

With a Little Help From My Friends:

Collaborative Librarian Instruction in
an Interdisciplinary Geology Course

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Introduce what we're here to talk about and why

- You're going to hear about how we worked together and how team teaching can work for you. The benefits of team teaching.
- Case study of how it could work and be applicable in your settings

Lend me your ears and I'll sing you a song

What is GEO2262 and how did we get involved?

(AG) ***What the course is all about***

Geology 2262: Earth, and the Composition of our World – course that explores the links between our physical, biological and cultural worlds through the lens of chemical elements and minerals. This was open to any student as long as they'd completed at least 30ch or with permission from the instructor. Most students were from the sciences (particularly biology) but not all of the 17 students, and they ranged from second to fifth year students. Two instructors owned the course (Dr. Lucy Wilson geology and Dr. Aaron Granger chemistry) and 10 other instructors from various disciplines like psychology, English, biology, and libraries were involved. The course covered a number of specific chemical elements, and each lecture would discuss an aspect of that element through the lens of one of our disciplines. The students were warned at the start it would be different from what they're used to, and they were given the schedule and who was lecturing each class with their syllabus so it wouldn't be a complete surprise every week. An example of one section, taught over the course of multiple lectures was the element copper. Students were taught about its chemical and geological properties, how it affects human and plant life biologically and interacts with our environment, the historical uses of copper, economics of copper, and stories/legends about copper particularly a Russian folktale about Copper Mountain and mining. The course met twice a week for 80mins lectures with three hour labs every Thursday. All instructors were encouraged to come to class and attend labs, even if they weren't teaching.

○ ***How/why did we get involved in this course***

This was the second time this course was offered (last time was two years ago). The

science librarian at the time was involved in and delivered a library research lab and participated in the instructor-led group presentation on Mercury. Last winter when the instructors were mentioning offering this again at a meeting of the Vice-President's Excellence in Teaching Committee (of which the librarians are members), they asked me if I'd be interested in participating as the new science librarian. It sounded really interesting and since I was new I was game for anything, even if it was a year down the road. Once I'd attended the first team meeting last spring I realized it would make more sense to ask my library colleagues in Arts and Business/English to join me to better support the interdisciplinary nature of the course. And as I thought more about the course and how we could be involved I also was getting more comfortable with the instructors and was more confident to assert myself to see how much library involvement we could get away with (turns out quite a bit).

- ***Briefly outline library involvement in the course (ice breaker, labs, assignment, class attendance, exam questions, marking)***

At every turn our fellow instructors encouraged and welcomed more involvement from us. We still were doing a 3 hour library research lab, and we had a library assignment, we participated in the very first lab, the "ice breaker", we contributed questions for the students' final exam, and then helped mark the exams just the other week with a "marking party" with other instructors. And as much as possible we attended class; personally I only missed a couple and got so much out of going to class, and it was more face time for us with the students.

Phil will get into more specific details about our collaboration for the course, but first David is going to talk about who we are as library instructors, and how we got to where we're at with co-teaching and collaboration.

Do you need anybody?

Who we are & how we got started with co-teaching

About who we are and about our teaching styles, and also about how we started co-teaching and why we like teaching together.

Who we are

Rachel introduced us earlier, but I'll reiterate that the three of us work at the University of New Brunswick Saint John and we're the only three librarians on our campus. I'm the Humanities and Social Sciences Librarian and Head Librarian. Alex is the Science & Health Sciences Librarian. And Phil is the Business and English Librarian.

Our campus has about 2000 students and UNB's campus in Fredericton has about 8000 students and about 20 librarians. The two campuses are about 75 miles apart.

I've worked at UNB Saint John for 12 years and Phil and Alex are both quite new to the campus. The three of us have worked together for less than a year and half, but we've worked very well together in that time and we enjoy collaborating in various ways, including in the classroom.

How we got started with co-teaching

Before Phil and Alex arrived, I didn't work very closely with the other librarians on my campus. They were all near the ends of their careers and were used to working independently.

Phil's experience at UNB Fredericton was similar to mine in that he and the other liaison librarians on his campus tended to work independently and Phil didn't do any team teaching.

Alex, on the other hand, had quite a bit of experience with team teaching from when she was a librarian at the regional hospital. She often taught with the academic medical librarian who supported the Dalhousie University Medical students in Saint John.

There are a few reasons why, after the three of us came together at UNB Saint John, we started to engage in team teaching. One is that I wanted to do everything I could to help Phil and Alex transition well into their new roles and get to know people on campus. I brought them with me to events and meetings outside the library, and sometimes when instructors asked me to teach in their classes, I'd bring them along as well so they could introduce themselves to the students, observe my teaching, and sometimes teach part of the class. I did this especially when I went into UNIV 1003 classes.

UNIV 1003 is a first-year class that's designed to help students develop the essential skills they need to succeed in university. Eight sections are taught each year and the library is heavily involved in each section. I brought Phil and Alex to those classes to prepare them to take on some of the work. I also invited them to a few other classes, mainly to introduce themselves and observe.

This kind of helped get us started with team teaching, but I don't think we would have gone further and expanded our efforts if it hadn't been for Alex. Alex was used to team-teaching from her previous job and wanted to continue this practice as a librarian at UNB Saint John. She has invited Phil and me to team teach with her several times and has been the driving force behind our team-teaching efforts. She's also team taught with some of our librarian colleagues on the Fredericton campus.

We operate under a liaison librarian model, and the assigned liaison always does the bulk of the instruction when we teach as a team in a discipline specific course. For example, Alex as the Science and Health Sciences librarian would do most of the instruction when we team teach in those courses but might get Phil or me to help with hands-on group activities, or to cover a topic that isn't subject specific, like scholarly communications for example, which Phil covered when he went with Alex to teach a Biology Grad seminar.

Following Alex's example, I've invited her and Phil to teach with me a few times. Last term, for example, I asked Alex to co-teach a Sociology class with me because the class was covering a lot of health-related topics and she's the Health Sciences librarian. As a result, the students got a much better presentation than I could have given them on my own.

The third main reason why we're doing more team teaching now is simply that we get along very well and enjoy working together. That's not to say, though, that I didn't like my previous colleagues, or that I think you need to be friends in order to teach together, but in our case the fact that we get along so well has made a difference.

Because we had done some teaching together and it had gone well, when Alex approached Phil and me about teaming up for the Geology class, we were both inclined to say yes. And as we learned more about the class, we saw that it was an ideal fit for team teaching. The reason it's so ideal is that it's interdisciplinary. The two main instructors are Science professors but professors from various other subjects are involved as well, including English,

History, Economics, and others. Phil and I knew a lot of those instructors and admired them for their teaching abilities. The people were great, the content looked really interesting, and the course was perfect for team teaching. For these reasons, Phil and I did not want to miss out on the opportunity to be involved.

Teaching styles

Teaching together has helped us recognize and reflect on our own teaching styles, on each other's teaching styles, and on the ways our different styles work together. It's also helped us recognize our various strengths and weaknesses and the ways we can support each other. Before I hand things over to Phil, I want to say a little about each of our teaching styles and strengths and weaknesses.

Phil generally teaches in lecture format, encouraging students to participate, and posing questions that require them to engage in a conversation. His teaching is typically structured into 3 parts: philosophical, strategy, and workflow. The philosophical part addresses why we search, strategy covers how we prepare to search, and workflow deals with search mechanics.

When I teach, my goal is to make things very practical. I teach to the assignment as much as possible, showing students the process that they should work through to get the assignment done, and I talk with them as we go about why certain approaches work better than others. Alex has a much more experimental approach to teaching than Phil and I have. She makes a concerted effort to read about best practices and to talk to people to get different ideas and she likes to try out different things. She regularly incorporates active learning activities into her teaching, and takes time to reflect on how things went and on what she could do differently the next time around.

When planning to teach the 3-hour lab for the Geology class, we saw that we'd need to cover some theory, some practical skills, and that we should have some active learning activities. So, we had Phil cover the more theoretical aspects, I covered the practical how-to parts, and Alex was the brains behind the active learning activities, which we all helped administer. It ended up being a good blend of our different teaching styles.

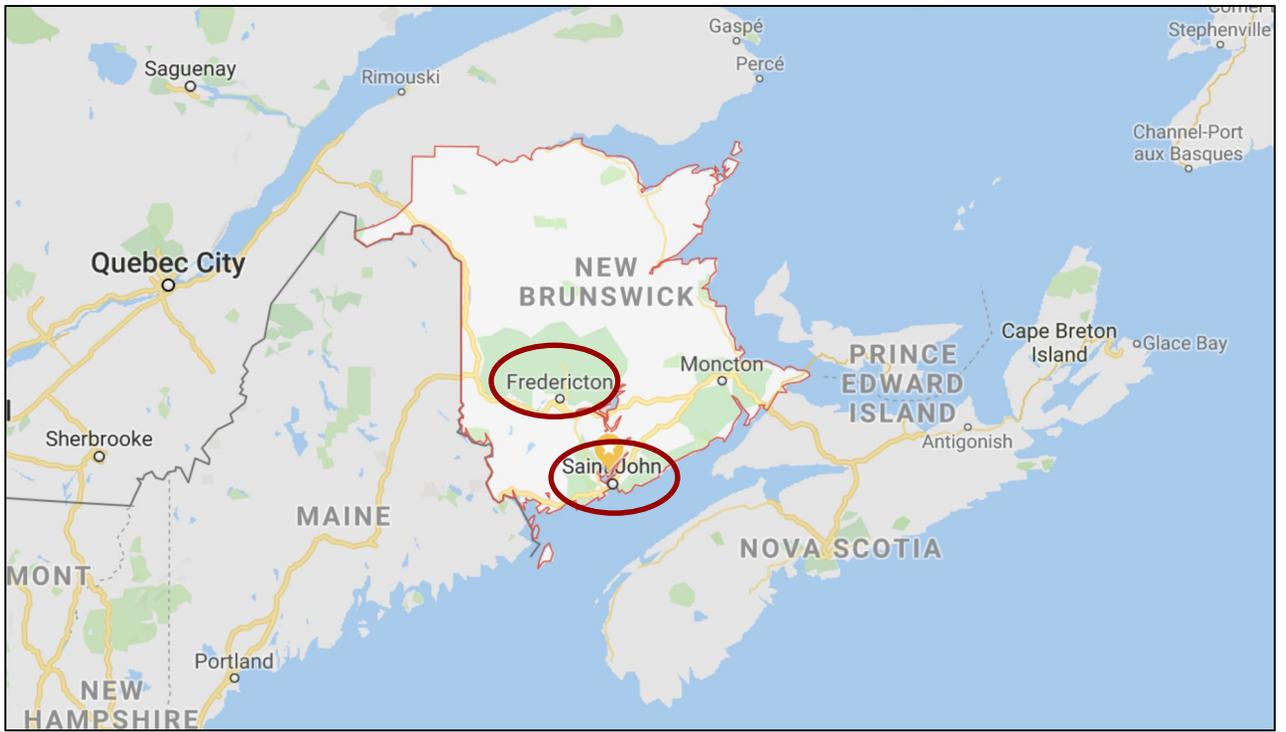
Strengths and weaknesses

We also divided up other tasks based on our different strengths and weaknesses.

Alex's strengths include the ability to plan and organize and to manage projects. Because of this, she took the lead when it came to planning our instruction sessions and she made sure we stayed on track. Although she's a very engaging presenter, sometimes she has trouble providing clear and concise directions for group activities and feels she rambles a little too much when she's not confident with the material. Fortunately, Phil is very good at providing clear and concise directions—and (as I said before) at explaining theoretical concepts—this is why he provided the directions and covered the theoretical parts during the lab. Phil can sometimes come across as a little too serious, and be a little intimidating to students, so he

preferred to let Alex and me take the lead on responding to student questions and comments. I'm not a very creative thinker, and not very comfortable with taking risks in the classroom, so I followed Phil's and (mainly) Alex's lead when it came to planning and delivering the group activities. I really enjoy interacting with students, though, and am able to build relationships with them quickly and I was able to contribute in the lab by getting to know them and helping them during the group activities.

We found that by combining our different teaching styles and using our collective strengths to cover for our individual weaknesses, the teaching sessions we conducted went really well. Now I will hand things over to Phil, who is going to delve deeper into the details of the deliberations that determined our direction.



UNB Saint John







I'll try not to sing out of key

How our collaboration worked in GEO2262

PT - purpose of the lab? Our objectives

- In this bit, I'm going to be covering details very specific to our experience and to this course, but our hope is that you might find some of these details useful as examples for your own existing or potential collaborations.
- Part 3 Co-teaching/collaboration experience for GEO2262
 - How did we work together to plan, deliver and reflect on our collaboration within this course?
 - Alex took point as the liaison for the sciences. She responded to emails from the organizing instructors, asking questions on the group's behalf and ensured that we understood our deliverables and their timelines. Of the 3 librarians involved, she undoubtedly did the most work.
 - Planning took place from May to December, and throughout the early weeks of the course. The course instructors encouraged and invited our participation at every step.
 - Most of our planning took place in face-to-face working meetings, often 2 to 3 hours in length. These meetings generally involved a goal (i.e. developing our speaking notes into workable form) and began with discussion, then silent work interspersed with further discussion, and eventually agreement that we had reached a sufficient shared understanding of the goals to go off

- and do some work independently.
 - Usually one member of the group would feel pressed earlier than the others about a particular deadline, which was a very effective way to stay on task, vs individual procrastination habits.
 - We divided our roles in the session based on perceived strengths and weaknesses. This is a fuzzy process and does depend on the relative self-awareness of the people involved to a certain degree, but in our case it was effective. These did not fall along subject lines, because we aimed to keep the lab relatively subject-neutral (using a mix of science, arts and business examples in a few brief moments). Instead, for example, Alex introduced the session, led an opening activity, and led the research methods demonstration, Phil spoke on the topics of authority and currency, and David spoke on information need and selecting databases. We collectively guided most of the other activities.
- Planning and delivering the labs (ice breaker & research), assignment & exam questions
- Our first lab involvement was in an “ice-breaker” lab session in which all the different instructors were asked to prepare a brief exercise in their subject area on the topic of ice. Objective: introduce students to the idea of authority and certain sources meeting a given information need. We had groups of students look up ice in different free web sources: Merriam Webster, Urban Dictionary, Wikipedia, and Google. They were asked to investigate the source – its age, the source of its information, its authors, etc. We discussed the wide range of definitions for the word, focusing especially on unusual vernacular definitions. I was quite ill during this intro lab, and sat at the back unable to speak. This is an added benefit of co-teaching: illness does not necessarily kibosh a session.
 - The library lab was the 3rd lab in the course (second-last Thursday of January). This wasn’t ideal – would have preferred to be later in the semester – but it was structurally necessary for other elements of the course.
 - We had 3 hours to fill with content. Our objective (to be *taught* in the lab and *measured* by the research log) was to teach both principles of information literacy and practical research skills.
 - Because we had so much time, we felt we could be experimental with our content and with our format.

- We felt that it needed to be balanced between passive and active learning. We settled on 7 activities and 7 speaking/lecture sections.
- We won't have time to go through our activities in detail today, but we've included a link to all the course materials we created at the end of our slides. We'd be delighted to chat with you about them one-on-one, or answer more specific questions at the end!
- We worked on a collaborative outline document and collaborative slide deck to prep and guide us through the lab.
- None of us really knew what a "lab" is supposed to be like – we all have arts backgrounds. So, we asked the science professors leading the course for guidance, and they encouraged us to include the activities and avoid extended lecture. We had no knowledge transfer material from previous (solitary liaison) librarian involvement in the course. Despite our best efforts to mimic a traditional lab setting we realized when it was over we missed an important aspect - having the students do something to grade them on. The science profs were so used to labs they didn't think to mention it and we had no idea it was a thing so we didn't think to ask.
- In previous iterations, this course included a library research lab, but no other involvement. This time, Alex asked for more, and successfully pitched a "research log" assignment to the instructor at a 10% of course grade value.
- The students were (separately) expected to prepare a group presentation on an element of their choice – the research log assignment was intended to help them seek more authoritative information for that presentation.
- They were asked to record in detail the steps they took in their searching, and they were also asked to reflect on their thought process, judgments and choices when evaluating sources.
- How did we plan and develop this? Because there had not been a library assignment before, we had a blank slate to work with. We agreed that our assignment should build on the content of the library lab (determining authority/credibility of sources, sources appropriate to an information need, and using library resources), and that the assignment should prepare them for their group presentation.
- We developed this material over the course of some months –

- beginning to brainstorm in August, but not finalizing the assignment until the end of January.
 - The model for the assignment – the “log” - was suggested by Alex, who was familiar with the format from the health sciences and felt that it would be similar to field journals and lab notebooks and thus resonate with the interdisciplinary background of the students.
 - Students were required to meet with us as part of the assignment requirements.
 - Exam questions – we were asked to submit exam questions to be included as options in the short answer and long answer portions of the exam. We focused on content from our lab – most students responded to both of our questions, doing a middling job of it.
- Marking
 - PT & AG took the lead on this with some input from DR (Head priorities called him away) We marked together, with Phil taking the lead on giving constructive feedback and Alex filling in with other comments and tempering Phil’s tone- together we decided upon grades. We marked all of the assignments together.
- Working with other instructors/students
 - This was an easy relationship, probably because a course like this one is designed by and tends to involve the most active and prominent teachers on campus. Several have won local or national teaching awards, and most use innovative teaching styles in their own classrooms. They welcomed our suggestions and our request for an assignment. They made us feel like fellow instructors rather than like service-providers. It was also likely an easy relationship because since Alex and I came to campus, with David all of us tended to attend events and meetings together, and were more visible to our fellow instructors than they had been used to. We heard comments from people that it was nice to see us out and about together.
 - Most of our planning with the other instructors was by email and in early meetings, but the two main instructors (Dr. Lucy Wilson & Dr. Aaron Granger) were in regular formal and informal contact with us throughout to provide answers to our questions and opinions about students’ strengths, weaknesses, and needs.
 - Students – one of the strengths of the course was our ability to develop regular, less-formal relationships with students by

- regularly attending class and labs and meeting with them to discuss their projects. This sustained contact, in our view, was a key game-changer in changing their research behaviours – even if they didn't do what we'd hoped, they were certainly more comfortable asking questions and honestly discussing their approaches with us.
- Reflections for next time (specific to our co-teaching/collaboration)
 - We were overall very satisfied with our co-teaching/collab structure. Although there are lots of things we might change about the nuts and bolts of the lab and assignment, our planning and co-teaching went really well!

I get by with a little help from my friends

Practical takeaways

[AG]

o **Why do this? Advantages to co-teaching/collaboration**

I hope we've demonstrated this afternoon some of the reasons why trying this could be a benefit and might be something you consider trying.

Practical – sharing workload, makes sense for the course

Relationship building (with each other and instructors)

Students get to know more people at the library and get more comfortable with seeing us outside of the physical library setting

Learning from each other (subject expertise/specialties, teaching styles – how this experience has changed us?)

AG What did I learn from DR & PT and other instructors to change/improve my teaching:

I loved having so many different examples of teaching styles to watch and see which ones I liked and what I could consider incorporating into my own teaching. I'm also still new to the academic world and I'm always learning things from David and Phil about about what we do as academic librarians and it's like cheap professional development. I'm especially envious of David's ability to develop a rapport with students (he's scary good at remembering names) and his example makes me try harder to make connections.

o **Challenges to doing this**

You have to have the right people for the job; this doesn't always work.

Someone can dominate and hog everything, instruction styles don't mesh, someone likes text heavy slides or a certain font and you don't, someone is way more outgoing and always interrupts or corrects the other person.

Can take time and effort to coordinate your parts; greater risk of repeating content, poor transitions, going over time if you don't; someone does have to take ownership of this to keep everyone on task, but not become a micromanager.

You need to find a balance and learn to compromise – you wanted to collaborate for a reason, no one forced you, so you need to listen to each other and balance out your strengths and weaknesses. You have to trust them to do their part.

- ***Types of courses to look for these co-teaching opportunities & nature of what your role and involvement could be***

First year courses like our UNIV1003 or similar; courses with info literacy aspects, research methods, graduate seminars.

We've mentioned a few ways this could work: co-teaching could be equal partners, someone leads and others lend expertise, someone leads and others are available to assist with activities, etc. And very important to note that co-teaching in a colleague's class does NOT obligate you to invite them into yours. Co-teaching can take many forms!

- ***Finding ways to cultivate relationships with faculty outside class***

Facetime is important, go to events, meetings (especially if they're teaching related), etc. Get out of the library!

- ***Get to know your library colleagues***

Find out what they're working on, classes they're teaching – do you have staff meetings, or instruction committees or other opportunities to find opportunities for collaboration? Or you could tell them about this awesome presentation you went to that was all about how co-teaching and collaboration was the new thing to try!

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Questions for us?

Contact info and Twitter handle

Course materials

<https://bit.ly/2VLf8WX>

If you'd like to see our specific course materials we've scanned them all together and shared them as a PDF. This includes our lecture notes, activities, and assignment, and also some blank pages due to single sided pages getting scanned with double sided ones.