TEACHING STATEMENT

An empowered learner feels competent and motivated to think and learn, for life. Though a clichéd term, I consider empowering learners the primary role of a university and my responsibility as educator. In today’s society a capacity to think critically is vital, yet the contemporary university struggles to live up to its commitment to empower learners, and can be an especially disempowering environment for people with diverse learning styles and cultures.

Whether debating in the classroom or measuring runoff in a mountain stream, I have watched environmental science empower students. The hands-on, real-world focus naturally inspires learners and builds confidence. My goals as an educator capitalize on that. I empower learners with a structured yet student-guided curriculum that gives students agency in their own learning and accommodates diverse learning styles. I foster creative, evidence-based thinking about scientific, environmental, and social issues, drawing on my broad Geography background to broach complex problems. And, I facilitate experiential learning so that students can develop practical skills, whether using a clinometer or writing a research proposal. I particularly love working with students in the field, my natural habitat.

What follows are descriptions of my key teaching strengths (bold text) and how they support these educational goals to foster confident, critical, and equipped life-long learners. Examples come from a Water Resources Management course that I developed and instructed in the University of Victoria department of Geography in spring 2015. Sections of the course evaluation survey related to my teaching effectiveness are appended.

Empowering learners

Confidence in one’s own ability to learn requires a clear course structure and expectations. I present the course rationale, assignments, and methods of assessment clearly in the course syllabus and during scheduled review sessions. I explain learning objectives at the beginning and end of each class to frame content and specifically serve as the exam study guide. I provide formative assessment by assigning low-stakes (low or no point value) ‘practice’ tasks first, then providing solution-oriented feedback before a final assessment. For example, prior to their final paper students wrote a government briefing note on the same topic as an opportunity for early information-gathering, argument organization, and feedback.

I facilitate a student-guided curriculum that gives students agency in their own learning. I provide choices for class, guest lecture, and assignment topics so that the course content is meaningful, devote a major portion of the course to student-led activities rather than passive lecture-learning, and provide a range and choice of assessment types so that students with a wide range of learning styles can succeed. I provide options for assignment weighting, for example weighting a lab or a mid-exam more heavily depending on individual student needs, and I use alternative participation formats for students uncomfortable speaking aloud in class.

I was deeply influenced by my experience as a student and educator at the University of Victoria, which is located within unceded territories of Canadian First Nations people, and where inclusion of indigenous people, traditions, and values are a critically important — yet
imperfectly executed — part of university life. Rooted in my experience working with First Nations students and other diverse student groups, I use culturally-responsive teaching strategies to foster an inclusive learning environment. A student-guided curriculum allows me to integrate students’ personal experiences, emphasize topics relevant to them, and offer assessment options inclusive of diverse backgrounds. I also rely on a range of educational resources rather than a textbook which may exclude students with financial barriers or particular learning styles.

Evidently my teaching approach combines structure and flexibility, which can be risky. A lack of structure can cause confusion, while a lack of flexibility discriminates against some learning styles. To strike this balance I use a reflective teaching strategy, deliberately reviewing my teaching practices throughout the term and adapting to student needs as they evolve. I check in regularly during class, solicit formal midterm course feedback (survey), and make requested changes within, not after, the term. For example, students felt their concerns about a long mid-term exam were addressed by changing the format of the final exam and reducing the mid-term grade weight.

Creative, evidence-based thinking

Creative and evidence-based thinking equips students to confront challenging scientific problems in the real world. I emphasize complex and controversial issues, especially global change issues, whenever possible. I encourage students to seek innovative solutions, for example by drawing on a concept from a different course to solve a problem, and I help students to practice critically evaluating research and sources through group discussion. I cultivate a dynamic and respectful classroom culture where students feel their opinions are valued and are safe to reflect deeply and critically.

Experiential learning

I am a passionate field scientist and outdoor enthusiast, and experiential learning is a hallmark of my teaching approach. I prioritize field work on campus, in the community, and beyond. I have an extensive scientific field background including lengthy periods of teaching and research in remote wilderness settings. I have directly supervised dozens of undergraduate field research projects, and have delivered faculty seminars on field instructional strategies, course design, logistics and safety, and scientific instrumentation. When confined to the classroom I design practical activities that build relevant skills, for example writing a scientific briefing note or dissecting scientific study design. I am excited to incorporate my recent training in Inquiry-Based-Learning into future learning and teaching.

Final thoughts

I am a passionate educator and environmental scientist, and I believe the dual research and educational mandates of the university can provide an exceptional opportunity for empowering learners. I regard environmental science as a community and way of thinking that naturally supports learner empowerment, creative and evidence-based thinking, and experiential learning. I believe in the upcoming generation’s ability to address environmental problems and I sincerely enjoy being a part of that process.
Appendix: Coulthard Course Evaluation Survey responses related to *teaching effectiveness*
Water Resources Management (Geog. 371) University of Victoria, 2015

I Instructor's Teaching - Students' Ratings on the Following Statements:

8. Overall, the instructor was effective in this

<table>
<thead>
<tr>
<th>course</th>
<th>Value</th>
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<tbody>
<tr>
<td>Very Poor</td>
<td>0%</td>
</tr>
<tr>
<td>Poor</td>
<td>0%</td>
</tr>
<tr>
<td>Adequate</td>
<td>5%</td>
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<tr>
<td>Good</td>
<td>10%</td>
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<tr>
<td>Excellent</td>
<td>85%</td>
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<td>Total (20)</td>
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<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
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<tbody>
<tr>
<td>Response Count</td>
<td>20</td>
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<tr>
<td>Mean</td>
<td>4.80</td>
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<tr>
<td>Median</td>
<td>5.00</td>
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<tr>
<td>Standard Deviation</td>
<td>+/-0.52</td>
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7. Overall, the course offered an effective learning experience

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<th>Statistics</th>
<th>Value</th>
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<tbody>
<tr>
<td>Response Count</td>
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<tr>
<td>Mean</td>
<td>4.55</td>
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<tr>
<td>Median</td>
<td>5.00</td>
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<tr>
<td>Standard Deviation</td>
<td>+/-0.78</td>
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IIV Student Comments:

What strengths did your instructor (Bethany Coulthard) demonstrate that helped you learn in this course?

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<tr>
<td>Using examples of WRM from around the world. Coulthard was extremely organized so it was really easy to learn about water management issues but still understand what information she was hoping we would take away (the objectives listed were very helpful). Coulthard was also very knowledgeable and enthusiastic. She was really proactive in making sure that the students were understanding the course outline, content, and expectations. Very simplistic slides that were easy to understand in terms of the expectations for the lecture, consistent posting of class slides to study throughout the course, very personable and made concepts understandable, availability for feedback on projects, tests, and papers, gave examples of cases around the world that demonstrated the concepts we were learning, and hands on exercises and projects with real-life practicality. Bethany did an excellent job of teaching this course and is one of the most engaging and personable instructors I have had in my university education. She is exceptionally knowledgeable about the material and content, but presents it in a way that is comprehensive and easy to grasp. There was always an opportunity to discuss topics, and often the class felt like more of a debate and analysis of concepts than a lecturer talking at the students. Her positive attitude and passion for the subject shone through in every class, with this personable relationship inspiring even more interest and captivation in the class. I cannot say enough about how inspiring, engaging and informative this class was as a result of Bethany’s teaching style. She was very enthusiastic about the material and it rubbed off on me. She was great at answering questions, even if she didn’t know the answer. Promoted engagement throughout the semester, very positive attitude, motivated and happy to teach. As well, help outside of the classroom was an asset, and provided the necessary assistance to excel. Engaged students interests clear visual aids great feedback and availability. Super knowledgeable and passionate!</td>
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<tr>
<td>- very personable, enthusiastic, passionate about the course. - course assignments and projects where very well put together and provided the class with the opportunity to undertake work that we will do for our career in the future (EX: writing a briefing note based on an issue that is actually occurring in the real world, and conducting a flood management plan). - She did not overload us with massive amounts of readings (very nice) and the readings we did do, there was a class discussion which related to the reading instead of using it as a filler within the lecture. - she made the course material very interesting and engaging through the way the lecture was presented. - she made a great effort to get to know everyone and remembered our names after the 1st week.</td>
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<td>- very accommodating. This course was really interesting with a broad array of topics which really let us explore deeply the water management issues. Also, the course was really engaging and it was just enough challenging. Definitely a perfect class the way it is now! :-</td>
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<tr>
<td>Bethany is an amazing prof! I have never had a professor that I have respected so much, and appreciated everything she had to say about water resource management. Being someone who knew very little about the topic coming into the class, I don’t think I have ever left a class feeling like I have learned as much as I have. She inspired me so much! She has the kindest heart, and really wants her students to succeed in the best way possible - constantly looking for inputs on her teaching methods and how the students are finding the class. I plan on taking every course she teaches until I graduate, so much fun and sad to leave!</td>
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<td>Great energy, attitude and enthusiasm. Really cares about her students, and that matters to students a lot. She was very enthusiastic and passionate about the subject and she displayed an extensive knowledge about it. She was very interested in our thoughts and our specific interested on water resource management and made sure to answer our questions to the best of her ability. The course had a great flow to it and she made it easy for us to understand and engage with the subject matter.</td>
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She is easy to listen to.
Bethany was a really wonderful teacher! She was prepared, clear, a good speaker. Her slides and explanations were excellent. She included relevant case studies, engaged with students, told stories and got everyone excited about water! I would take another class with her if I had the chance.
Bethany was an amazing teacher that deserves above average recognition. She was incredibly understanding of students workload, while still able to push each of us to study and go beyond what we learnt in class. Instructions were very clear, and each section of the class material was lead by objectives that really helped us understand the important concepts to take from the class. There was an average work load that was nicely distributed throughout the semester, and she was a fair marker if you attended class and participated. Have only had a few teachers at UVic that were like this. Bravo!
Great lectures
Very knowledgeable and engaging
Animated, vibrant lecturer
respectful of ideas and generated questions/discussion
Very nice person, helpful
first hand knowledge due to tree ring data!

Please provide specific instructions as to how the instructor could have helped you learn more effectively.

Comment
Understanding that this course had a relatively heavy workload compared to other courses
Using examples of assignments as they are handed out eg. demonstrating a BN
Honesty, one of the best professors I’ve ever had.
For readings, post questions regarding what we should focus on for the reading, or what questions we should seek to answer from the reading. Also, when discussing the readings in class, assigning groups to get together and share their knowledge on what they learned from the reading first, and then bringing together the class is an effective way to get everyone involved in the learning process.
No improvement necessary.
she was awesome, no suggestions
- honestly i feel that nothing could have made my learning more effective, very happy with the effectiveness of Bethany's teaching
The class was so well balanced and thought out that it seems hard to do better.
The first midterm would be my only critique but she was well-aware that people had an issue with it and was very accommodating for the second midterm. Everything else was amazing!
I think her current approach needs absolutely no adjustments. Her energy, attitude, enthusiasm and passion are a breath of fresh air, and that in itself helps you learn more effectively.
Use the examples to our benefit. Fewer examples in more depth to really help us understand the concepts. Have tests that aren't as demanding. For a 50 minute exam we should not have 5 long answer questions- not enough time to answer adequately. Key concepts should be highlighted in the course slides- slides should be posted ahead of time so that we can listen instead of worrying about what to write down. Fewer slides with less words.
I think the marking framework wasn’t always fair And didn’t make sense all the time. A little unfair

Please provide specific suggestions as to how this course could be improved.

Comment
What I posted above, and I would suggest having a lecture or two outlining the CRO and local water management (because it is facing many issues). I find that it has real pulling power when we learn how these management issues effect on a personal level.
One small thing I noticed that could have been different was that one of the longest papers of the term to read was made for the last week, after the final test. I think there would have ben better discussion if it was a shorter paper for the last week as it would have been an easier read.
The course is just fine the way it is.
shorter midterms to allow more time
- N/A

No improvements necessary! Continue this way, I'm sure we all enjoyed the class.
I have no suggestions. This class was amazing.

By having Bethany Coulthard teach this course from this moment onwards!!!
The only part of the course that was not enjoyable was the midterm. The content was fair but we did not have enough time to finish. This was for the most part rectified on second examination.
This course was overall a pleasure to take! More courses from this instructor would be appreciated!

Do not assign the briefing note so early in the semester- we didn't have enough class discussions about it to fully get a grip on it (too much time from when the briefing note was due and the final paper) they should be 2-3 weeks apart instead of 2-3 months. Provide more time for groups to get together for group presentations, timing in the semester was poor as everything is due during that time (assign before reading break next time).

Some of the readings were a little dry and tough to get through (Weber & Tuhler and Ongley). Maybe increasing the number of readings, but having some shorter ones - more variety.
The assignments were really great though! The case study project was fun!

Either get rid of the second midterm or the case study - too many small projects in a 3rd year class in not enough time
no guest lecturers when away - that extra time would be wonderful at this stage in our degree (3rd/4th/5th year students)

More cookies!