Illuminating scholarship to students: Librarian-faculty course collaborations

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Abstract

Collaborations between teaching faculty, librarians and others can lead to enhanced learning experiences for students, especially in the interrelated areas of scholarly research, information literacy and academic integrity. I focus on collaborative projects related to credit courses, ranging from 1st through 4th year, at two Canadian universities, the University of British Columbia and the University of Toronto. Examples include such techniques and strategies as in-class activities, out of class homework and assignments, flexible assignments and online resources. I highlight collaborations across units and working with students as co-scholars. I present examples of evidence of efficacy of such collaborations. I include online links to templates, step-by-step details and other resources for librarians, teaching faculty and other colleagues to use or adapt.

Key words: collaborative instruction, faculty-librarian course collaboration, information literacy, academic integrity, scholarship of teaching and learning

Introduction

A key goal of faculty-librarian course collaborations is to create a better learning experience for students, especially in the interrelated areas of research, information literacy and academic integrity. Collaborations between teaching faculty, librarians and others can lead to effective assignments, in-class activities and resources that guide students towards better research and writing (Kuh, 2008). The characteristics of successful faculty-librarian collaborations most often mentioned in the literature are shared goals, shared language, mutual respect, overlapping competence and ongoing communication (e.g. Bolan, Bellamy, Rolheiser, Szurmak, & Vine, 2015). To achieve collaborative success, teaching faculty, librarians and others should work together towards shared learning outcomes, ensuring that their learning activities tune students into the practices of scholarship. Story-Huffman (2015) agrees, describing 12 steps to collaboration between faculty and librarians. Organized as an iterative process, examples include discussing ideas with department chairs and deans, conducting planning meetings, keeping lines of communication open and making time to celebrate and review for a future collaboration.

Information literacy, the set of skills needed to find, retrieve, analyze, and use information (Association of College and Research Libraries (ACRL), 2015), is often the starting point for

building an effective collaboration as it is a competency that both faculty and librarians have refined throughout their academic experiences (Bennett & Gilbert, 2009; Brasley, 2008; Gunnarsson Kulesza & Pettersson, 2014). The ACRL Information Literacy Framework (ACRL, 2015) divided into six frames, suggests that, for every discipline, students must work through such ideas as: research as inquiry, scholarship as conservation and that authority is constructed and contextual to begin to develop genuine expertise. Schaub, Bravender & McClure (2015) note ways of teaching these frames, such as crafting a credible message, evaluating information sources and using sources to support claims. Helping students to write clearly and succinctly, and to support relevant statements with appropriate citations and references, is best started in first year (Cassidy and Fox, 2012).

In this paper, I focus on collaborative projects, most of them related to courses, of librarians, teaching faculty and sometimes others, such as graduate student teaching assistants and educational developers. Most examples are drawn from two Canadian universities, the University of British Columbia (UBC) and the University of Toronto. I provide examples of such collaborations – including from my own work, those of colleagues (including students) which whom I have worked and co-presented at conferences – augmented by the literature and examples shared by colleagues from other institutions and organizations. I include web links to templates, step-by-step details and other resources for librarians, teaching faculty and other colleagues to use or adapt. Examples, links and full references can be found at several pages of my website, In View Educational Development (Cassidy, n.d.).

Techniques and Strategies

I have organized the examples below by topic, acknowledging that there will be some overlap. The examples from my own practice are drawn from four courses at UBC which I designed and taught and/or collaborated with faculty instructors and graduate student Teaching Assistants to create materials. These include two third year courses: a biology elective and an integrated science course; and two first year courses focused on scholarly writing.

In-class activities

The use of out-of-class technology made more active use of in-class time in a first year land and food systems course focusing on writing and argumentation. For example, in class, students generate ideas about course topics, write essays to prompts, discuss readings and construct concept maps to summarize units in the course. Outside of class, they search for key words and scholarly references, watch online videos, and provide feedback on peers' writing.

Discussions and activities related to evaluating scientific (or scholarly for any discipline)

claims help students practice in preparation for their work on upcoming research papers. Rutledge (2005) notes that "an understanding of the nature of science as a method of inquiry is a fundamental component of scientific literacy" (p. 329).

In both first year courses, instructors and teaching assistants, augmented with collaborations with librarians and others, helped students in and out of class to prepare them for scholarly writing, through worksheets to introduce the basics of essay structure, and tips to prepare for in-class writing.

Out of class homework and assignments

Ticket to class.

To encourage students to complete a pre-reading for an upcoming computer lab led by a librarian, I designed an activity, whereby I first assign a short reading, often from the media and with it, give each student one of three 'tickets', small slips of paper. Each colour of ticket has a unique question related to the reading, asking students how they would conduct searches for scholarly material. As students come into the computer lab, I collect their tickets, on which they wrote their answers, handing them to a librarian guest facilitator, who then uses their verbatim responses to organize the lesson. I provide step by step instructions online. This practical introduction to conducting scholarly research helped students in two third year science courses as they embarked on their first research paper assignment, and throughout the term for other assignments.

Citation exercise questions.

Created by a graduate student teaching assistant, this homework activity explains what a citation is, and the relationship between in-text citations and the References Cited section of a paper. In one exercise, example screen shots from scholarly journals are provided, asking students: 1. How would you cite the above article in the body of your text? and 2. How would you include the above article in your reference list? In another exercise, two references, one from a website and one from a journal, are noted as being incorrectly formatted. Students are asked to: i) Reformat them as shown in 'Citations and References' and ii) Provide the appropriate citations for the given references. The exercise is discussed in class after students have completed it.

Flexible assignments.

Flexible learning – allowing flexibility of time, place and audience – as a pedagogical approach was a focus in the core curriculum of courses ranging from $1^{\rm st}$ through $4^{\rm th}$ year within the Faculty of Land and Food Systems at UBC. Examples, such as digital media-based assignments, i-clicker and online quizzes, group blogs and Community-Based Action Research are elaborated in references at In View Educational Development (Cassidy, n.d.).

Not all learning takes place in the presence of the instructor, in solitary study, or in group study (Cassidy and Poole, 2005). We should allow our students the opportunity to formally

identify other places and processes by which they learn, and we should design our courses to include assessment and evaluation strategies that acknowledge these places and processes.

Turning responsibility for learning to our students has many benefits, showing the confidence we place in them, and motivating them to become lifelong scholars. Whether guiding first year students, helping second and third year students as they need it, or offering senior students (and sometimes first year students) chances for self-directed learning, the inclusion of scholarly research and academic integrity is strongly encouraged. Self-directed learning is enhanced when students are able to make connections to their own educational experiences (Renner, 2005).

Online resources

TurnItIn.

In both first year courses, we required students to submit their research papers to TurnItIn (n.d.). We have done this in a guided way to best help students. Both their draft (often called Version 1 to emphasize its importance) and their Final Version are submitted, in our case to our university's special account, with the findings sent to instructors along with the assignments. We also provide students a visual walkthrough of the system and teaching assistants help students as they proceed. Between the two versions of writing, class discussions focus on the most common mistakes students make on their in-text citations, including those that usually lead to a poor TurnItIn score.

Calibrated Peer Review (CPR; n.d.).

CPR is an online program that can be used to help enhance the peer review process. Typically, we have introduced the program after in-class discussions and demonstrations. Out of class, students complete a set of training modules before they give and receive anonymous feedback on peers' writing via this online program. See for more details. We have found that, in the two first year courses in which we used it, students' abilities to write clearly, and avoid common mistakes, improved over the three times they took part. For students new to self review, Likkel (2012) found that students' confidence in judging the quality of their own writing increased after using the CPR system.

Web tutorials, course websites and resource guides.

I worked with discipline-specific librarians to co-create a variety of resources for all four courses noted above. In addition to librarians leading special computer labs for students, they also created resource guides, including such details as indexes and databases specific to the course topic, links to resources such as subject guides and electronic journals, and tips for conducting scholarly searches from on campus or at home.

A key goal of the strategies used across the Faculty of Land and Food Systems was to scale up from 1st through 4th year, with increasing complexity in each subsequent course. For example, we used a common evaluation framework and shared resources, such as librarian-created web tutorials, course websites and tools. A familiar tool, one that builds each year, resulted in students being better able to see the clear articulation from one course's intended outcomes to the next.

Open Library Course Reserves Readings.

UBC Library's new electronic system provided a good solution to the previous paper course packages sold to students. The same readings were copyright cleared, sometimes within a week of requesting them electronically to the system. These included articles, book chapters, and other media. Hyperlinks to each reading were posted to the course management system, available at any time to enrolled students. Not only did we stop wasting resources, but the course website became the one-stop 'shop' for all of the students' assignments, deadlines and links to videos, websites and course materials that we created such as guides, worksheets and other preparatory items students needed to bring to class.

Citations and References and A quick guide to citing.

Compiled by graduate student teaching assistants, these resources were intended to help students prepare their research papers. Following the citation style of either Council of Science Editors (CSE) or American Psychological Association (APA), the guides present key tips how to format citations within their papers, and for the References Cited. A related tip for students was to write down the complete reference and citation when they first use it. Definitions of plagiarism, the above-described TurnItIn tool, and guidelines and practice about the use of direct quotes rounded out the ways that we helped prepare these first year students for scholarly writing throughout their degrees and beyond.

Collaborations across units

Collaborative projects across multiple units, including writing and teaching support centres also play important roles in academic integrity.

For example, in 2010, the University of Toronto (U of T) launched a collaboration, called Partnering for Academic Student Success (PASS), between the Centre for Teaching Support & Innovation and U of T Libraries (Bolan, Bellamy, Szurmak, & Vine, (2014); Bolan, Bellamy, Rolheiser, Szurmak & Vine, 2015). Some examples of PASS achievements include librarians working more closely with the teaching support centre to share insights, produce and synthesize material, and conduct research, surveys and background studies. These activities can lead to enhanced learning by students in and out of class.

At UBC, the then called Centre for Teaching and Academic Growth, offered workshops on a variety of topics for faculty members and others who teach. Starting in the 1990s, a number of these, designed and led by reference librarians, showed teachers ways that they could involve their students in scholarly research using the library's new search tools.

A successful collaboration of students, faculty, educational strategists, specialist science writers, writing centre professionals and tutors with a combined interest in science communication started at UBC in 2012. Funded by the Teaching and Learning Enhancement Fund (TLEF) over several years, the resulting resource (Science Writing Resources for Learning, n.d.), is for both students and educators. A series of 13 videos, found on its own YouTube channel and featuring stop action animated drawings (with voice-over) of squirrels, explores key aspects of scholarly writing. Wildly popular, some of the videos have had 14,000 views!

Collaboration with students

Working in partnership with students, both undergraduate and graduate, is beneficial. As course instructors, we are able to hear the voices and perspectives of those taking our courses. Collaborating on publications and conference presentations helps to introduce students to scholarly practice. Valuable resources can be co-created that benefit teachers, students and librarians. For example, Sugarman and Demetracopoulos (2001) worked in partnership with graduate students and others to create a web-based research guide for world history.

Many examples and full references, from a third year science elective, and a first year science course, co-authored with undergraduate students taking the course, teaching assistants, librarians and colleagues from other units related to course topics, such as sustainability and community service-learning, are found at In View Educational Development (Cassidy, n.d.).

Evidence of efficacy

There is evidence that incorporating the kinds of techniques and strategies described above can lead to improvements in student learning. For example, for a first year science course focusing on writing, we (Birol, Deane, Cassidy & Fox, 2014) measured the impact of first year students' views of the nature of science, using a validated survey. We found improved understanding in all categories from pre- to post-test. In this course, activities both in and out of class target improvements in scientific writing, inquiry and argumentation skills. Other examples of the results of a collaboration across many units to promote student learning in this course is found at Fox et al. (2014).

A first year land and food sciences course focusing on writing made purposeful connections between out-of-class and in-class activities. Examples include when homework (such as a

reading, video, worksheet completion) is the focus of activities in the next class. Evidence comes from student surveys, written reflections and assignment grades that these examples help students meet the intended course learning objectives.

Conclusion

I have highlighted collaborations across units and working with students as co-scholars. I present examples of evidence of efficacy of such collaborations. I included online links to templates, step-by-step details and other resources for librarians, teaching faculty and other colleagues to use or adapt.

Renner (2005) notes that a characteristic of adult learning is a deep need to be self-directed. Examples in this paper show ways to do just that. As teachers, I suggest that we engage students in the process of mutual inquiry rather than transmitting knowledge to them. Collaborative efforts between librarians, teaching faculty and others model these processes and provide our students with the resources they need, when they need them. This can be done, as noted above, through in class and out of class activities that can involve the use of technology. In doing so, we are preparing our students for future success with academic literacy in an increasingly complex world of sources and qualities of information.

I also encourage you to bring students in as active collaborators and co-presenters in aspects of scholarly research and academic integrity. Collaborations could involve undergraduate students enrolled in your course, graduate student teaching assistants you have hired to help teach your course, or other students engaged in various projects.

The examples shared in this paper show how collaborations of librarians, teaching faculty and others can result in integration of research tools into students' growing understanding of scholarship. Successful collaborations work on many levels, modeling to students the rich interactions and conversations at the core of scholarship and involving them actively in such.

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