Understanding the use of student ratings of instruction (SRI) data for research purposes

Presenters:

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DALHOUSIE UNIVERSITY

Acknowledging the Land

Please recognize with me the land I live on and that the University I work at, Dalhousie University, is part of Mi'kma'ki, the ancestral and unceded lands of the Mi'kmaq People.

Go to: https://native-land.ca/

MI'KMA'KI
LAND OF THE MI'KMAQ

Quebec

Kespe'k

New Brunswick

Prince Edward Island
Epekwitk

Unama'ki

Newfoundland
Ktaqmkuk

Piwktuk

Nova Scotia

Siknikt

Eskikewa'kik

Sɨpekne'katik

Atlantic Ocean

Kespukwitk

Maine, US

Mi'kmawey Debert Cultural Centre,
Teaching about the Mi'kmaq, p.16

Presenters

Dr. Jill McSweeney-
Flaherty (Harley)

Robyn Moore
(Soda & Scout)

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(Rusty)

Team Members

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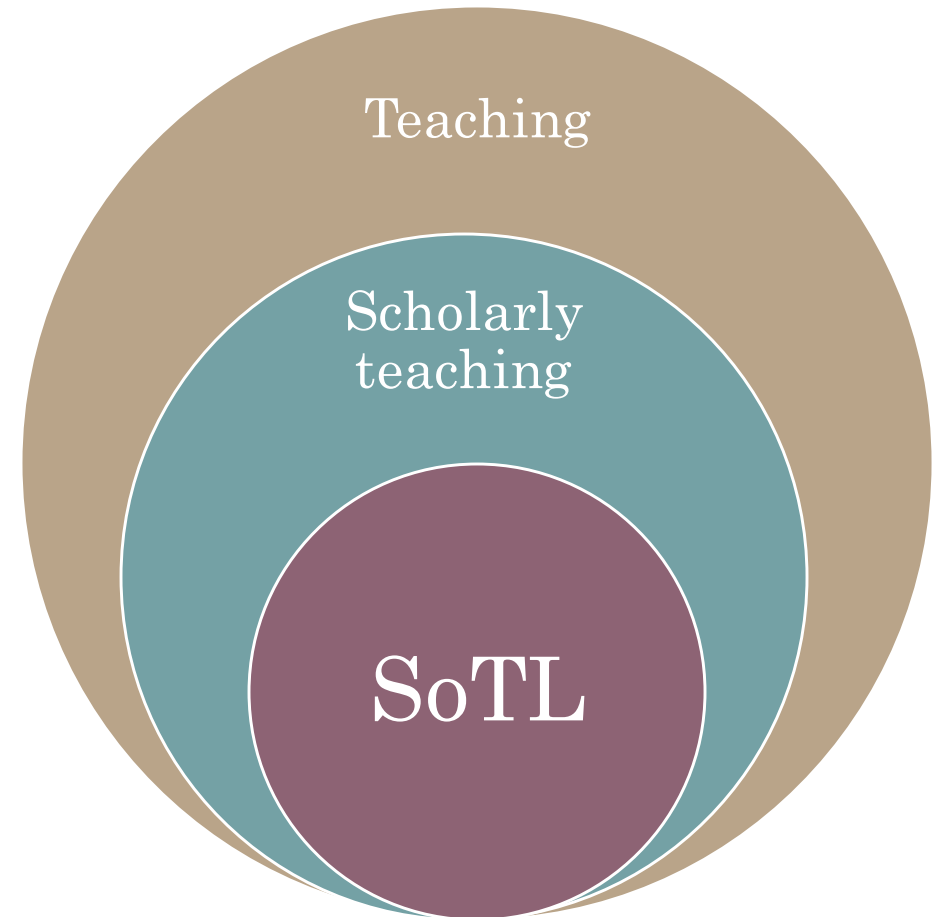Studies

Thank you!

Explorance Faculty Research Grant 2021
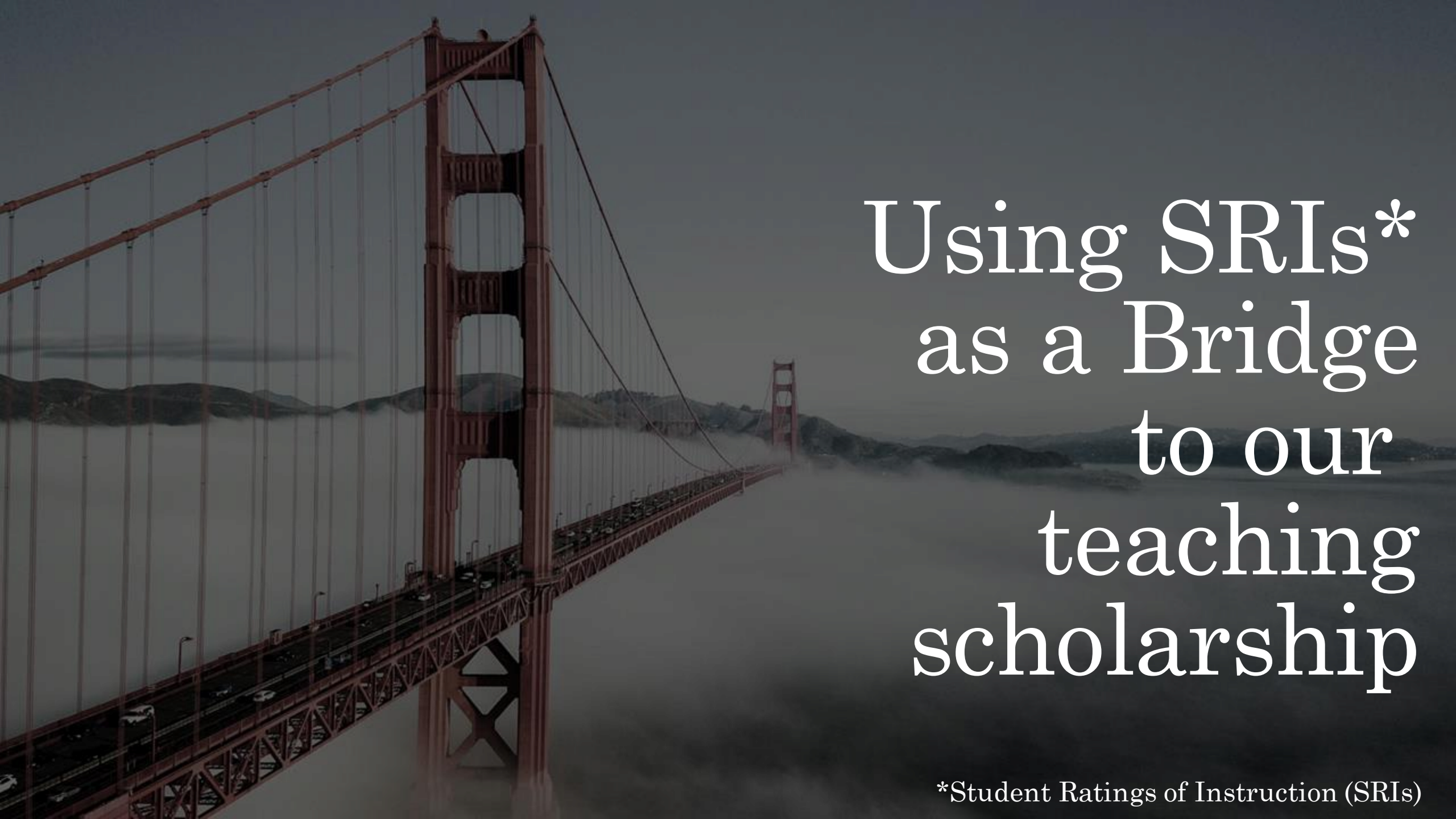
bluenotes group

Background & Rationale

- Scholarship of teaching and learning (SoTL), **"the systematic study of teaching and/or learning"** (McKinney, 2007)

- SoTL helps us **enhance** the student experience and our pedagogical practices

Teaching

Scholarly teaching

SoTL

McSweeney-Flaherty, Roy & Moore (August, 2021)

Life Cycle of SoTL

Evidence helps us *ask* and *answer* questions about our teaching practice and student learning

McSweeney-Flaherty & Schnurr (2020)

Using SRIs*
as a Bridge
to our
teaching
scholarship

*Student Ratings of Instruction (SRIs)

Why SRIs?

- Rich & abundant

- Student voice

- Existing data, little to no work to collect data

- Evidence across contexts

- Platforms aid in analysis, visualization & dissemination

Audience Poll

Have you used SRI data* for research on your teaching practice? Or know of others at your institution who do?

- Yes

- No

- I don't know

Realities of use

- Institutional ethics board*

- Institutional barriers preventing use

- Unclear process

Research Questions

1) Systematically explore the potential ethical considerations of using SRI data for research purposes.

2) Compare U15* institutional policies and practices around SRI data use for research purposes.
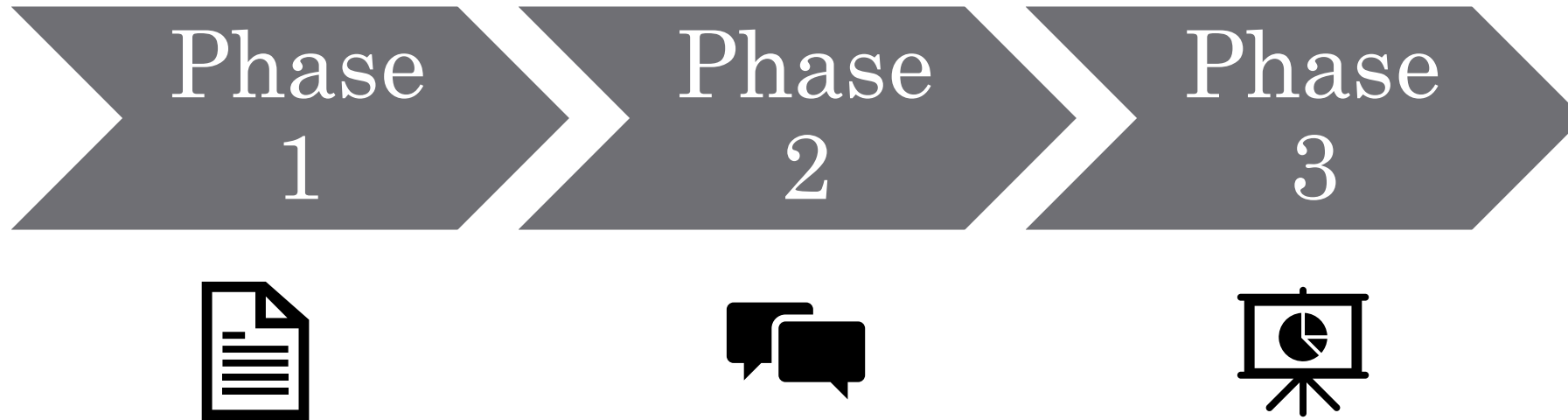
3) Explore BLUE's capabilities to facilitate research on teaching and learning.

Phases 1 & 2

Phase 3

Research Design

Audience Engagement

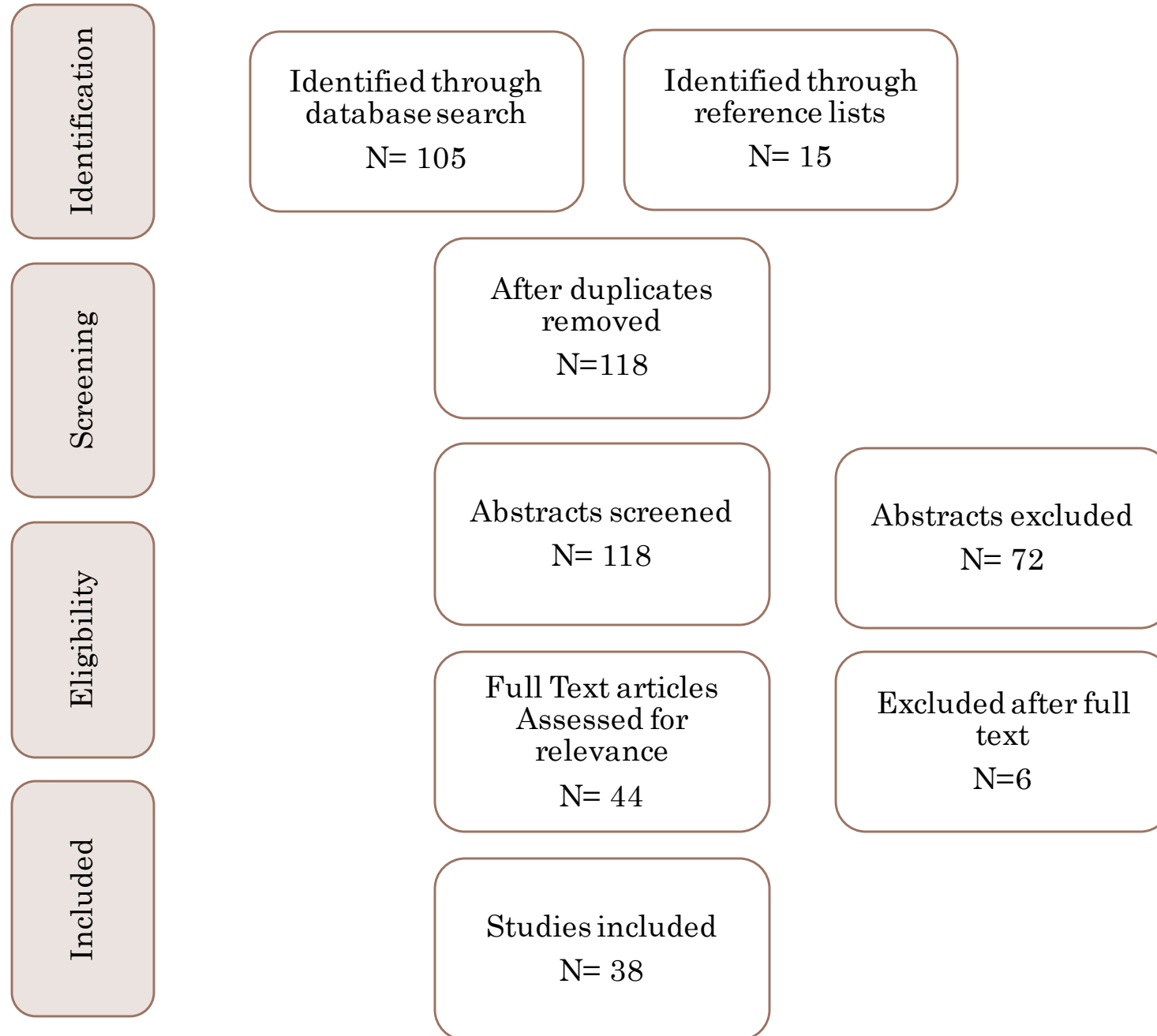We want to hear from you!

- https://bit.ly/2V6zRFZ

Phase 1 – Scoping Review & Document Analysis

Phase 1 Methods: Scoping Review

- Scoping Review Process (Arskey & O'Malley, 2005)

- Databases Searched
  - ERIC
  - PsychINFO
  - Sociological Abstracts
  - Academic Search Premier
  - Taylor and Francis Online

Terms related to SRI	Terms related to SoTL	Terms related to University
"Student Rating of Instruction" "Student Evaluation of Teach*" "Course Evaluation" "Teacher Evaluation" "Student Learning Experience Questionnaire" "Course Experience Questionnaire	"Scholarship of Teaching and Learning" - SoTL	- University - Higher Ed* - Tertiary Ed* - College

Phase 1 Results: Scoping Review

| Identification | Identified through database search N= 105 | Identified through reference lists N= 15 |

| Screening | After duplicates removed N=118 |

| Eligibility | Abstracts screened N= 118 | Abstracts excluded N= 72 |

| | Full Text articles Assessed for relevance N= 44 | Excluded after full text N=6 |

| Included | Studies included N= 38 |

Phase 1 Results: Scoping Review Themes

Theme	Number of articles
Ethical Considerations of SoTL	13
Methodological Considerations of SRI as data	3
Examples of SRI as data	22

Phase 1 Results: Scoping Review

Ethical Considerations of SoTL

- Privacy & Confidentiality
  - Use of student data
  - Anonymization
- Conflicts of Interest
  - Dual role of Instructor
- Fairness and Equity in Research Participation
  - Undue influence
- Secondary Use of Information
  - Already collected data
  - No consent obtained

Phase 1 Results: Scoping Review

Methodological Considerations of SRI as data

- Validity of Data
  - Students not taking SRIs seriously
  - Student experience versus teaching effectiveness

- Useable data
  - Some studies found that the SRI data was not helpful for the questions they were asking

Phase 1 Results: Scoping Review

Examples of SRI as data

- Of the 22 studies who mentioned SRI as data source, only one directly states that REB approval was sought.
- Many examples of studies using this data suggests that some institutions may have processes in place to support this type of research

Phase 1 Methods: Document Analysis

- Document Analysis Process

| Selection of Universities | → | Hand search University Secretariat (or equiv.) website | → | Explored SRI and Ethics related policies |

McSweeney-Flaherty, Roy & Moore (August, 2021)

Audience Poll

Does your institution have a formal policy that states how SRIs (or your institution's variation) can be used for research purposes?

- Yes

- No

- I don't know

Phase 1 Results: Document Analysis

SRI Policies of U15s

- 8 had formal policies on their institution's SRIs
  - 2 mentioned SRIs for research purposes
  - Remaining 6 do not include research under purpose for SRIs

- Ownership
  - None of the 8 directly mention ownership
  - 2 mention that instructors are responsible for releasing the data

McSweeney-Flaherty, Roy & Moore (August, 2021)

Phase 1 Results: Document Analysis

Research Ethics

- 13 had formal policies
  - 3 state that **collecting** SRI data is not research and thus does not need ethics approval
    - 2 of which suggest that **using** the SRI data **after it is collected** falls under Secondary Data Analysis that requires ethics approval
  - 2 do not mention SRI specifically but do mention student data more generally

Phase 1 Results: Document Analysis

No clear consensus on SRI and research policies

No standard for ownership

No clear consensus on SRI and ethics*

McSweeney-Flaherty, Roy & Moore (August, 2021)

DAL

Phase 2: Interviews

Phase 2: Methods

- Semi-structured Interviews

- SRI Administrators, Data Stewards, Directors of Teaching Centres or University Administrators (n = 9)

- **Preliminary Analysis** (more interviews scheduled)
  - 3 Independent Reviewers
  - Content analysis

Theme 1: Value but ambiguity

Value in SRI data for research, no clear cut process on how to access/use, but would like one!

"I think there's **more of a need now than ever** to do research on this kind of data so that we can continue to support students having a voice …Especially if your institution strives to be a top teaching institution, I think it's important to have that data available for research purposes" (Participant 001)

"I think there is a lot of value in it just in terms of, it's one of the only systematic ways that we collect feedback from students and have their perspective on the experience within a course." (Participant 004)

Theme 2: Data Handling Barriers

- **Ownership (n=7): Who has the rights to the data?**
  - Institution/Student/Instructor

- **Access (n=7): Who can access what types of data?**
  - Quantitative vs Qualitative | Raw vs aggregate

- **Management: Who oversees the data?**
  - Department, Teaching Centre, Institutional Analytics

"But nothing really stands in their way of doing it other than tedium and process." (Participant 003)

Theme 3: Ethical Considerations

- Confidentiality (n = 7) : student, instructor, and institution

- Consent (n = 3)

- Clarity on data governance (n = 5)

- When is it exempt? (n = 3)

- Governed by the Institution's Research Ethics Board (n = 7)

"I don't think there are any questions that need to be asked if the research ethics board is evaluating a proposal for, they're going to catch all the questions." (Participant 002)

Overview

- Important tool for SoTL

- Desire for formal policy for governance

- Ethical concerns are already covered by TCPS

- **Tension between Institutional vs Ethics Board governance of use**

Phase 3 – Use of BLUE

Phase 3: Intended Methods

- A) Survey faculty – utility of Blue for data analysis and visualization

- B) Invitation to the Faculty Dashboard

BLUE @ Dal

- Over 20,000 Students

- 4000 courses in over 200 programs

- Approximately 76000 FFO tasks setup in a typical term

- About 2500 courses evaluated

- 2775 instructors evaluated

- Hosted by Explorance

- DIG (Data Integrity Gateway)

- BTA (Blue Text Analytics)

BTA Theme Cloud

What did your instructor do that helped your learning in this course or clinical setting?

What did your instructor do that helped your learning in this course or clinical setting?

Chart
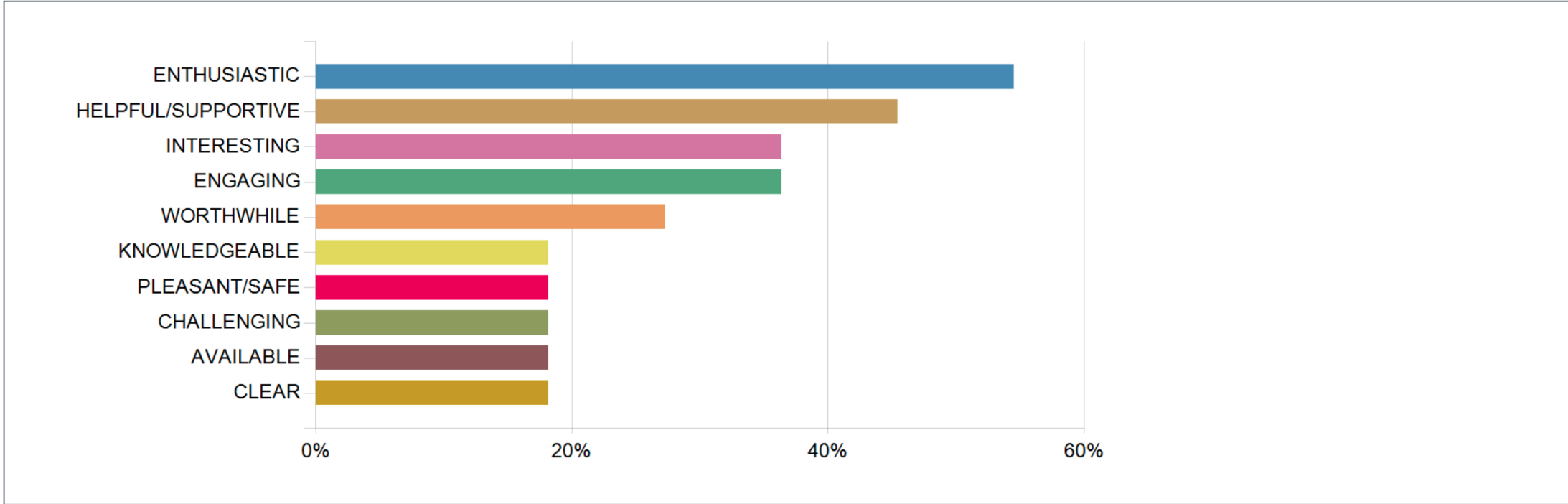
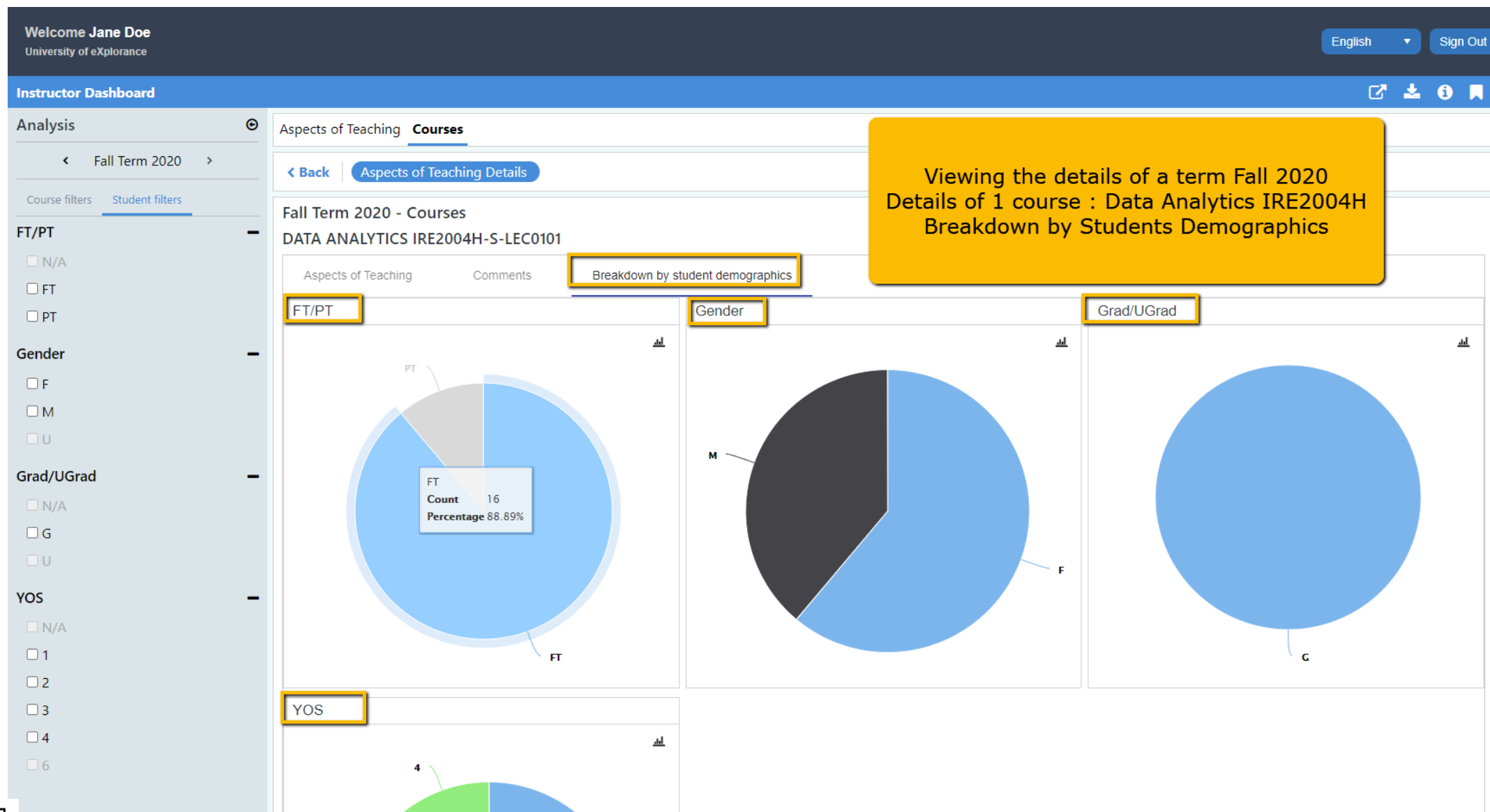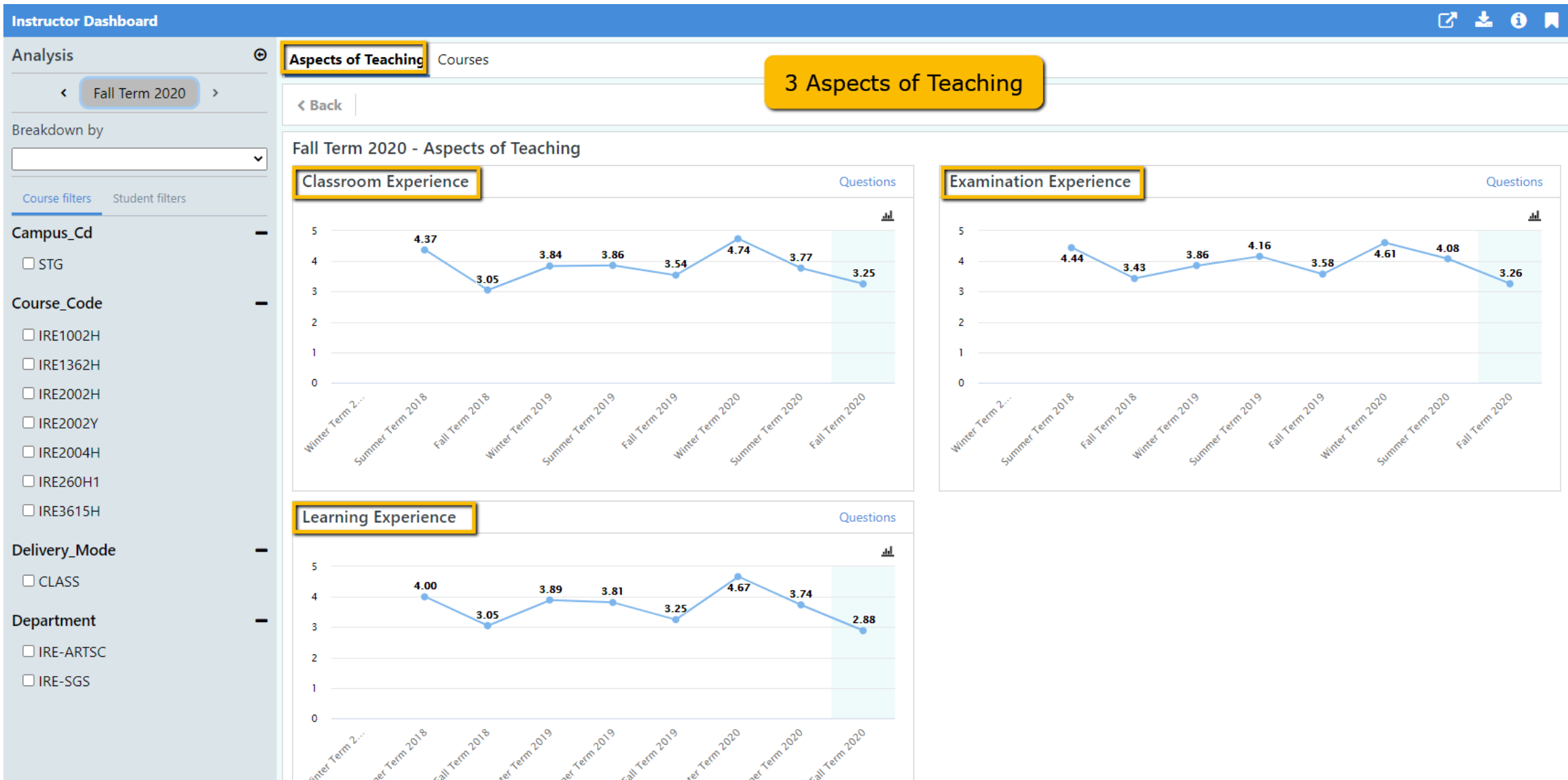# Reporting Considerations

- Break Down of the data
  -demographics
  -course
  -themes

- Comparison of the data
  -by year
  -by term
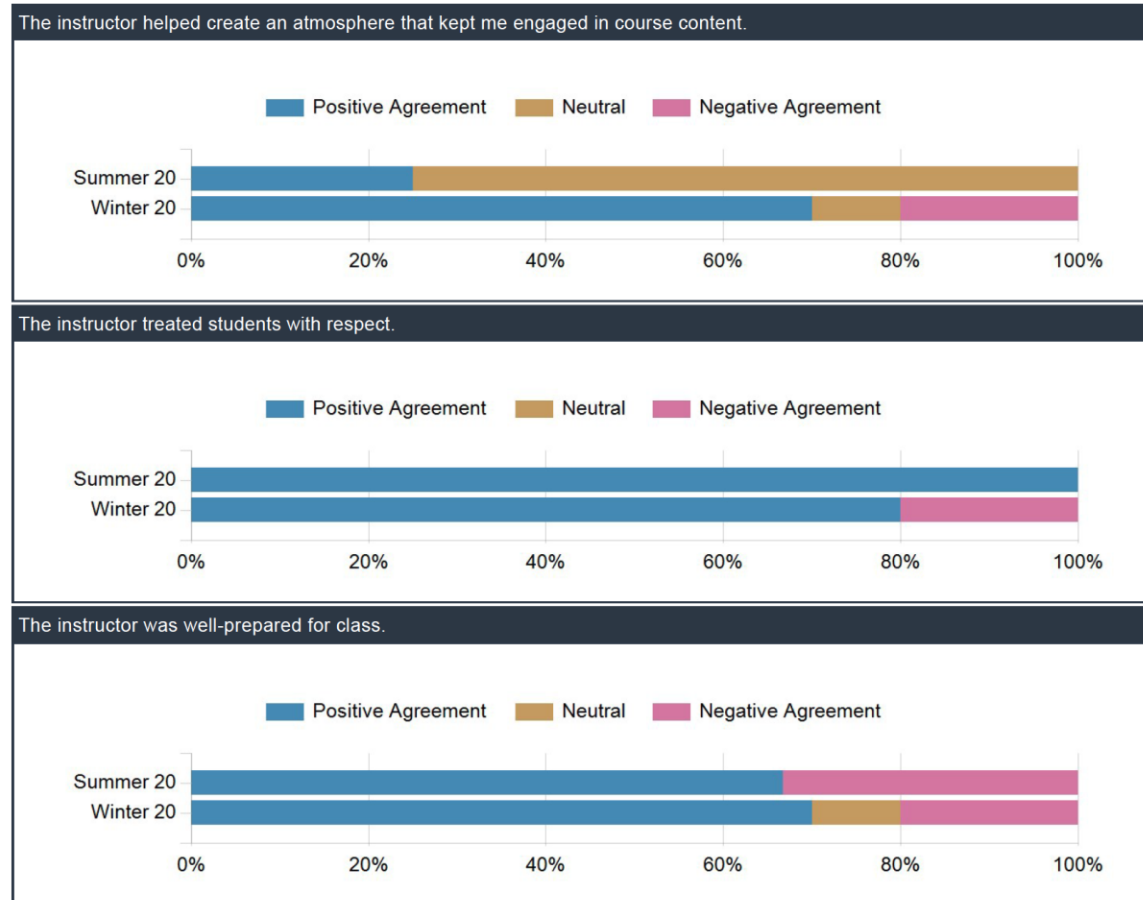
- Reporting over time
  -Results from one course over time

Student Demographics

Aspects of Teaching

McSweeney-Flaherty, Roy & Moore (August, 2021)

Multi-term reporting

Current Reality

- Our university has not approved the use of student demographics in the Blue system. All analysis to our SRI data has been done externally by our Dal Analytics team.

- Our data and current setup does not allow us to take advantage of some of the features shown in the screenshots above.

- We were not able to get funding approved for the Faculty Dashboard add-on.

- We don't currently report BTA at the instructor level.

Next Steps

Future Implications

- How do we form consistent data handling practices across institutions?

- How are institutions and instructors using SRIs for SoTL? *(Interest from multiple participants)*

- How can SRI platforms be leveraged as pathways into SoTL?

Thank you!

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  - Bruno Roy (Bruno.Roy@dal.ca)
  - Robyn Moore (Robyn.Moore@dal.ca)