

Integrating Reading, Information Literacy, and Literary Studies Instruction in a Three-Way Collaboration

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Abstract

This article describes a unique course-based collaboration involving an English professor, a Learning Strategies Counselor, and a Librarian. The potential benefits and barriers of collaborative teaching in literature are reviewed. The article delineates a three-way instruction model built around an annotated bibliography assignment in a junior-level English class. The model integrates instruction in information literacy, critical reading, and literary studies to help students become effective readers and researchers. The results indicate that students benefit from this teaching model. The article also offers ways to make collaborative teaching work and provides suggestions for further research.

The collaboration came about because an English professor at the University of Houston was trying to help the students who were struggling with the research assignments in his ENGL 3301 class. In their work leading up to a final research essay, these students encountered difficulties at three crucial stages of their semester-long research process: searching for relevant secondary criticism, reading this material critically, and synthesizing ideas from their reading in their own work. These issues, which speak to the interrelatedness of information literacy, critical thinking, and reading and writing skills, represent common problems among our students. This essay will describe the steps he took with two other collaborators, a Learning Strategies Counselor and a Librarian, to devise an integrated set of presentations that would help students move through the complex demands of an annotated bibliography assignment.

The University of Houston (UH) is an urban public research university that has been recognized for its highly diverse student population; UH was recently named by the US News and World Reports (2010) College Rankings as #2 among national universities in terms of racial diversity. This diversity extends to students' educational backgrounds: more than half of our 37,000 undergraduates are transfers from community colleges or other two- or four-year schools, and many of them represent the first member in their family to attend college. The lack of a predictable student profile within and between sections of the same class makes teaching here a significant challenge.

There is a huge range of academic competencies represented in every class and at every level of the curriculum. So how can faculty begin to address this tension between the variations in individual students' abilities and the broader teaching objectives necessarily imposed upon a class as a whole? The first step lay in thoughtful course design and curricular development.

To address the wide range of abilities and backgrounds found in every class ENGL3301: Introduction to Literary Studies was created more than a decade ago to prepare students for the academic demands of undergraduate literature courses (Mazella, 1998). The skills taught in this class are meant to be used throughout a student's academic career. The class introduces students not just to literary texts, authors, and genres, but to the key issues and approaches to the academic study of literature. Since this course was first developed, the English department typically offers five or six sections annually.

Subsequently, it became clear that students needed additional assistance with the research process. The question at hand was whether specifically targeting students' reading comprehension and information literacy skills might help to bridge the gap between the stronger and weaker students. To strengthen students' skills in both areas, a collaboration was initiated between the professor, Learning Strategies Counselor and a Librarian. They were each invited to make separate in-class presentations designed around an annotated bibliography project. In their separate presentations, the librarian taught students how to search for and evaluate secondary sources for this assignment, while the learning strategies counselor demonstrated how to read secondary sources more critically and analytically. Even after these presentations, however, students were still struggling to master the various skills involved in the creation of an annotated bibliography. Each presenter's treatment of the topics in isolation had failed to convey to students the need to combine, align, and master these skills together. Ultimately, the goal was for students to develop a single, integrated research process that helped them choose topics, locate, gather, and synthesize information, construct arguments, and refine their thoughts in an orderly and self-regulated fashion. In order to help students digest all these critical skills, it seemed that both sets of instruction (i.e., information literacy and critical reading) needed to be incorporated into a more unified presentation that might potentially have a greater impact on students. Thus, the three decided to strive towards integrating the content of the presentation in a way that would provide students with a more holistic, less fragmented view of the research process.

This article reviews earlier research regarding collaborative teaching in higher education and presents the three-way collaborative teaching method while assessing its impact on student learning.

Background

Collaborative teaching practices have often been proposed as a way to enhance undergraduate learning because faculty and other professionals have as much to gain from collaboration as their students. Learning communities, for example, help deepen learning for faculty, librarians, or other professionals by multiplying opportunities for discussing problems

or generating alternative solutions. These characteristics are true of any kind of group work, at either the student or professional levels (Svinicki & McKeachie, 2011).

Expert to expert collaborations, however, whether among faculty or other campus professionals, have the added benefit of introducing experts trained in one field to those engaged in a separate field for the sake of solving a common problem. This has the effect of forcing each side to rediscover and make explicit its tacit assumptions to the other, so that both sides can generate at least a provisional common framework for understanding their problem. To use the terms of organizational theorists Argyris and Schön (1978), this kind of collective reflection and deliberation is crucial for what they call “double loop learning,” a form of organizational learning that begins to question and reflect upon its own assumptions in order to solve problems otherwise insoluble within a single intellectual framework. Collaboration and the double loop learning it fosters help to alert specialists to the limitations of their own approach, and can, therefore, combat the usual academic tendencies toward “siloization” (the vertical but not horizontal flow of expert knowledge), compartmentalization, and fragmentation of potentially useful insights within the contemporary research university (Mazella & Grob, 2011).

While still uncommon, cooperative teaching is nonetheless gaining recognition for higher education instruction (Davis, 1995). So why collaborate? One obvious reason is to enhance instruction, but in a way that also increases the collaboration’s potential impact (more people are affected by the change) while making it easier and less time-consuming for faculty to attempt new pedagogical techniques and strategies. For example, Rehling and Lindeman (2010) claim that team teaching has enriched their curriculum, has given them both more confidence, and has encouraged them to “reveal and rethink [their] pedagogical philosophies” (p. 95), and has enabled them to talk over how to deal with difficult classroom situations. Additionally, the three collaborators’ multi-disciplinary experience suggests that collaborative teaching has been an effective way to bring together the variety of disciplinary approaches necessary to achieve a common goal: to help students acquire the skills needed to sustain a complex process that unites their reading, research, and writing.

Although universities often provide rhetorical support for collaboration as a concept or buzzword, in practice, collaborations can be difficult to initiate or sustain because of the way that research universities are organized. The disciplinary organization of academic departments, for example, makes it much harder for individuals in different units to combine their efforts, even while trying to advance recognized institutional goals. As a result, departments and professors from different units remain isolated from one another, even in regards to the one circumstance they do generally share, their teaching. Though this problem of squaring the disciplinary organizational structures of departments with their teaching mission has been widely recognized for several decades, there have been some encouraging trends toward some institutional acceptance of collaboration. Some examples would include initiatives like the Information Literacy Competency Standards for Higher Education issued in 2004 by the Association of College & Research Libraries (ACRL); the interest of regional accreditation agencies in encouraging instructional innovation; and the emergence of university teaching centers

as found the University of Houston's Center for Teaching Excellence.

While librarian-faculty collaboration has been more extensively discussed in the secondary literature (Campbell, 2010; Association of College & Research Libraries, 2004; and Caspers, 2006), student affairs professionals seem much less likely to collaborate with faculty than librarians (Kezar and Lester, 2009; McMurray and Sorrells, 2007). This discrepancy may be caused by the longstanding institutional divides among faculty, academic affairs and student affairs units, or perhaps by each group's divergent assumptions about teaching. For example, Schroeder (1999) writes that "the primacy of the curriculum and course work (particularly in the major) are highly valued by faculty whereas informal learning that occurs through out-of-class experiences is not" (p. 10). While faculty seem to recognize the benefits of working with librarians, historically they have not pursued a similar line of activities with student affairs professionals. Further, the collaborative practice documented in the literature tended to involve a simple one-on-one exchange between members of two disciplines, whereas this project introduced the complexity and multidimensionality of teaching students higher order critical thinking skills regarding the sources used in their research essays (Kantz, 2000). As such, it seemed to entail a more comprehensive and integrated approach to instruction.

Key Components

The collaboration united the expertise of a student affairs professional (teaching reading skills), a librarian (teaching information literacy skills), and an English professor (teaching both specifically literary research skills and the "content" of Jonathan Swift's *Gulliver's Travels* and its critical history).

Annotated bibliography assignment. Each group of students had to annotate two journal articles, two websites, and two books—all organized around an assigned sub-topic in literary criticism (Swift and Religion, Swift and Empire, etc.). Their bibliographies were shared with other students in the class so that everyone could benefit from the information that was discovered. And, of course, the group work in the annotated bibliographies done in the first part of the semester constituted part of the "scaffolding" for their independently researched and written essays done in the final weeks of the semester. A form of this assignment long recognized as one of the best ways to teach students information literacy (Mackey & Jacobson, 2004), became the focus the joint effort. By requiring students to work in peer groups to find sources, evaluate them, and cite them, this assignment's goal was to introduce students to the skills necessary to begin doing independent research in the field of literature. It also gave them further practice in each step of an extended, incremental research process in a peer group context providing them with opportunities for modeling these skills for one another.

Information literacy instruction. The Librarian, focused on information literacy instruction, helping students develop skills in identifying, searching for, and evaluating the articles necessary for the assignment. This segment involved class demonstration, in-class practice, and facilitated discussion. Take-home assignments were used to reinforce skills taught in class.

Reading skills instruction. The Learning Strategies Counselor focused on assisting students in their work on the scholarly articles necessary for

the bibliography. Because most of these articles followed the same general format, she sought to explain this format explicitly to the students. To help them recognize the format, and to then locate the information and arguments more efficiently, she used the notion of “form schema” developed by Rigney and Munro (1977, as cited in Brooks & Dansereau, 1983). The “form schema” is an abstract prototype containing general information about the format and conventions, but not the content, of articles within a particular discipline. For example, most research articles in the social sciences have an introduction, method, results, and discussion section. Similarly, each article in literary criticism had an introduction containing a thesis statement, textual evidence supporting the claim made by the thesis statement, and a conclusion. After modeling for students the process of inquiry—how one reads and understands systematically the writings of secondary criticism on literary texts, by using a roadmap specific to their discipline—the learning strategies counselor had the students practice finding these key parts of an article, using an example she discussed with the entire class. After the “clues” were pointed out, students could use to look for these parts when they examined articles on their own.

The multidisciplinary aspect of the collaboration reflected Argyris and Schön’s notion of “double loop learning,” that the deepest, most effective group learning occurs when tacit knowledge (in this case, the tacit knowledge of a disciplinary expert) is brought to the surface, questioned, and explained collectively. This instruction component, therefore, helped bridge the gap between the professor’s and the students’ disparate understandings, while helping the professor understand which aspects of the assignment were most confusing to the class.

Secondly, the reading skills instruction, based on the counselor’s expertise in Educational Psychology—especially the psychology of reading—aided students who generally had only superficial prior encounters with peer-reviewed scholarship and may never have had significant practice in independently identifying these features or extracting this information for themselves. The counselor was the one who was able to identify some of the potential gaps or breakdowns in their process, and who was able to suggest ways for them to begin mastering the process. Because literature teachers are typically trained to regard reading and reading instruction as pre-disciplinary and distinct from literary study (Hamel, 2003), it is unsurprising that a different field’s scholarship was critical to uncover why students were struggling with these aspects of reading.

Course blog. The course-blog acted as a multiplier, enhancing the impact of the collaborations taking place among both instructors and students. This occurred because the blog facilitated collaboration and discussion among both groups, while providing all instructors with a platform to directly communicate with students about their online contributions (Walsh & Kahn, 2010). The course-blog also enhanced the collaborations of students in a number of ways. They could see what their classmates had written, thus expanding the pool of examples to draw from when they wrote their own work. They could also see the professor’s comments about their classmates’ work, and learn more about the criteria by which their own work would be judged. At the same time, it opened up additional opportunities for further collaboration, since each member of the team was able to view students’

progress on their assignments throughout the instructional process and reinforce the instruction offered by other team members.

Content integration. In order to integrate their teaching content, the collaborators met individually and jointly multiple times to decide the content, sequencing, and methods of instruction for each aspect of the three-day presentation. Detailed teaching outlines then circulated among the team. Eventually the content was broken down into still smaller units and rearranged in a sequence that better reflected the students' optimized research process. The final outline described the teaching responsibilities of each team member, along with times allotted to each presentation, in-class practice session, and general discussion segment. Such tight scripting was necessary because of a 50-minute class-time, along with the desire to emphasize as much as possible the hands-on and inquiry aspects of the research process. With that in mind, a decision was made to take the time between sessions to reinforce skills taught. Wednesday, Friday and Monday were selected deliberately to complete the three sessions and also allow one weekend in between for students to complete an extensive group assignment.

Team teaching in class. All three collaborators were present for all three class sessions. The professor introduced the goals and the structure of the consecutive three-session workshop at the beginning of the first session. (The same information was also made available on the course blog, which also made available each day's teaching materials for students to review after class.) The counselor introduced the assignment and gave an overview of the purposes of annotated bibliographies and the steps required to complete one. The librarian demonstrated how to search for scholarly books and articles, helping to familiarize students with library resources, the formulation of search strategies, and the identification of appropriate scholarly resources. The content was delivered via presentation, demonstration, group activities, and brief reflection/discussion exercises. At the end of class, students were given a take home assignment that required them to use a variety of information resources to find scholarly articles relevant to their group's assigned topic.

The second session focused on critical reading skills. The counselor used the "form schema" concept (Rigney and Munro, 1977, as cited in Brooks & Dansereau, 1983) to explain the format and conventions of scholarly articles in literary criticism, which showed students how to quickly identify the key information in the articles they were skimming for possible inclusion in their bibliographies. After that, students did a quick literature review exercise and were then asked by the librarian to evaluate the sources they had found. Afterwards, students were given an out of class assignment that further elaborated upon the evaluation of information sources and resources. Students were required to post their completed evaluation assignments to the course blog over the weekend.

The main focus of the third session, which was facilitated primarily by the librarian, was on evaluating information, which included strategies for determining the most appropriate and credible information sources (e.g., internet vs. scholarly sources) and resources (print vs. electronic databases) for their specific topic. It aimed at helping students reflect their own observations over the assignments.

Results

The results are analyzed based on the class evaluations and observations about the students and their subsequent work done in the class.

The students were given 15 minutes to complete an evaluation form at the end of the third session. The evaluation was designed based on the learning outcomes set by all participating instructors. Instead of testing students' performance of the skills taught, the design of the evaluation was to ascertain the impact of the instruction sessions. The evaluation form contains thirteen 4-level Likert scale questions, one multiple-choice question with open answer, and three short-answer questions (see Figure A for the evaluation form and figure B for the results of the evaluation).

Figure A

ENGL 3301 Workshop Evaluation Form

Title _____
 Instructor _____ Date _____

Please rate your confidence in the following skills. (SA= strongly agree, A=agree, D= disagree, and SD=strongly disagree).

- | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|----|
| 1. I can use the library catalog to find a book or journal article on a specific topic. | SA | A | D | SD |
| 2. I can use a major literature database (MLA, JSTOR, Project Muse) to find a critical article on a topic. | SA | A | D | SD |
| 3. When I am searching the database, I know how to refine my search to cut down the number of irrelevant results, or to expand the number of possible results. | SA | A | D | SD |
| 4. I can connect to library resources remotely | SA | A | D | SD |
| 5. I can find the full-text articles of an academic journal in the Library, even when the article is not available online. | SA | A | D | SD |
| 6. I can distinguish a citation of a book chapter from a citation of a journal article, just by reading a database record. | SA | A | D | SD |
| 7. I can locate an article, if given a citation | SA | A | D | SD |
| 8. I understand the purpose and format of an Annotated Bibliography. | SA | A | D | SD |
| 9. I can skim an article and select important information. | SA | A | D | SD |
| 10. I can determine which sources are credible. | SA | A | D | SD |
| 11. I can determine which sources are relevant to my topic | SA | A | D | SD |
| 12. I can write a paragraph summarizing an article for an AB. | SA | A | D | SD |
| 13. I understand the steps involved in creating an AB | SA | A | D | SD |

Please list one new skill you can start using immediately to improve your performance in Engl 3301.

How confident are you that you will to incorporate this new skill into your academic studies?

1 2 3 4 5
 Not at all Somewhat Very Much

What might prevent you from using this new skill? (check all that apply)

low interest low commitment low motivation
 procrastination time constraints difficulty in implementing
 disbelief in its effectiveness other-please list _____

If you did begin using this new skill, what impact would that have for you academically.

General comments about the presentation:

In about three weeks you will be emailed a follow-up survey regarding the skill listed above. Please make note of this skill. Thank you.

Figure B

Questions	Average Score (Score level: 4=strongly agree 3= agree 2= disagree 1=strongly disagree)
1. I can use the library catalog to find a book on a specific topic.	3.3
2. I can use a major literature database (MLA, JSTOR, Project Muse) to find a critical article on a topic.	3.7
3. When I am searching the database, I know how to refine my search to cut down the number of irrelevant.	3.4
4. I can connect to library resources remotely.	3.4
5. I can find the full-text articles of an academic journal in the Library, even when the article is not available online.	3.1
6. I can distinguish a citation of a book chapter from a citation of a journal article, just by reading a database.	3.2
7. I can locate an article, if given a citation.	3.2
8. I understand the purpose and format of an Annotated Bibliography.	3.4
9. I can skim an article and select important information.	3.4
10. I can determine which sources are credible.	3.4
11. I can determine which sources are relevant to my topic.	3.5
12. I can write a paragraph summarizing an article for an annotated bibliography.	3.5
13. I understand the steps involved in creating an annotated bibliography.	3.4

List one new skill you can begin using immediately: Database searching skills (8 students listed a skill in this area), Other online and library resources (10 students listed a skill in this area), annotation and writing skills (10 students listed a skill in this area), Critical reading skills (4 students listed a skill in this area), Time management (1 student listed a skill in this area), No new skills learned (2 students felt they learned no new skills)

How confident are you that you will incorporate this new skill into your academic studies? (5-level rating: 1=Not at all, 3=Somewhat, 5=Very much)
Average results= 4.4

What might prevent you from using this new skill? (Check all that apply)

Low interest = 3	Low commitment=0	Low motivation=4	Procrastination =9
Time constraints = 7	Difficulty in implementing = 2	Disbelief in its effectiveness = 1	Other=2

Overall, students expressed a very positive experience with this teaching model, and almost every student listed a new skill that they had learned (see Figure B). Their self-reported confidence level for using each skill was high (see Figure B). Among all questions, students expressed most confidence in their ability to use a major literature database (MLA, JSTOR, Project Muse) for finding a scholarly article on a topic. This is an encouraging result, because most of the students had at best a superficial knowledge of the scholarly databases before they took the class, and some of them were learning about these resources for the first time. The result indicates that students acquired new knowledge of scholarly resources and also gained confidence in using them. They were comparatively less confident when asked whether they could “find the full-text articles of an academic journal in the Library, even when the article is not available online.” Students also

believed strongly (4.4 on a 5 point scale) that they would use the skills learned for their future studies.

When asked to “list one skill you can start using immediately to improve your performance in English 3301,” students cited the ability to do literature searches 8 times (among 17 answers) and their reading skills 4 times. On the question “If you did begin using this new skill, what impact would that have for you academically?” students believed that the skill would have a positive impact. Most believed that in the future they would have better research skills, use better resources, and be prepared to write better papers.

Based on the professor’s observations of and interaction with students, it appeared that this integrated approach to reading and information literacy instruction has had a positive impact on students’ independent learning and critical reading skills.

Discussion

Overcoming Obstacles to Collaboration

Before collaborative work could begin, it was necessary for someone to break through the “silo” mindset enforced by the university and disciplinary thinking to initiate the project. The faculty member was able to play this role for a number of reasons: he had experience with multidisciplinary collaborative projects through his work on the University of Houston Faculty Senate, had been teaching the English 3301 course for years, and, most importantly, because he recognized that students were encountering problems that his own instruction was not able to resolve. Driven by a commitment to student-centered learning, the professor explored what resources were available on campus to supplement his own teaching effort and found professionals on campus who not only had the necessary expertise but were also prepared to tailor their own presentations to the specific demands of the course and the students.

The second obstacle, however, involved the difficulties of professionals communicating across disciplinary lines. As noted previously, the difference in professional orientation between those providing for the social welfare of the student (student affairs) and those developing the mind of the student (faculty and academic affairs) meant that the two groups were not used to collaborating. For example, the counselor (trained as a psychologist) did not know very much about English literature prior to working on this project; therefore, she needed to educate herself about this field before being able to offer assistance to the students. What seemed to help with this issue was keeping the needs of the students at the forefront. All three collaborators wanted the students to succeed and we were able to keep that as our primary goal.

Benefits of Our Collaboration

On a concrete level, the collaboration benefited the students. From the perspective of most faculty, learning skills and information skills (reading, researching and evaluating information) are assumed instead of being explicitly taught. However, students learn best when they are put in a context with tasks and skills taught and practiced in a logical and coherent

manner. This collaboration helped to create a rich learning environment, which provided intellectual frameworks, tools (protocols, guidelines, and resources for developing key information literacy and reading skills), and assigned tasks (an annotated bibliography assignment) for practicing those skills—all within the context of an authentic problem (selecting appropriate criticism of *Gulliver's Travels*). As a result, students were able to make sense of how and why a subject is researched, studied, and communicated within their chosen discipline. This domain-specific, case study approach helps to foster a more advanced and refined form of critical thinking than students would receive from more abstract presentation of the content (Svinicki, 2004). Moreover, because the focus of the collaborative was to maximize the impact of our instruction, sequencing lessons mimicked the actual research process of the students.

From observations of the students over the years in the target course, their research process, and their final papers, this collaboration format appeared to indicate increased mastery of research skills. When comparing a typical annotated bibliography entry from 2007 to one from 2010, for example, the first group selected less relevant texts, annotated them with less precision, and followed MLA style less closely (See Figure C). Students' own observations corroborated this assessment. For several years, at the semester's end, the professor required students to compile group and individual portfolios containing all their coursework, including their online postings. They read through their body of work and then wrote a brief self-assessment essay detailing what they have learned in the class. Because the collaboration (and this article) evolved over several iterations of the course from Fall '09 forward, the initial set of portfolios and self-assessments were not preserved, but documentation from subsequent iterations of the course indicate favorable results. One student wrote, for example, that "outside presentations by the . . . staff were extremely helpful to me, especially the database lesson and the critical reading lesson." Another student has written, "I feel that my ability to research and understand texts has been increased significantly through this class." And students have made similar comments over the years in their course evaluations (e.g., "my research skills have greatly improved"). From a longer-term perspective, moreover, students were also introduced to two offices that could help them throughout their academic careers--the library and the campus learning center.

Figure C

Sample of Student Work Pre- and Post-Intervention

Fall 2007, Swift and Femininity, Books:

1. Bloom, Harold. Modern Critical Interpretations: Gulliver's Travels. New York: Chelsea House Publishers, 1986. A collection of critical essays on "Gulliver's Travels". The book contains essays on Gulliver's motives throughout his travels, politics, gender, philosophy, and other themes.

Fall 2010, Swift and Femininity, Books:

Hammond, Brea. "Swift and Women." Jonathan Swift. Portland: Irish Academic Press, 2010. 100-116.

Brea Hammond examines Swift in his role as mentor and his subsequent interactions with women. According to Hammond, Swift learned how to be a role model from Sir William Temple. The processes and social skills acquired influenced Swift's ability to create and maintain relationships, both platonic and romantic. Hammond concludes that Swift's constant need to act-the-teacher and to be admired made intimacy with friends and potential lovers difficult.

On a professional level, although this integration demanded a much higher degree of coordination and teamwork than any of the team members were used to undertaking, each member of the team benefitted considerably from this collaboration. For example, as a result of this experience, the counselor learned how to articulate and market her skills in a new way to professors on campus and has had further experiences (in other disciplines) where she focused intensely on the content of a course in order to assist students with necessary skills. On a broader level, the university benefitted from the collaboration by witnessing a potential model for other collaborations in the future.

Implications and Suggestions for Further Research

University staff reading this might wish to reflect on their own specific skills and on how these might be of use to others on campus striving to advance the university's teaching mission. For librarians and learning center professionals, marketing is often necessary for faculty to learn about these services and how they might fit into their courses. Such services should not just be offered as free-standing "workshops" or "seminars" but as presentations embedded within a curriculum, designed to assist students in learning particular, course-specific skills. Once one connection has been made with a faculty member, that connection can be leveraged to form new ones, with the benefit of the previous collaborative experience to make the process even smoother.

Faculty reading this case study may recognize the benefits of acknowledging an instructional problem, asking for help, and admitting that they don't always have the answers when a problem arises. There are professionals on every campus trained in information literacy and student learning issues (and many other things).

Nonetheless, while this study represented an innovative example of what can happen when three diverse professionals work together, others engaged in such collaboration could develop a rubric system to assess results of both the library assignments and the final research project more systematically, along with the existing portfolio and self-assessments. This will ensure that the resulting student assignments are examined in a methodical, rigorous way to see if the essential elements are present, and that the necessary skills were taught. Ideally, all presenters should be involved in designing and implementing such a rubric system.

Conclusion

Although much research related to cooperative teaching among faculty members, or faculty with librarians is available, this specific course design builds on that concept by incorporating expertise from learning professionals and librarians into the teaching of a specific, key assignment. This type of collaboration was very effective for improving students' academic skills. The traditional one-shot "guest speaker" or "library tour" model cannot compete with more active and integrated forms of instruction that increase both engagement and "time on task." Students learn best, however, when they learn these skills in a specific context that allows them to see their application in situations as close to genuine disciplinary practice as possible.

Davis (1995) has stated that collaboration is time-consuming while requiring much more imagination and accommodation than traditional methods. It demands more preparation and communication from instructors. Nonetheless, we believe that this teaching model helped to achieve results that could not have been accomplished using the traditional, one-shot presentation. For one thing, the collaboration team was able to explicitly demonstrate and model the research process step-by-step in front of the students. Through their observing the sequence of the collaborative teaching, students could clearly identify the various stages of the research process and realize the iterative nature of the process. Further, the collaboration, undertaken in front of a classroom full of student groups, helped to foster and model peer-learning and team work among students. As for the three collaborators, the intensive collaboration helped each participant gain considerably from each other's expertise, thus confirming the observation of Rehling and Lindeman (2010) that collaboration helps every participant reevaluate his or her philosophy of pedagogy and beliefs about instruction. Best of all, the collaboration was able to provide students a better-organized and integrated presentation of two academic skills—reading and researching—that are essential for success in their chosen intellectual domain.

References

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: a theory of action perspective*. Reading, MA: Addison-Wesley Pub. Co.
- Association of College & Research Libraries. (2004). *Standards for libraries in higher education*. Retrieved from <http://www.ala.org/ala/mgrps/divs/acrl/standards/standardslibraries.cfm>
- Brooks, L. W., & Dansereau, D. F. (1983). Effects of Structural Schema Training and Text Organization on Expository Prose Processing. *Journal of Educational Psychology*, 75(6), 811-820.
- Campbell, M. (2010). Collaborations Between Librarians and Faculty in a Digital Age. *Education Digest: Essential readings condensed for quick review*, 75(6), 30-33.
- Caspers, J. S. (2006). Building strong relationships with faculty-librarian collaboration. In P. Ragains (Ed.), *Information literacy instruction that works* (pp. 19-31). New York: Neal-Schuman.
- Davis, J. R. (1995). *Interdisciplinary Courses and Team Teaching: New Arrangement for Learning*. Phoenix: The Oryx Press.
- Hamel, F. L. (2003). Teacher Understanding of Student Understanding: Revising the Gap between Teacher Conceptions and Students' Ways with Literature. *Research in the Teaching of English*, 38 (1), 49-84.
- Kantz, M. (2000). Helping students use textual sources persuasively. *Allyn and Bacon Sourcebook for College Writing Teachers* (pp. 187-207). Boston: Pearson.
- Kezar, J., & Lester, J. (2009). *Organizing higher education for collaboration*. San Francisco, CA: Jossey-Bass.

- Mackey, T. P., & Jacobson, T. E. (2004). Integrating information literacy in lower- and upper-level courses: Developing scalable models for higher education. *JGE: The Journal of General Education*, 53(3/4), 201-224. doi: 10.1353/jge.2005.0006
- Mazella, D. (1998). Implications of Curricular Change at the University of Houston. *Profession*, 89-104.
- Mazella, D., & Grob, J. (2011). Collaboration between faculty and special collections librarians in inquiry-based classes. *portal: Libraries and the Academy*, 11(1), 467-87.
- McMurray, A., & Sorrells, D. (2007). Student services and the college classroom: Some ideas for collaboration. *College Student Journal*, 41(4), 1218-1223.
- Rehling, L., & Lindeman, N. (2010). Vive la difference: What we learn from each other by teaching together. *Business Communication Quarterly*, 73(1), 91-96. doi: 10.1177/1080569909358099
- Schroeder, C. C. (1999). Partnerships: An Imperative for Enhancing Student Learning and Institutional Effectiveness. *New Directions for Student Services* (87), 5-18. doi: 10.1002/ss.8701
- Svinicki, M. D. (2004). *Learning and motivation in the postsecondary classroom*. Bolton, MA: Anker Pub. Co.
- Svinicki, M. D., & McKeachie, W. J. (2011). *McKeachie's teaching tips: strategies, research, and theory for college and university teachers* (13th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- US News & World Report (2010). Best Colleges 2011: National campus - ethnic diversity. retrieved from <http://colleges.usnews.rankingsandreviews.com/best-colleges/national-campus-ethnic-diversity>
- Walsh, L., & Kahn, P. (2010). *Collaborative working in higher education: the social academy*. New York: Routledge.