

Council of Chairs of Canadian Earth Science Departments

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Craig Nichol, PhD PGeo
Associate Head, UBC Okanagan

Strategies to Advance the Relationships
between Earth Science Departments and
the Regulators of Professional Geoscience:

Supporting Earth Science Students to Professional
Geoscience Registration



BACKGROUND TO THIS STUDY

Surveys: 9 regulators, 28 departments

Sep 2021 – Feb 2022

Appreciative Inquiry Interviews

9 regulators, 17 departments

Current Best Practices

Future Best Practices

Key strategic supports

Concrete steps to engage in change
– 6 months and 5 years

550 pages+ of transcript.

Results to CCCESD in October 2022

Final report summer 2023

Distributed Aug/Sep 2023



FINDINGS

1. Foster Relationships
 - 1a. Department Professions Advisor
 - 1b. Academic Liaison for Geoscience
 - 1c. Regular meetings
2. Student Centered Engagement
 - 2a. Present to students
 - 2b. Public list of program alignment
 - 2c. Public institution specific course lists
3. Dialogue on Future Requirements
 - 3a. Scope and future of geoscience
 - 3b. Prepare for competency assessment in GIT.
 - 3c. Streamline processes for multiple reviews

Strategies to Advance the Relationships between Earth Science Departments and the Regulators of Professional Geoscience:

Supporting Earth Science Students to Professional Geoscience Registration



Available at: <http://hdl.handle.net/2429/85444>

1 FOSTER RELATIONSHIPS

1A. DEDICATE A PROFESSIONS ADVISOR

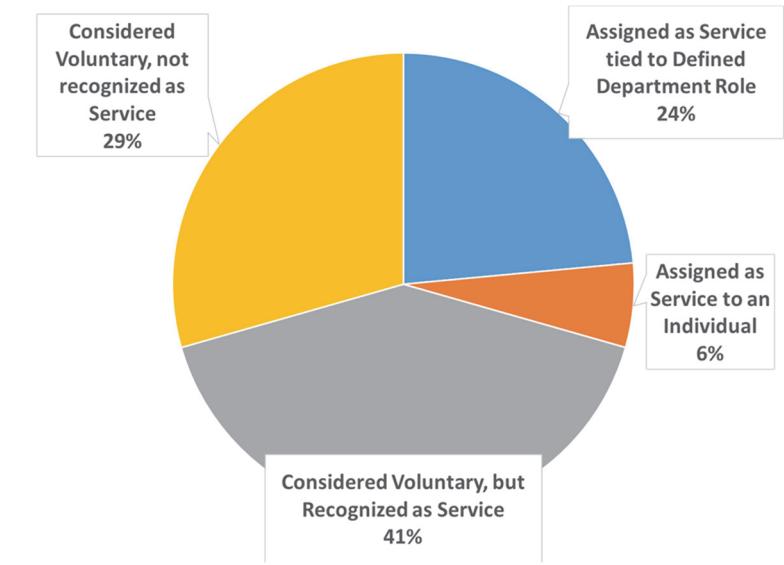
- Recognized service role
- Faculty member, with staff support if possible
- Minimum 3 years and a succession plan

Updates:

- Jan 2023 CCCESD added Professions Advisor to survey
- Oct 2023 First national meeting: 17 participants.

Questions:

1. Does the timing of the CCCESD survey align to when service roles are assigned?
2. How and where should the list of professions advisors be shared nationally?
3. How often and when should advisors meet?



"When you formally facilitate something properly things happen. When you don't and you leave it to ad hoc, volunteer, things fall through the cracks."

Department Interviewee

1 FOSTER RELATIONSHIPS

1B. DEDICATE AN ACADEMIC LIAISON FOR GEOSCIENCE

- An easily identified contact point for faculty, staff and students.
- Capable of advising students on
 - Whether career choice fall in licensure
 - Geoscience streams
 - Course checklists
- P. Geo. recommended

Updates:

- Results presented to Canadian Geoscience Standards Council Oct 16, 2023

"I guess, in our organization, it would be to assign somebody the responsibility for the relationship with geoscientists in general, including the earth science departments and students."

"Currently, who is responsible for which relationships is broken out in terms of our processes and types of levels of licensure, not so much engineering versus geoscience."

Regulator Interviewee

"That connection from the regulator directly to the students so that they don't have to liaise through faculty."

Department Interviewee

1 FOSTER RELATIONSHIPS

1C. COMMIT TO REGULAR SCHEDULED MEETINGS

- Regular meetings – quarterly, biannual, annual?
- 1:1 regulator / university (invite Dean?)
- 1 regulator / multiple universities (meet colleagues?)
- Visit new faculty

Question:

- Has anyone had new meetings with regulators?

"Having a little bit more purposeful structure around communicating with the Earth science departments would be beneficial, and having a more documented process so that it is easy to transfer it onto the next person."

Regulator Interviewee



2 STUDENT-CENTERED ENGAGEMENT

2A. REGULAR MEETINGS WITH STUDENTS

- In person presentations are best
- Remote talks may give more coverage
- Record the meetings and post in LMS system
- Visit new faculty

Updates:
Shared resources

"The best relationship that we have with the universities is that every fall we try and stand up in front of their students"
Regulator Interviewee



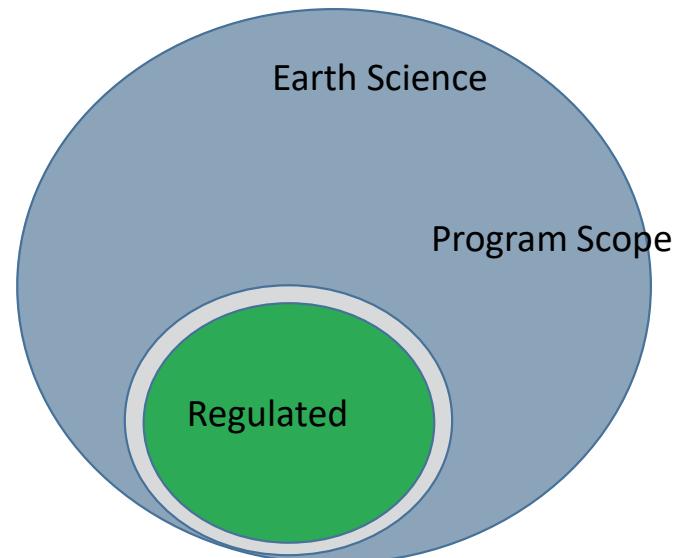
[2023 Careers and Licensure Resources.docx](#)

2 STUDENT-CENTERED ENGAGEMENT

2B. IDENTIFY PROGRAM ALIGNMENT

- National list of program alignment or diversity.
- Common language for calendars / websites to describe licensing and programs.

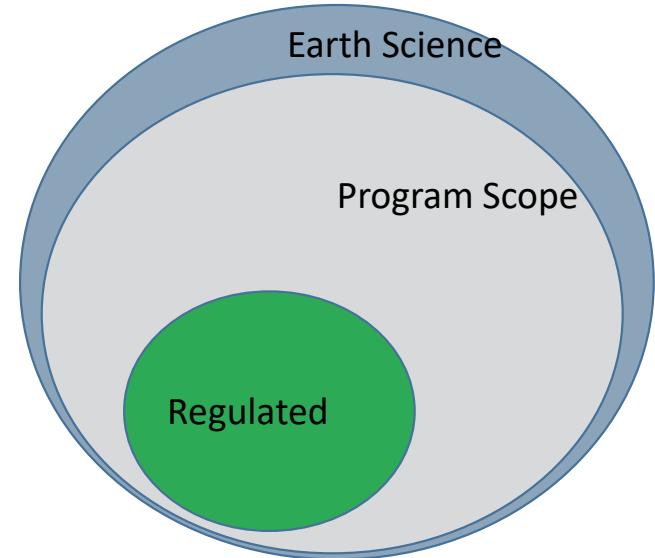
Aligned



Question:

- Add the question to the CCCESD Survey?
- Annual survey from regulators?
- Where would the list be stored?
- Interest in help writing calendar language?

Diverse



2 STUDENT-CENTERED ENGAGEMENT

2C. PUBLIC INSTITUTION SPECIFIC CHECKLISTS

- BC and Saskatchewan have public lists.

Updates

- BC – all BC institutions submitted revised lists this spring. Hoping for annual process.

Question

Would a common national application format help?

"In five years time I hope that I have all of my course lists at every university published online. Expanding to other provinces might be a good next step."
Regulator interviewee

"I would feel very bad If I was offering a course that they thought was going to tick their requirements and then it didn't count"
Department interviewee

3. DIALOGUE ON FUTURE REQUIREMENTS

3A. SCOPE AND FUTURE OF GEOSCIENCE

- Low understanding in academia of how the boundaries between geosciences / earth sciences / environmental sciences are determined for licensure.

"The GKE is on a schedule to be reviewed every five years or so, but there should be an ability for institutions to communicate back what is working."

Regulator interviewee

Question

Increased department regulator discussion?
Discussion between CCCESD and Canadian Geoscience Standards Council?

SUGGESTED ACTIONS AND QUESTIONS

1A: Professions Advisors

- Does the timing of the CCCESD survey align to when service roles are assigned?
- How and where should the list of professions advisors be shared nationally?
- How often and when should advisors meet?

1B: National list of academic liaisons for geoscience

1C: Regular Meetings - Has anyone had new meetings with regulators?

2A: List of shareable resources for students See links

2B: List of aligned / diverse programs

- Add the question to the CCCESD Survey? Annual survey from regulators?
- Where would the list be stored?
- Interest in help writing calendar language?

2C: Would a common national application format help?

3A: Discussions between CCCESD and CGSC on GKE processes

Increased department regulator discussion?

Discussion between CCCESD and Canadian Geoscience Standards Council?

NEXT STEPS

- What additional studies would it be worth pursuing?
- Survey students?

Thank You

Source 1:



GEOSCIENTISTS
GÉOSCIENTIFIQUES CANADA®



Canadian Council of Chairs
of Earth Science Departments

Source 2:



EARTH EDUCATORS'
RENDEZVOUS
TWIN CITIES, MN, JULY 11-15, 2022



EARTH EDUCATORS'
RENDEZVOUS
PASADENA, CA, JULY 10-14, 2023

Source 3:



THE UNIVERSITY OF BRITISH COLUMBIA

Department of Earth, Environmental and Geographic Sciences