

Improving the relationships between Canadian Earth Science Departments and Canadian professional geoscience regulators.

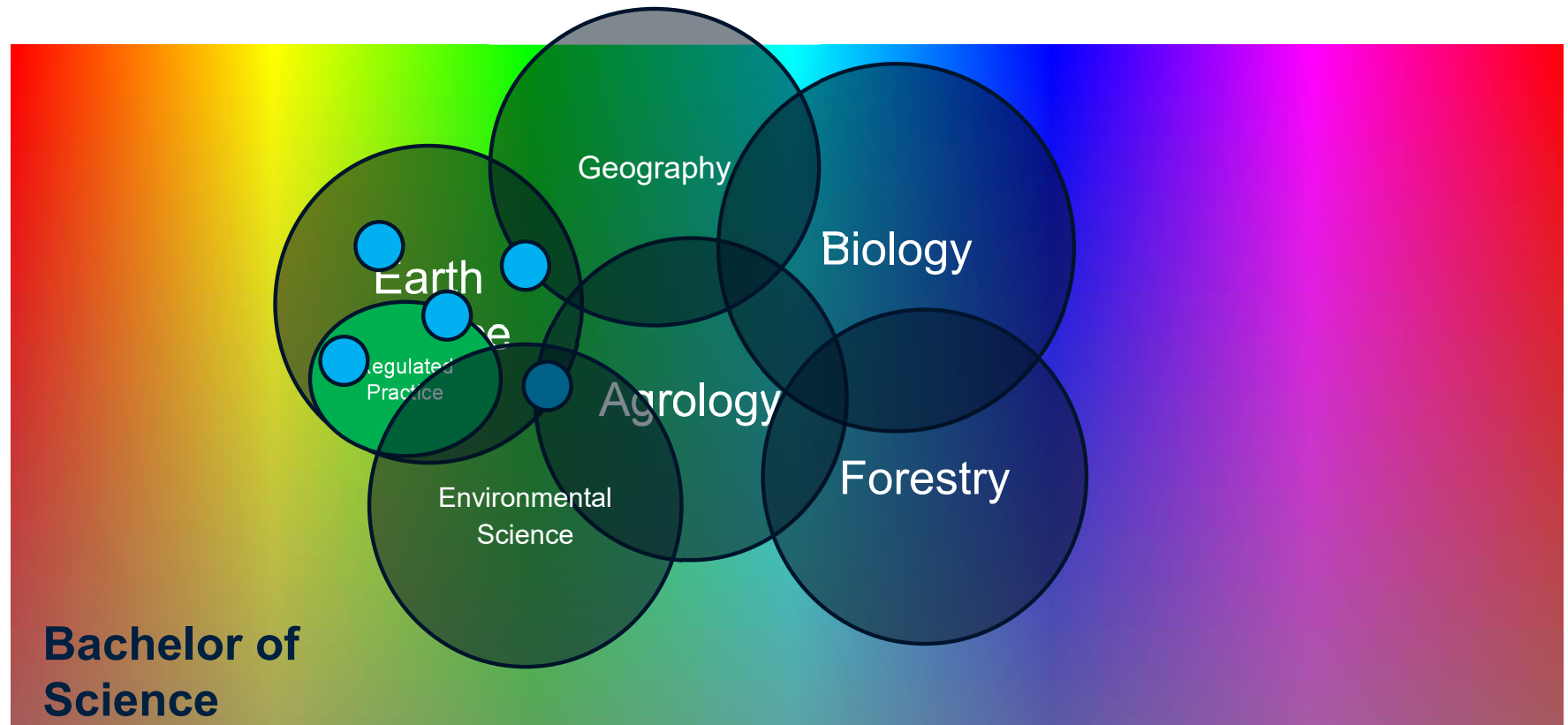
Dr. Craig Nichol  
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THE UNIVERSITY OF BRITISH COLUMBIA

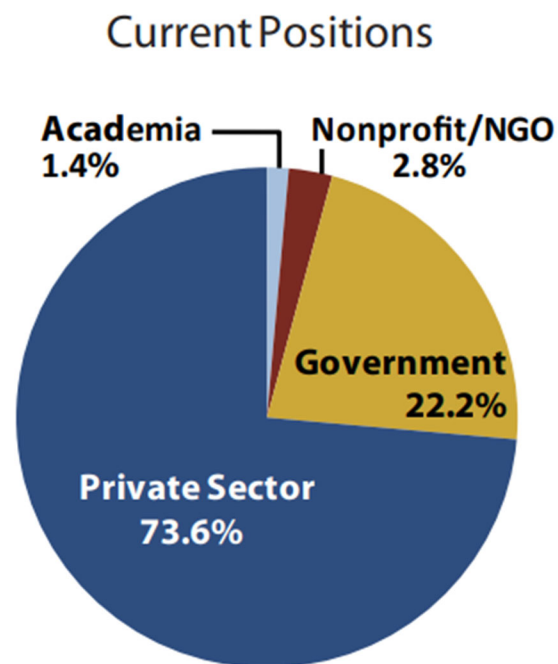
Department of Earth, Environmental and Geographic Sciences

## STUDENTS: WHAT AM I GOING TO DO?

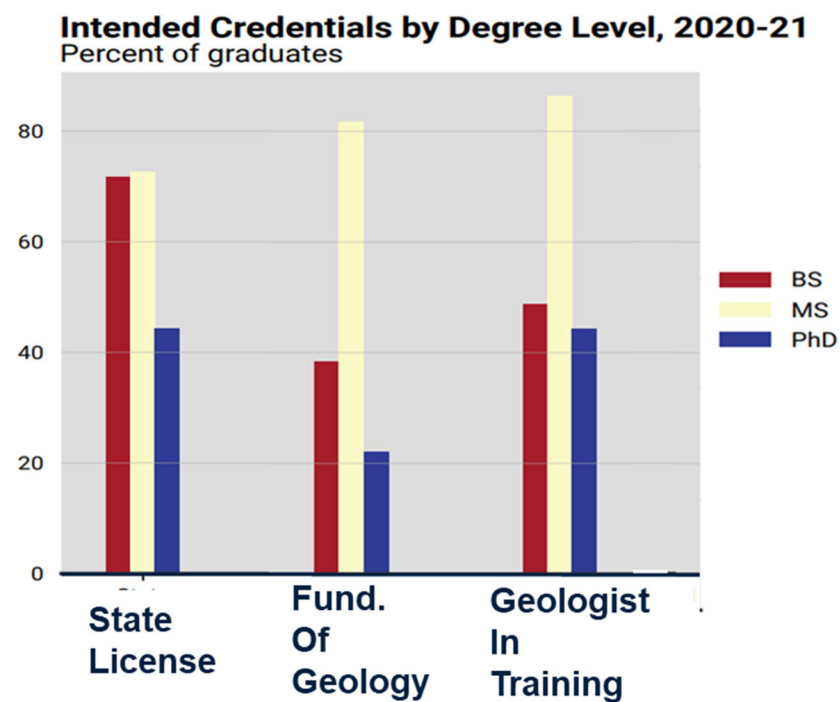


*"We are responsible for everyone that we recruit" Wendy Todd*

## STUDENTS: WHAT DO THEY WANT?



Data: American Geosciences Institute



*"We are responsible for everyone that we recruit" Wendy Todd*

# THIS STUDY

Surveys: 9 regulators, 28 departments  
Appreciative Inquiry Interviews  
Current Best Practices  
Future Best Practices  
Key strategic supports  
Concrete steps to engage change  
– 6 months, 5 years

Interviews completed:  
Sep 2021 – Feb 2022  
9 regulators, 17 department representa  
550 pages+ of transcript.

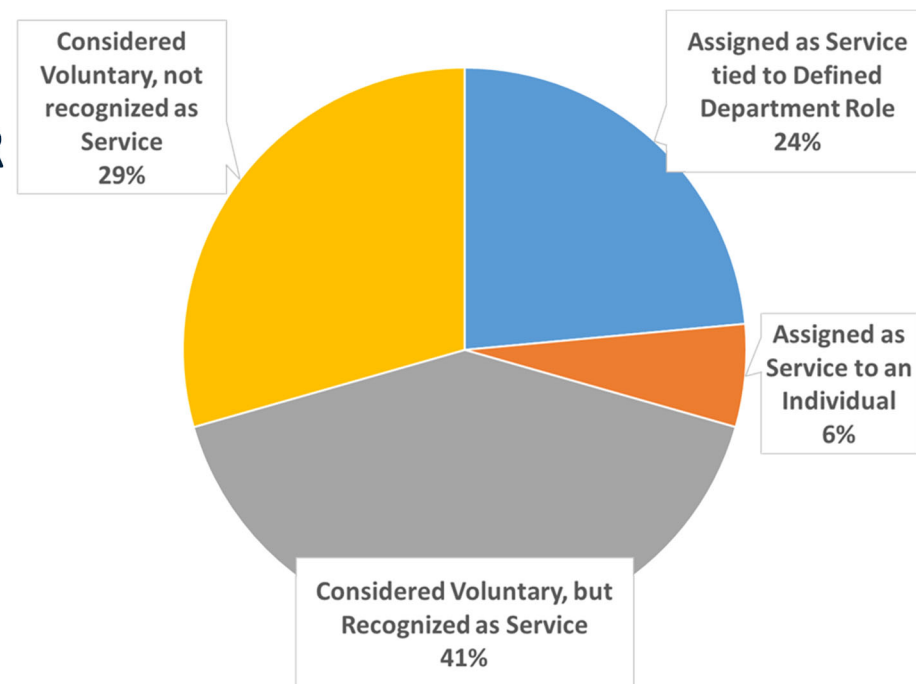
Common themes extracted.



# 1 FOSTER RELATIONSHIPS

## 1A. DEDICATE A PROFESSIONS ADVISOR

- A dedicated professions advisor role as recognized and valued service
- Faculty member, with staff support if possible
- Minimum 3 years, good succession plan



*“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

## 1A. DEDICATE A PROFESSIONS ADVISOR

- A dedicated professions advisor role as recognized and valued service
- Have a defined role voted on at a department meeting
- Faculty member, with staff support if possible
- Minimum 3 years, good succession plan

*“The University administration recognizing the importance of this to our students. If that support is there it is naturally going to filter down to us.”*  
Department Interviewee

*“The best piece of advice would be to go and sit on the board. It's a really good learning experience to see the industry from the perspective of those who have to regulate it and ensure the integrity and the honesty and everything else that's required.”*  
Department Interviewee

# 1 FOSTER RELATIONSHIPS

## 1A. DEDICATE A PROFESSIONS ADVISOR

### Action Items:

1. Name and contact information for the professions advisor
2. Suggest a date for a national meeting to review project results and collaborate
3. Compile list during annual CCCESD survey and give to Geoscientists Canada.



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*“Perhaps linking with other people in a comparable role for other institutions. Could there be some opportunity there for sharing best practices with each other?” Department Interviewee*

# 1 FOSTER RELATIONSHIPS

## 1B. DEDICATE AN ACADEMIC LIAISON FOR GEOSCIENCE

- A dedicated contact point for faculty, staff and students.

*“A formal mechanism so there is somebody at the regulator who is a designated liaison with the universities.”*

*Department Interviewee*

- P. Geo. recommended
- Must be capable of advising students on
  - Career choices
  - Geoscience streams
  - Course checklists

*“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?

### Formats:

- 1:1 regulator / university (invite Dean?)
- 1 regulator / multiple universities (meet colleagues?)

*“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*

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## 2 STUDENT-CENTERED ENGAGEMENT

### 2A. REGULAR MEETINGS WITH STUDENTS

- In person presentations are best
- Remote for more coverage
- Record the meetings and post in LMS system.

*“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*

*“I have found that you really have to get out there and talk to them in first year, talked them in second year, talk to them in third year.”*

*Regulator Interviewee*

## 2 STUDENT-CENTERED ENGAGEMENT

### 2B. IDENTIFY PROGRAM ALIGNMENT

- Only Quebec has public lists
- National list of program alignment or diversity.
- Common language for calendars / websites to describe licensing and programs.
- Action: Compile during CCCESD Survey

*“ I would like to streamline so that we don’t have to look at the transcript of every student. You get a B.Sc. in geology from <university> and you are a good to go. It is not accreditation, but it decreases the workload. I would like to see that nationally”*

*Regulator interviewee*

*“It would be great is they could rubberstamp some of our programs and say ‘If you take all the core requirements then you will meet the GKE’”*

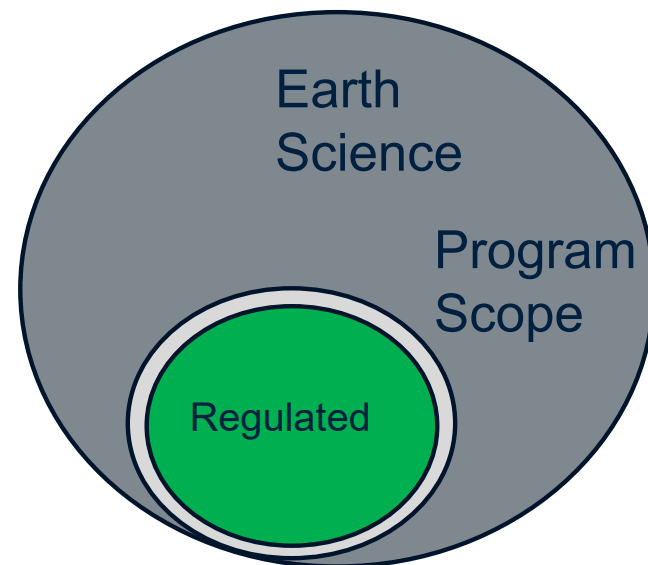
*Department interviewee*

## 2 STUDENT-CENTERED ENGAGEMENT

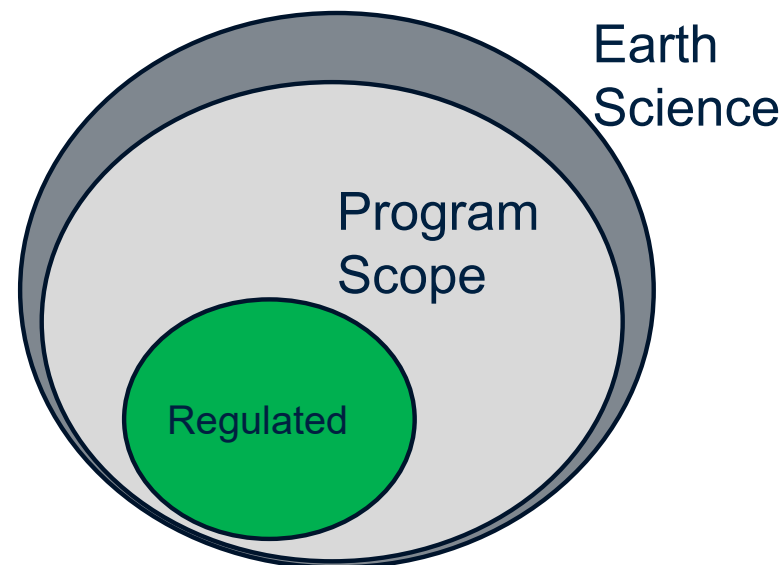
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Aligned



Diverse



## 2 STUDENT-CENTERED ENGAGEMENT

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*“It is up to the institutions on how they want to frame their programs. They know the regulator looks for the GKE”*  
*Regulator interviewee*



## 2 STUDENT-CENTERED ENGAGEMENT

### 2C. PUBLIC INSTITUTION SPECIFIC CHECKLISTS

- Only BC has public lists.
- Makes the messaging simpler.
- Requires an annual process to keep up to date.

*“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. FACILITATE MORE NATIONAL DISCUSSION

#### 3A. Scope and future of geoscience

*“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*

#### 3B. Prepare for competency assessment in GIT.

*“Within the next six months, describe the competency based assessment program, and within the next five years, make it streamlined so they can start building those skills towards competencies in undergrad.”*

*Regulator interviewee*

#### 3C. Streamline processes for multiple reviews

*“I would like to see more collaboration between regulators. Have them work together to help the departments who are juggling multiple regulators.”*

*Department interviewee*

## CCCESD

### Survey:

- Collect information on professions advisors
- Collect information on program alignment

### Committee:

- Work with Geoscientists Canada to help write common calendar / website language to describe licensing and program alignment
- Help facilitate a national meeting of program advisors

*"I'm hoping by six months I will have a contact in every department that I feel that I can email, and they can email me."*  
*Regulator Contact*

## NEXT STEPS

- Final report finished in several weeks.
- Distribute to CCCESD members and Regulators
- Organize national meeting of professions advisors

List of Professions  
Advisors  
And  
Program Alignment



<https://1drv.ms/x/s!AgychUGJrFtvj5AJ7iT0kwkmauPwlg?e=OpMVYM>

## DISCUSSION

- 1a. Department Professions Advisor
- 1b. Academic Liaison for Geoscience
- 1c. Regular meetings
  
- 2a. Present to students
- 2b. Public list of program alignment
- 2c. Public institution specific course lists
  
- 3A. Scope and future of geoscience
- 3B. Prepare for competency assessment in GIT.
- 3C. Streamline processes for multiple reviews

List of Professions  
Advisors  
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