-scale approach to a large-scale educational challenge, the issue of teaching critical thinking skills. By modeling critical thinking behavior to a group of seventeen freshman students, the classroom instructor and the librarian piloted in microcosm a pedagogical approach that could be applied on a larger and more extensive scale. By first test-driving the experience of intense collaboration and gathering anecdotal evidence, the authors feel better prepared to debut these methods on a larger scale. Currently, the UNH Manchester librarians are involved in curricular conversations with Developmental English and Freshman Composition instructors to incorporate explicit critical thinking/reading and information literacy skills into all courses and to explore assessment techniques to measure the effectiveness of such instruction. Because of the scale of this initiative, the authors believe that pre- and post-assessment to gather quantifiable data would be very appropriate and would augment anecdotal experience in the classroom. The UNH Manchester Library is exploring methods for addressing quantifiable data gathering, including the recent acquisition of eInstruction instant feedback devices to gauge students' level of knowledge before, during, and after information literacy sessions.

Final Reflections

The authors anticipate that the institutional initiative—which encourages faculty, librarian, and student collaboration in the teaching of core information literacy competencies—will prove as fruitful as this small-scale classroom venture. The multiple voices in the classroom—teacher, librarian, mentor, and students—led to an educational

environment in which all of the participants learned from one another and reminded all stakeholders that education is a cooperative enterprise. By together asking students to examine their own assumptions, pose serious questions about an important civic issue, and seek after knowledge by engaging in scholarly research, the authors invited them to become active participants in the scholarly discourse and set them upon the road to information fluency.

REFERENCES

Badke, W. B. (2005). Can't get no respect: Helping faculty to understand the educational power of information literacy. *The Reference Librarian*, *89/90*, 63-80.

Bodi, S. (2002). How do we bridge the gap between what we teach and what they do? Some thoughts on the place of questions in the process of research. *The Journal of Academic Librarianship*, *28*, 109-14.

Cannon, A. (1994). Faculty survey of library research instruction. *RQ*, *33*, 524-541.

Grafstein, A. (2002). A discipline-based approach to information literacy. *The Journal of Academic Librarianship*, *28*, 197 -204.

Hardesty, L. (1995). Faculty culture and bibliographic instruction: An exploratory analysis. *Library Trends*, *44*, 339-367.

Hearn, M. (2005). Embedding a librarian in the classroom: An intensive information literacy model. *Reference Services Review*, *33*, 219-27.

Hinchliffe, J. (2000). Faculty-directed library use instruction: A single class, retrospective study. *Research Strategies*, *17*, 281-89.

Manuel, K., Beck, S. E., & Molloy, M. (2005). An ethnographic study of attitudes influencing faculty collaboration in library instruction. *The Reference Librarian*, *43*, 139-161.

Paterson, S. F., & White, C. B. (2004). A collaborative approach to information literacy. *Academic Exchange Quarterly*, *8*, 165-71.

Paterson, S. F., & White, C. B. (2005/2006). Rethinking the paradigms: Toward a new vision of libraries and student learning. *International Journal of Learning*, *12*, 123-30.

Schulte, S. J., & Sherwill-Navarro, P.J. (2009). Nursing educators' perceptions of collaborations with librarians. *Journal of the Medical Library Association, 97,* 56-59.

Simmons, M. H. (2005). Librarians as disciplinary discourse mediators: Using genre theory to move toward critical information literacy. *Libraries and the Academy, 5,* 297-311.

White, C., & Pobywajlo, M. (2005). A library, learning center, and classroom collaboration: A case study. In J. K. Elmborg & S. Hook (Eds.), *Centers for learning: Writing centers and libraries in collaboration* (pp. 175-203). Chicago: Association of College and Research Libraries.

APPENDIX

Assignment 2: Causal Argument [Excerpt]

- Look at your local newspaper and select an article that has as its subject a **local problem. NOTE: Be sure the problem is a narrow one. Think small! The narrower your focus, the more manageable your causal argument will be. Please check your topic with me before proceeding with the assignment.**
- Brainstorm and then research using the resources of UNH Manchester's library, your problem, establishing if it exists elsewhere, what the causes of it are elsewhere.
- Describe in detail what the problem is. Use background research here. Think how you can make the problem serious enough to be worth looking at for us and your specific audience (to whom you'll address your argument). In this case your audience will be readers of your local newspaper.
- Research who is affected by your problem, how, and why.
- Research all the potential negative effects of this problem, both direct and indirect.
- Research how long your problem has existed.
- Research whether your problem is getting worse and why.
- Using the resources of UNH Manchester's library, discover the substantive causes for your problem.
- Isolate at least **three** causes for your problem and explain, using the terms in *For Argument's Sake*, what **type** of causes they are (focus on **sufficient causes** and **contributing factors**).
- Using research and reasoning, pinpoint the **most serious** cause for your problem—a sufficient cause—and **identify what its underlying motivation** is; explain your choice; be sure also to explain why the other two causes are not so significant as this one.
- Treat your paper as an **article for your local newspaper**. **You are an investigative reporter for your local newspaper and you have been sent on an assignment to research and write about the causes of a local problem.** You'll therefore need to shape your ethos (voice on paper) appropriately for the audience (pathos). So, as in your previous paper, choose your words carefully, making sure that you seem credible, thoughtful, and reasonable.