Illuminating scholarship to students: The role of librarian-faculty course collaborations

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Overview

• Who’s here?
• Faculty – librarian collaborations
• Tools and Strategies: ACRL Frames
• Our examples and your reflections
• Take-aways
Our learning object (LO)

http://guides.library.utoronto.ca/fac-lib-collab

Exploring Faculty-Librarian Collaboration

An inventory of examples and materials helping to explore faculty-librarian collaborations.

Science Writing Resources (UBC)

Science Writing Resources from the University of British Columbia

Compiled by Alice Cassidy alice.cassidy@ubc.ca Course Coordinator for LFS 150 and SCIE 113

Science Writing Resources for Learning (ScWRL)

The Science Writing Resources for Learning (ScWRL) website provides practical resources stemming from our work with S communications credit course at UBC. You will see resources for students and resources for educators, the latter includir use or adapt. This website is part of special projects supported by the UBC Teaching and Learning Enhancement Fund. Th below, are an integral part of this site.
Who has worked with a librarian on course-related materials or activities?

“Session: Collaboration Arena” by Ralf Appelt on flickr at https://flic.kr/p/dq63tB CC BY-SA 2.0
If you have worked with a librarian before:

1. Think about the pros and cons of that experience (2 min.).
   
   2. Find someone with whom to discuss them; decide on a commonality, observation or item to share. (3 min.)

   3. Share it with us. (5 min)

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Think  Pair  Share

If you have NOT worked with a librarian before:

1. Think about a way you might in the future (2 min.).

   2. Find someone with whom to discuss them; decide on a reason to share. (3 min.)

   3. Share it with us. (5 min)

With a partner, please complete the following, then share:

You had worked with a librarian, so

<table>
<thead>
<tr>
<th>+</th>
<th>-</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>What worked</td>
<td>What didn’t work</td>
<td>What you would change</td>
</tr>
</tbody>
</table>

You hadn’t worked with a librarian, so

<table>
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<th>+</th>
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</thead>
<tbody>
<tr>
<td>What worked</td>
<td>What you would like</td>
<td>What you want to avoid</td>
</tr>
</tbody>
</table>

Why this session?

“Sky and cloud” by Ray Tsang on flickr at https://flic.kr/p/ihKQk CC BY-SA 2.0
When faculty and librarians work together, their complementary approaches illuminate scholarship and translate the scholarly narrative into something tangible for students.
A successful faculty-librarian collaboration…

… involves:

• shared understood goals;
• mutual respect;
• trust and tolerance;
• competence in the hands-on tasks (teaching, research, critical thinking);
• ongoing communication.

Ivey (2003); Lindstrom and Shonrock (2006)
A successful faculty-librarian collaboration…

… involves:

• “willingness to shape a common mission outside of the unit-specific mission”;
• “interest in sharing jargon and definitions”;
• “willingness to learn aspects of the other partner’s expertise”;
• “ability to appreciate differences and not criticize or stereotype”

Lippincott (2000)
A successful faculty-librarian collaboration...

... involves:

• shared leadership;
• work across boundaries and disciplines;
• an eagerness to experiment.

Bolan, Bellamy, Rolheiser, Szurmak, and Vine (2015)
• shared goals;
• shared language;
• mutual respect;
• overlapping competence;
• ongoing communication.
Collaboration areas

- First year literacy / survey courses
- International student programs
- Psychology
- Educational psychology
- Business and management
- Science and technology
- Problem-based and case-based learning
- Online learning

Bennett and Gilbert (2009); Bowers et al. (2009); Cheney (2004); Gunnarsson, Kulesza, and Pettersson (2014); Prichard (2010).
Collaboration tools and strategies...
Information literacy

Information literacy, the set of skills needed to find, retrieve, analyze, and use information, may be a starting point for building an effective collaboration.

Association of College and Research Libraries (2015); Bennett (2009); Brasley (2008); Gunnarsson et al. (2014).
ACRL Framework: Threshold concepts

“Threshold concepts originated as faculty pedagogical research within disciplines.”

A benefit of using threshold concepts is their interdisciplinary appeal, and

“the potential for collaboration among disciplinary faculty, librarians, teaching and learning center staff, and others.”

ACRL Frames

Students in every discipline must work through these to develop genuine expertise:

- Authority is constructed and contextual
- Information has value
- Information creation as a process
- Research as inquiry
- Scholarship as conversation
- Searching as strategic exploration

What can you do with the Frames?

Investigate threshold concepts in your discipline.

What are the specialized information skills in your discipline?

• using primary sources (biology, history)
• using large data sets (physics, astronomy)

Help students view themselves as information producers, individually and collaboratively.

How do your students interact with, evaluate, produce, and share information?

- annotated bibliographies (psychology)
- wikis (historical studies, computer science)

What can you do with the Frames?

Consider using some knowledge practices and dispositions from each Frame in teaching.

How might you (and a librarian) design learning experiences and assignments that:

• help students assess their info knowledge gaps?
• help students find their info strengths?

Fun with Frames

“Sandbox” by Kate Mereand-Sinha on flickr at https://flic.kr/p/bnW1z CC BY 2.0
Fun with Frames: Your task

We will show examples of how we use the ACRL Framework when we teach.

Your job: Make notes on the Frames graphical organizer.

Do you already use the Frames? Might you? What comments or questions do you have?
<table>
<thead>
<tr>
<th>ACRL IL Framework Frame</th>
<th>Sample Knowledge Practices &amp; Dispositions</th>
<th>Examples from our activities</th>
<th>How would I use this?</th>
</tr>
</thead>
</table>
| Authority is constructed and contextual | • Use indicators of authority to determine source credibility.  
• Realize that authoritative content may be packaged formally or informally. |  |  |
| Information creation as a process | • Distinguish between the traditional and emerging processes of information creation and dissemination in a discipline. |  |  |
| Information has value | • Give credit to the original ideas of others through proper attribution and citation. |  |  |
| Research as inquiry | • Formulate research questions based on information gaps.  
• Seek and synthesize ideas from multiple sources and perspectives. |  |  |
| Scholarship as conversation | • Identify the contribution particular sources make to disciplinary knowledge.  
• Recognize that systems privilege authorities and that not having fluency in the language and process of a discipline is dis-empowering. |  |  |
Example: 3\textsuperscript{rd} yr science elective
Ticket to class

Photo by Minette Layne, Creative commons permission
For a pre-reading from media about a dead Killer Whale and PCBs found in it

Give questions to students (on colour-coded ‘tickets’)

- How research further?
- What questions?
- How connect to scholarly journal article?
- Where look?
Class takes place in library computer lab
What are PCB concentrations in Orcas?

Concept 1?  
Concept 2?  

Explanation

Try your concepts in a computer search
ACRL Frames used?

- Research as Inquiry
- Searching as Strategic Exploration
Example: SCIE 113

- First year seminar in science
- Small class, lots of activities
- Focus on writing argumentative essays
Help with scholarly writing

• Course library web page
• Tips, exercises and links on finding material, citing, references
Squirrel videos

http://scwrl.ubc.ca/

See more links on our LO

Image created with support from the UBC Teaching & Learning Enhancement Fund
Come see our poster!

July 7-10, London, Ontario

Western Conference on Science Education

http://www.thewesternconference.ca/
ACRL Frames used?

- Authority is constructed and contextual
- Information creation as a process
- Research as inquiry
- Scholarship as conversation
Example: LFS 150

- Scholarly Writing and Argumentation in Land and Food Systems
- Just completed first two terms
Linking in and out of class work

**Homework:** View website. Find one example of primary, secondary and tertiary sources. Bring to class

**Class activity:** Add your examples to the board and talk to others who chose similar topics
Library tutorials

• Linked online from students’ LMS
• Tied to homework or assignment as ‘suggested extra’ to help them
• Topics:
  – scholarly communication
  – citing and searching fundamentals
  – finding books and articles: the basics
2A.02 What is Plagiarism?

How Can I Use This?

Plagiarism is an important thing to avoid in writing a paper. Because it's possible to plagiarize on accident, it's important to understand what does and does not constitute plagiarism.

What is plagiarism?

Plagiarism is the "theft of someone else's words, work or ideas" (McMillan 2001)[1]. From a student handing in a paper that she/he has printed off the web or "borrowed" from a friend to a student copying whole passages from a book into his/her paper, plagiarism comes in varying degrees. The diagram on the right illustrates the varying degrees to which plagiarism may occur:

Actions that might be seen as plagiarism

- Buying, stealing, or borrowing a paper
- Using the source too closely when paraphrasing
- Hiring someone to write your paper
- Building on someone's ideas without citation
- Copying from another source without citing (on purpose or by accident)
- Deliberate Plagiarism
- Possibly Accidental Plagiarism
ACRL Frames used?

All of them!

- Authority is constructed and contextual
- Information has value
- Information creation as a process
- Research as inquiry
- Scholarship as conversation
- Searching as strategic exploration
Alice’s take-aways

Working with librarians makes a course richer for me and my students:

• new perspective
• web links
• inspiration for activities
Alice’s take-aways

- My ideas for active teaching and learning
- Librarian’s expertise

= Happy engaged students who are learning!
Example: Earth Science at UTM

Collaboration from the other side…

- ERS103 Intro to ERS
- ERS313 Sedimentology
- ERS120 Planet Earth

Grappling with threshold concepts of scholarship
“In any case, I'd love to instill the sense of academic pride that comes with proper scholarly research, and any help I can get with this would be fantastic.”

Personal communication, Laflamme to Szurmak, Wednesday, July 16, 2014.
I said...

I think I have a few ideas on how to bundle what you need into a decent "writing is part of scholarship and you should think of yourselves as scholars" piece.

He said...

Yup, you got it; that's the angle I also plan to take with the assignments.
A learning object I made for the in-class session

Understanding the why and methods of scholarly literature

Two Pieces of Scholarly Writing
First Scholarly Literature Sample
Second Scholarly Literature Sample
The Research Process
Journal Article Databases
Citation Management and Writing
Getting Help

First Scholarly Literature Sample

Here is a citation to the first sample of scholarly writing we will examine in class:

http://guides.library.utoronto.ca/ERS313
Second Scholarly Literature Sample

Here is a citation to the second piece of scholarly writing we will examine:

What are research articles?

Scholarship is an extended conversation between researchers, and the \textit{scholarly literature in each discipline tells the story of the inquiry} that fuels the conversation.

Primary sources in the sciences, usually \textit{peer-reviewed journal articles}, are the main mechanism researchers use to communicate original data and new ideas. Journal articles differ from popular sources in many ways. Take a look at this visual \textit{anatomy of a research paper} created by the librarians at the North Carolina State University (NCSU) Library to find out what is essential in a primary research paper.

Before publication, research articles usually go through the \textit{peer review process}. Peer review starts the conversation of scholarship going! To find out how, watch this video from the NCSU Library:

Peer Review in 3 Minutes

![Peer Review in 3 Minutes](http://guides.library.utoronto.ca/ERS313)
Scholarly Research Process

The scholarly communication life cycle is just that: a process. Examine the cycle below and visit the Scholarly Communications guide prepared by UofT librarians.

The Scholarly Communication Life Cycle
Sources in Science

When you search for your topic using either Article Search or the recommended databases, you will find different types of sources. Scholarly peer-reviewed journal articles, also known as original research articles, are **primary sources** in the sciences. While you will be often asked to cite these sources in your work, they are very focused and in-depth. They may not be the best way for you to start learning about your topic.

Use **secondary sources** like review articles or book chapters to get into a new topic before you write, or, if the subject is completely unfamiliar, start with tertiary sources like handbooks.

This chart will help you determine whether the source is primary or not:

**PRIMARY**
- Present original research on a topic
- Published and disseminated to the community

*Examples:*
- Peer reviewed scholarly journal articles
- Dissertations, theses
- Conference proceedings

**SECONDARY**
- Integrate primary sources to arrive at a bigger picture

*Examples:*
- Commentaries
- Review articles
- Chapters in scholarly books
- Scholarly blogs.

**TERTIARY**
- Provide generalizations and explanations

*Example:*
- Handbooks
- Textbooks
- Popular media

http://guides.library.utoronto.ca/ERS120/sources
Sources can get tricky, as a peer-reviewed scholarly journal like *Quaternary Science Reviews* may publish both primary sources like original research articles and secondary sources like review articles and commentaries:

Below, we have two samples of scholarly sources from the same peer-reviewed journal, *Quaternary Science Reviews*. In the course of ERS120, you will learn to distinguish the primary source from the secondary one.

http://guides.library.utoronto.ca/ERS120/sources
Which ACRL Frames did I address?

• Information creation is a process
• Research as Inquiry
• Scholarship as Conversation
and
• Authority is constructed and contextual
• Information has value
Which science threshold concepts?

• Primary and secondary sources may be published in the same peer-reviewed journal.

• What distinguishes them? The amount of original research…not always easy to tell them apart.

• Research and publication, and peer review, are part of a process.
Joanna’s take-aways

Librarians take part in the conversation of scholarship.

Using their expertise (and tools such as the ACRL Framework) and digital learning objects librarians can help you identify and teach your discipline’s information threshold concepts.
Visit the learning object

The learning object has:

• Detailed bibliography
• Links to our resources
• A place to contact us with your feedback
Thank you!

UBC, Woodward Biomedical Library
Ursula Ellis, Reference Librarian
Aleteia Greenwood, Head
Katherine Miller, Reference Librarian
Sally Taylor, Reference Librarian
SCIE 113 Teaching Assistants
Thank you!

Prof. **Marc Laflamme**, Assistant Professor, Earth Science, Paleoclimate and Paleontology, UofT Mississauga.

Prof. Lisa Tutty, Lecturer, Earth Science, UofT Mississauga.