University of British Columbia Vancouver - Department of Earth, Ocean, and Atmospheric Science

What I want instructors to know: Students sharing experiences and perspectives on learning science in field settings and beyond

Sarah Bean Sherman (bean@eoas.ubc.ca), Laura Lukes, Silvia Mazabel, Sophie Dupuis, Shandin Pete, and EaSEIL Student Partners*

Land Acknowledgement

The work leading to this document was created on the traditional, ancestral, and unceded territory of the Musqueum at the University of British Columbia (Point Grey campus) in Vancouver, Canada as part of the Earth Science Experiential and Indigenous Learning (EaSEIL) project. The authors appreciate that most field work is on Indigenous lands and strive to work respectfully with the Indigenous Peoples upon whose land they are working.

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Overview

- The Earth Science Experiential and Indigenous Learning (EaSEIL) project is a three-year initiative at the University of British Columbia (Vancouver, Canada) that creates space for instructors, students, staff, and community members to develop and transform field-based experiential learning.
- Informed by conversations with EaSEIL instructors (n=20), we identified four topics of discussion on which to partner with students: (1) feelings of belonging, (2) accessibility, (3) learning in groups, and (4) Indigenous content in Science courses.
- This poster shares preliminary highlights from discussions with student partners where they shared their learning experiences and offered recommendations to enhance learning.

Participants and Process

*Student Partners (n=17; 14 undergraduate, 3 graduate in science and engineering programs.

- Recruited through department listservs and word of mouth.
- Students were paid $50 for each focus group and $25 if they provided feedback on the summary document.
- 1-6 students in each; most students attended more than once.

The process that we used for the focus groups:

Before Focus Groups
- Working with EaSEIL instructors identified questions for focus groups

8 Focus Groups
- Individual written reflection
- Small group discussion

After Focus Groups
- Facilitators created summary of discussion
- Students reviewed summative notes
- Facilitators shared highlights with EaSEIL instructors
- EaSEIL is producing OERs

Accessibility

How or what has made your courses more accessible?

Accommodating learning experiences
- Recorded lectures, access to slides/notes
- Hybrid classes
- Long-term group projects with clear instructions and criteria provided in advance

Opportunities for Interaction
- Capitalize on and flexibility with office hours
- Get to know your students
- Survey students about accommodations needed

Foster work efficiency & relationship building
- Schedule free or down time
- Can be a full or half day or threaded throughout

Accessibility in the field
- Explicit, detailed information about the setting (e.g., videos, LMS, lived experiences, pictures, virtual tour)
- Consider financial accessibility of field courses:

Feelings of Belonging

What has supported your sense of belonging in courses?

Created by Daniel Gowryluk

Kind, patient & compassionate instructors
- Learn and use students' names
- Be flexible

Welcoming & positive climate
- All questions valued
- Invite diverse perspectives

Variety of assessments and evaluations
- Assess student improvement/growth
- Transparency about grading

Focus on planning, preparation and communication for field learning (in advance, on site)
- Informative meetings early on
- Ability to post questions /comments anonymously
- Creating a code of conduct **WITH** the students
- Provide opportunities for past students to share experiences with new students
- Daily itinerary that includes info about:

Learning in Groups

What helps you learn when working in groups?

Group Formation
- Size 2-4, assigned, rotate members
- Doing individual work beforehand
- Demonstrations are helpful

Highlighting the value of learning about Indigenous content
- Time to reflect and process Indigenous content
- Equally weighted on evaluation

"Prof said, it was important to understand different perspectives, and we were tested on it."

Indigenous Content

Are you interested in having Indigenous-related topics incorporated into your courses? Why and How?

Indigenous content provided relevant and authentic

"Two-way seeing has to do with looking at it from a different perspective, the focus is different (plants and rocks as teachers, stories that these tell, they offer us lessons for how to interact with the living world)"

Threaded throughout the course not only a single day
- Quality over quantity

"...the way it is integrated is flawed. Other ways of knowing are usually not well integrated, just isolated"

- Just one session on Indigenous topics and the instructor mentioned 'you won't be tested on this' [so students don't pay attention]

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For more information please contact ssherman@eoas.ubc.ca or easeil@eoas.ubc.ca

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