Earth Science Experiential and Indigenous Learning (EaSEIL) Project

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What is EaSEIL about?

EaSEIL is a 3-year TLEF project that creates space for instructors, students, staff, and community members to reimagine, develop, and transform field-based experiential learning opportunities for students.

This curriculum and professional development project supports instructors in:

- 1. Incorporating Indigenous histories, perspectives, Knowledges and ways of knowing into science curriculum
- 2. Increasing inclusion and accessibility practices in field-based learning opportunities
- 3. Engaging with the community to integrate interdisciplinary and systems thinking approaches into field-activities

EaSEIL's work supports action on critical elements in the UBC (Strat. 2, 11, 12, 13, 14, 17), Indigenous (Actions 15 and 16), FoS and EOAS Strategic Plans, and advocacy by Syilx elders (Chris Marchand, Eric Mitchell).

How do we work?

To accomplish our goals, we use three models of engagement to foster intentional collaborative reflection and action amongst instructors, students, UBC partnering offices and community members:

3 Tier Indigenous Engagement Model **Students as Partners Model** for Curriculum Development Student Advisory Focus Groups & Case Study: New course at UBC-Teck Resource Co-Development Projects Geological Field Station Facilitators **EaSEIL** Leadership Opportunities for: Community Individual reflection of Practice Knowledge Sharing Model Collaborative Sense-Making & Production Monthly meetings for those teaching EaSEIL on the Land Project Iterative & Responsive Activity Design

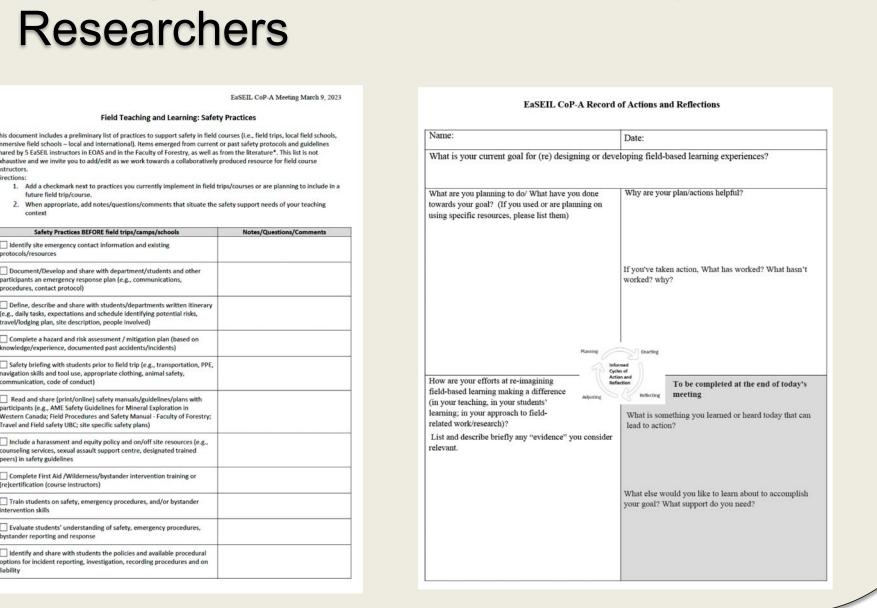
EaSEIL's Long-Term Goal

Reimagined/enhanced experiential field-based learning opportunities for students that:

- Are more accessible and inclusive
- Incorporate Indigenous perspectives, histories, ways of knowing, Knowledges

Resources for

- Students
- Instructors
- Faculty and Curriculum Developers



NOTE: EaSEIL is also engaged in research on the efficacy of the Community of Practice and Students as Partners Models (1-6)

Outcome #

Draft Course

Students as Partners

Students as Resource Developers

- Summer 2022 (7 students); AY22-23 (4 students)
- 11 projects (e.g., Accessibility Scenarios in field-courses, UBC Teck Station Virtual Tour, website, data analysis)

Students as Advisors (Oct. 2022 - Mar. 2023)

- 17 students (3 Grad &14 UG; EOAS, Forestry, IS, LFS) / honorarium
- Topics: (1) Feelings of belonging, (2) Accessibility, and (3) Group work in field-based learning experiences / (4) Indigenous content in science courses: needs, experience, aspirations
- 8 Focus Groups

Focus

Groups

- Individual written reflection
- Small group discussion
- Students review summative notes
- EaSEIL Leadership produces OERs

Highlights shared in CoP-a meetings

- Consistent participation
- Reports of feeling validated and represented
- Peer relationship building

Community of Practice

- Orientation meeting (Apr. 2022)
- 8 hybrid meetings, 90 min. each (Sep.2022 Apr. 2023)
- 19 instructors (EOAS, Geography, Forestry, Botany)

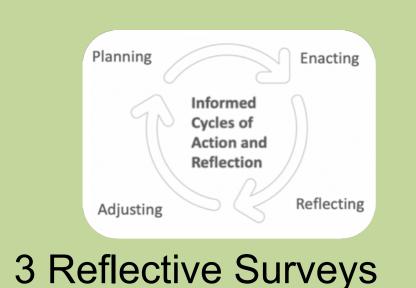


2 interviews

Learning competencies and professionalism

Activities, Processes, Outcomes, Impact (YEAR 1: 2022-2023)

- Ethics of field teaching and learning
- Accessibility, Inclusion and Safety
- Indigenous Sovereignty and Knowledge keeping protocols



- Consistent participation in meetings
- Shared / Increased understanding of key elements in field learning experiences
- Individual changes to curriculum design
- Enhanced collaborations with colleagues/partners
- 5 new members for Year 2

3 Tier Indigenous Engagement Indigenous Faculty

Validate and develop an

Expand Familiarity

- Validate instructor developed curricula
- Further Pedagogical Reflection
- Develop Cultural Competency Pedagogical Reflection Create a foundation of
- Validate/Expand Content Validate/Expand Pedagogy

Indigenous

Students, Faculty

Further Develop Cultural

Draft Course

Modification

Final

Outcome

New Course

Competency

Outcomes Tiers 1 and 2 events

- Potential course format (multi-semester, 1 week UBC-Teck field station, in-class learning, community based mini-projects completed in the field) following FAIR & CARE/OCAP Principles
- Potential Framework: Past Present and Future of Indigenous Science / Ways of knowing
- Suggested prerequisites and corequisites / content and definitions for all students
- Questions and ideas about: content, access, safety, instructors' background, cost, marking scheme, course longevity



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understanding of

curricular material

experience

Indigenous students'