



Exploring How Student Ratings of Instruction Data are Being Utilized for Research on Teaching and Learning

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Research Team



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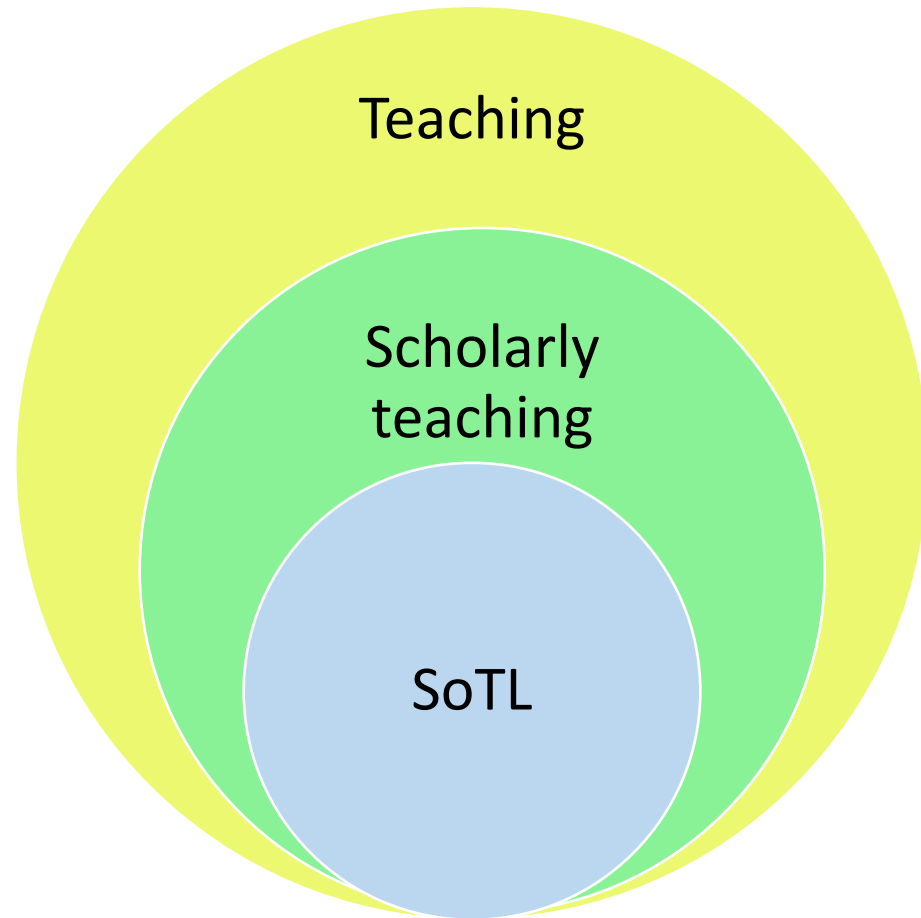
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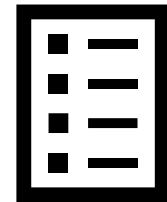
Background & Rationale



- 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

Using SRIs to Support Best Practices

- Student ratings of instruction (SRIs) support pedagogical decision making¹
- Increased participation in teaching and learning research²



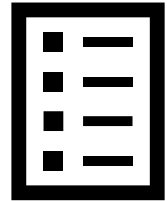
1. Linse, A. R. (2017). Interpreting and using student ratings data: Guidance for faculty serving as administrators and on evaluation committees. *Studies in Educational Evaluation*, 54, 94-106.

2. Wuetherick, B., Yu, S., & Greer, J. (2016). Exploring the SoTL landscape at the University of Saskatchewan. *New Directions for Teaching and Learning*, 2016(146), 63-70.

SRIs as a source of data for SoTL?

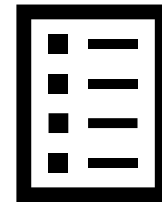
Has potential to be...

- Source of rich & abundant data
- Student centered
- Existing data, little to no work to collect data
- Evidence across contexts and iterations



Using SRIs to Support Best Practices

- Student ratings of instruction (SRIs) support pedagogical decision making
- Increased participation in teaching and learning research
- **Individuals struggle with utilizing SRIs data for research purposes often because of barriers associated ethical and access concerns**
(McSweeney & Moore, 2022)*





Building upon our previous work

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

Presenters:

Dr. Jill McSweeney-Flaherty
Bruno Roy
Robyn Moore



Research Questions

- **Who** is using SRI data for research purposes?
- **Why** they are using this data?
- **What** aspects of SRI data are used in research?



- **How** can SRI platforms like BLUE be used to support teaching and learning research and to develop evidence-informed practices for the use of SRI data for research purposes?



Dual Approach



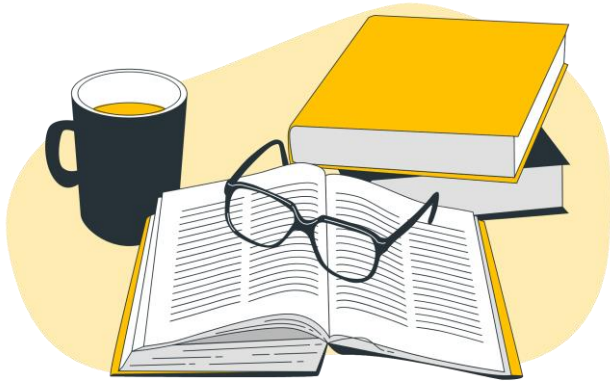
Scoping Review



Survey

Dual Approach

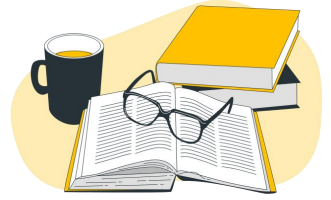
****We are still in the process of data collection!**



Scoping Review



Survey



Scoping Review: Method

- Databases (PsycINFO, ERIC, Sociological Abstracts, Academic Search Premier); limited to previous 20 years
- Strategy:

SRI terms	Research terms	University
“Student Rating of Instruction” OR “Student Evaluation of Teach*” OR “Course Evaluation” OR “Teacher Evaluation” OR “Student Learning Experience” OR “Student Evaluations” OR “Student Experience”	“Scholarship of Teaching and Learning” OR “SOTL” OR “Disciplinary Based Education” OR “DBER” OR “teaching research” OR “education research”	Universit* OR “higher ed*” OR Tertiary ed* OR college OR “post secondary” OR “undergraduate”

Identification

Identified through database
search
N= 1086

Screening

Abstracts screened
N= 1086

Abstracts excluded
N= 949

Eligibility

Full Text articles Assessed for
relevance
N= 137

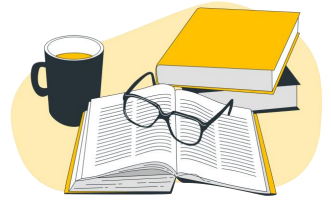
Excluded after full text
N=59

Included

Checked for Duplicates
N=78

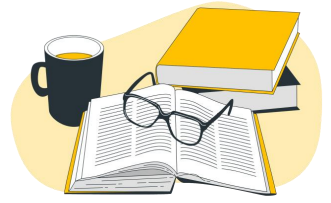
Studies included
N= 73

Scoping Review: How are researchers using SRIs in published research?

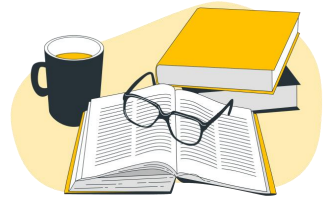


- Exploring Instructional and/or Assessment Change (n=23)
 - e.g. Implementing active learning, Project-Based Learning, Peer Review Activity
- Examining course changes (n=21)
 - e.g. Flipped classrooms, transition to online, change in teaching tech
- Factors that influence SRI results (n=13)
 - e.g. Bias, grades and timing of survey
- Assessing new course (n=6)

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- Research on tenure, promotion, and compensation (n=3)
 - e.g. Comparison of research to teaching success
- Reflection on teaching (n=3)
- Other (n=3)
 - e.g. Program Level changes, Teacher training impacts (department wide)



Scoping Review: Findings

A data source

- Only 12 of 75 relied solely on course evaluations
- Often paired with Student Grade (n=20)

Ethics

- No mention (n=49)
- Approved (n=11)
- Exempt (n=8)
- Uncertain (n=7)

Context

- Multiple courses, multiple instructors (n=27)
- Iterations of a single course (n=25)
- Single course, single instructor (n=12)
- Multiple courses, single instructor (n=10)
- Unclear (n=1)

Type of Data

- Closed (n=40)
- Closed/Open (n=26)
- Open (n=6)
- Unclear (n=3)



Survey: Methods

- Ethics approval obtained from Dalhousie University
- Recruitment:
 - Snowball advertising via previously identified teaching and learning liaisons
 - Listserv recruitment via STLHE, POD Network, and discipline specific
- Online survey (~15 minutes to complete)
 - Utilization of SRI data
 - Engagement in SoTL/DBER/T&L Research
 - Barriers they've experienced
 - Best practices



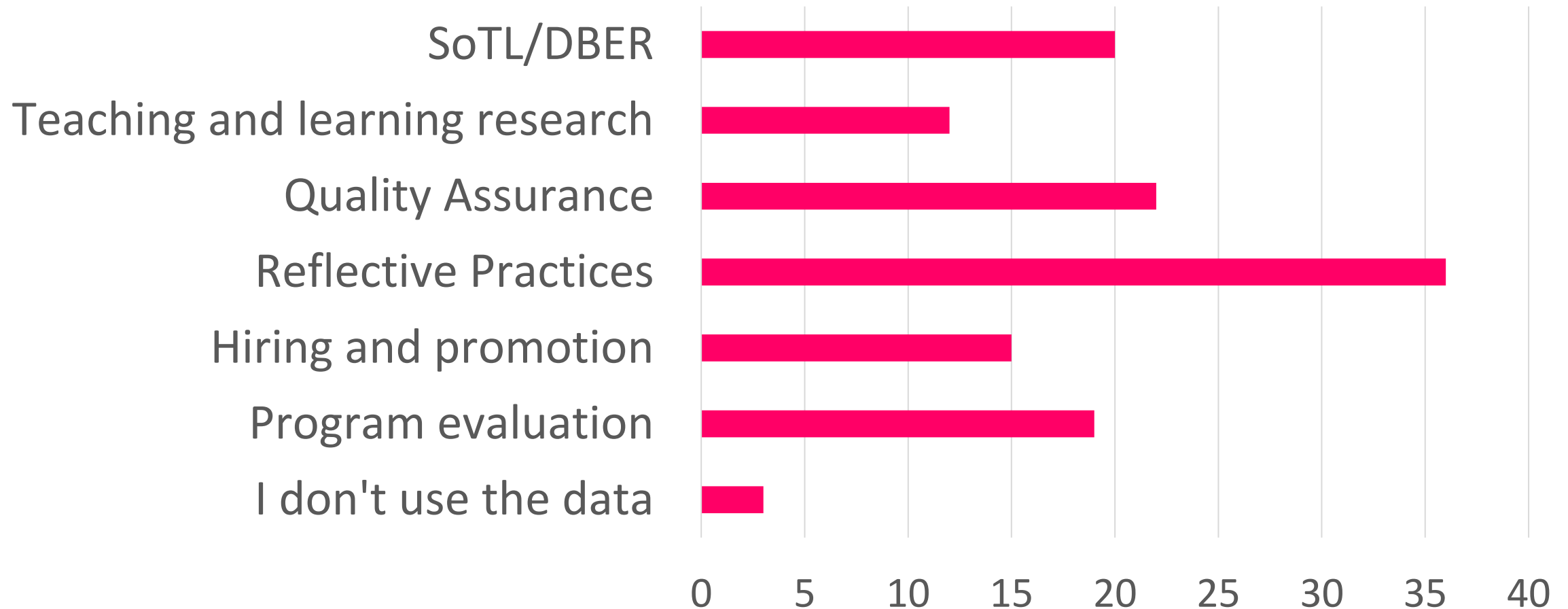
Survey: Findings

- 60 respondents, 10 did not meet criteria
- Additional call for recruitment in Fall 2022

	n
Canada	24
USA	26
Role*	
Faculty	32
Administration	13
Staff	11
Student	3
# years in profession	16.72

*Participants could select multiple roles.

How is the data being used (generally)?

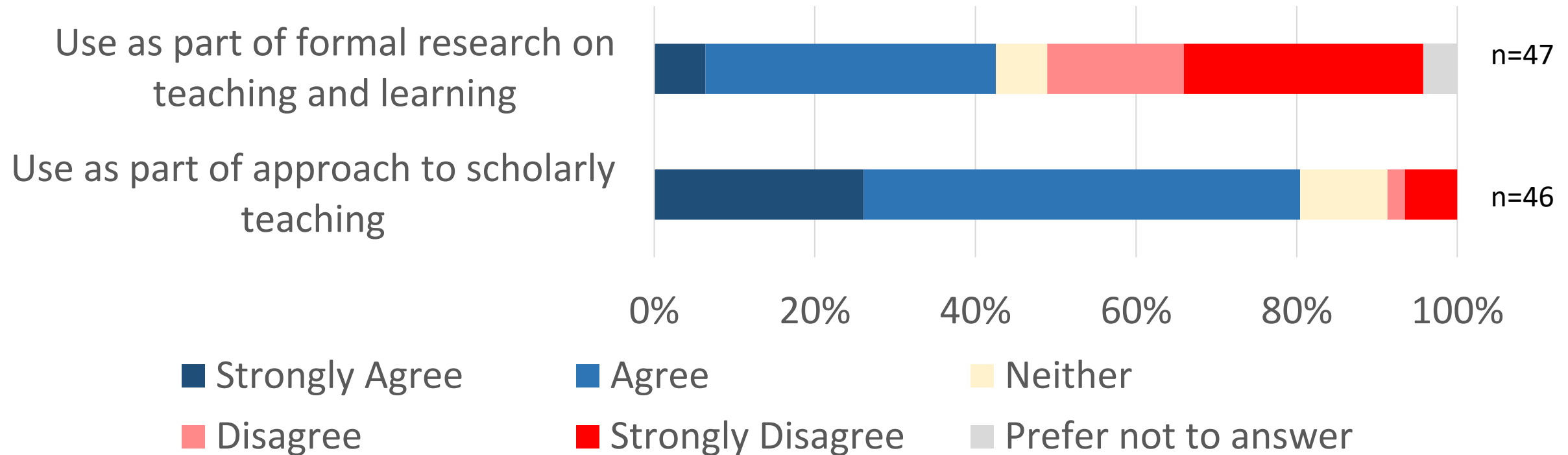




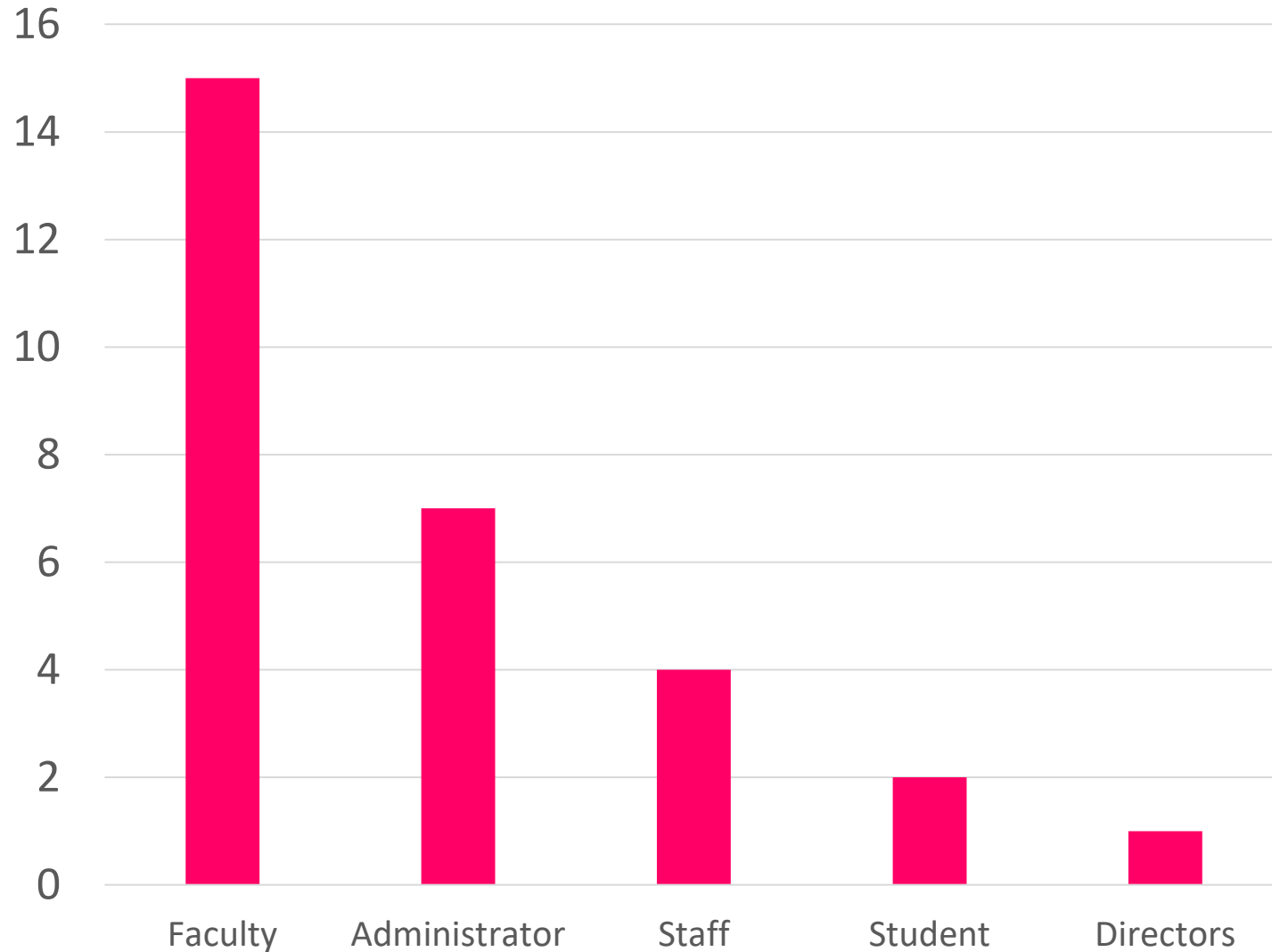
Briefly provide up to three ways that you are either using or plan to use student evaluation data in your work.

- **Course and program development (n = 14)**
 - *“Using data to help guide faculty through program quality reviews (to identify program strengths, challenges, and recommendations).”*
- **Professional development, reflection, tenure & promotion (n = 13)**
 - *“reflect on my own teaching practice, demonstrate improvement of my teaching over time”*
 - *“Using data to guide my informal professional development and course improvements”*
- **Insight into learner experience (n = 4)**
 - *“I like to “read between the lines” to gain a sense of what students are struggling with in terms of course tools: which tools work well, and which need adjustment”*
- **Institutional research and development (n = 4)**
 - *“Measure of impact of [teaching and learning centre] work”*

Is the data being used for *research*?



Who is using the data for research (n=20)?



- 35% indicated holding multiple roles compared to 10% for group who said they did not use data for research
- Course level (16), Departmental (8), Institutional (5), multi-departmental (3), multi-institutional (1)

What type of data are they using?

Context (select all)	Total
Aggregated departmental scores	3
End of course evaluations	18
Mid-course evaluations	6
Open-ended Qs	20
Quantitative Qs	16
Self created/personalized Qs	8
Statistical summaries	10

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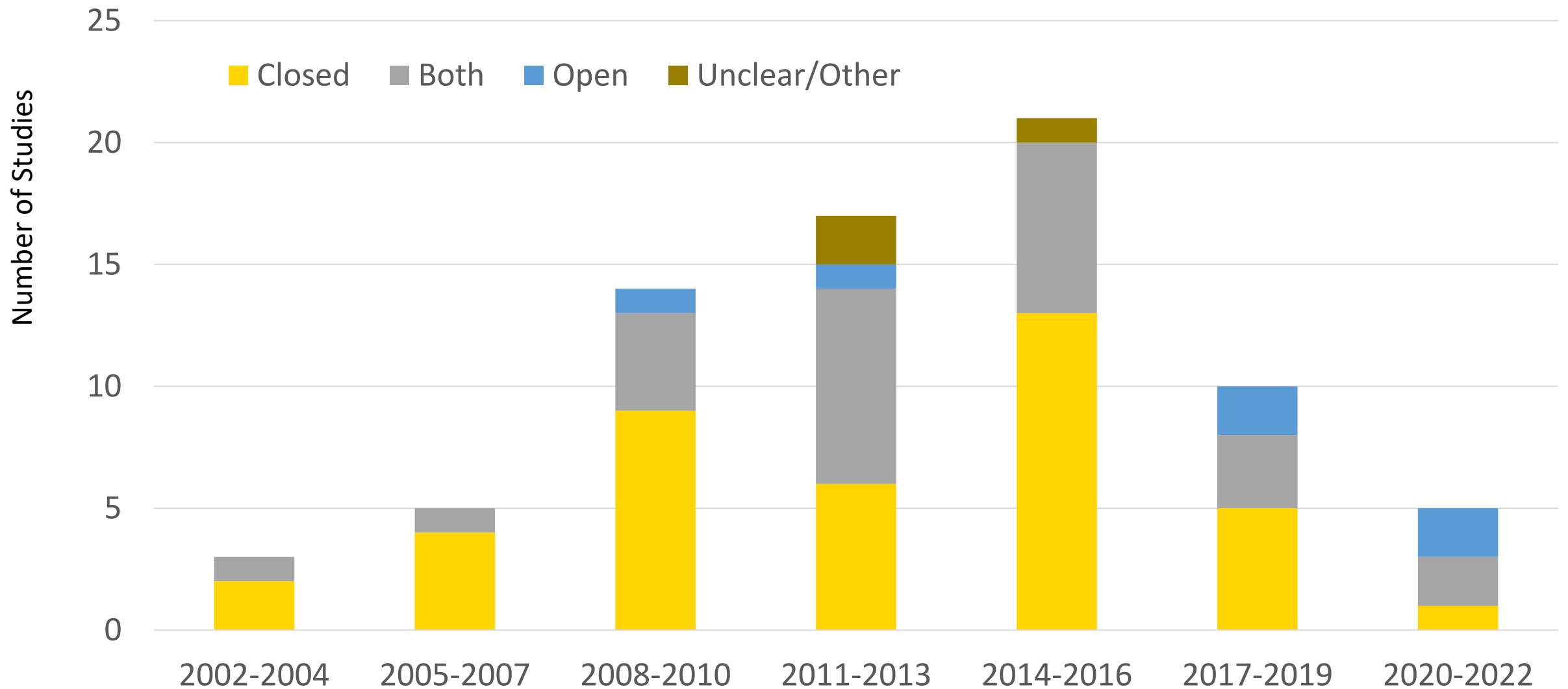
What type of data are they using?

Context (select all)	Total	Most Useful (select one)	Explanation
Aggregated departmental scores	3	0	
End of course evaluations	18	2	availability (2)
Mid-course evaluations	6	1	check-in for improvement (1)
Open-ended Qs	20	15	capture additional information (7), forward-looking feedback (3), higher-quality data (1)
Quantitative Qs	16	2	large scale trends (1), compare groups (1)
Self created/personalized Qs	8	2	target specific areas of interest/ research questions (2)
Statistical summaries	10	1	reveals trends (1)

Most suited to be used in research related to teaching and learning?

Context (select all)	Total
Aggregated departmental scores	4
End of course evaluations	8
Mid-course evaluations	7
Open-ended Qs	14
Quantitative Qs	8
Self created/personalized Qs	13
Statistical summaries	6

Type of SRI data being used in reported studies

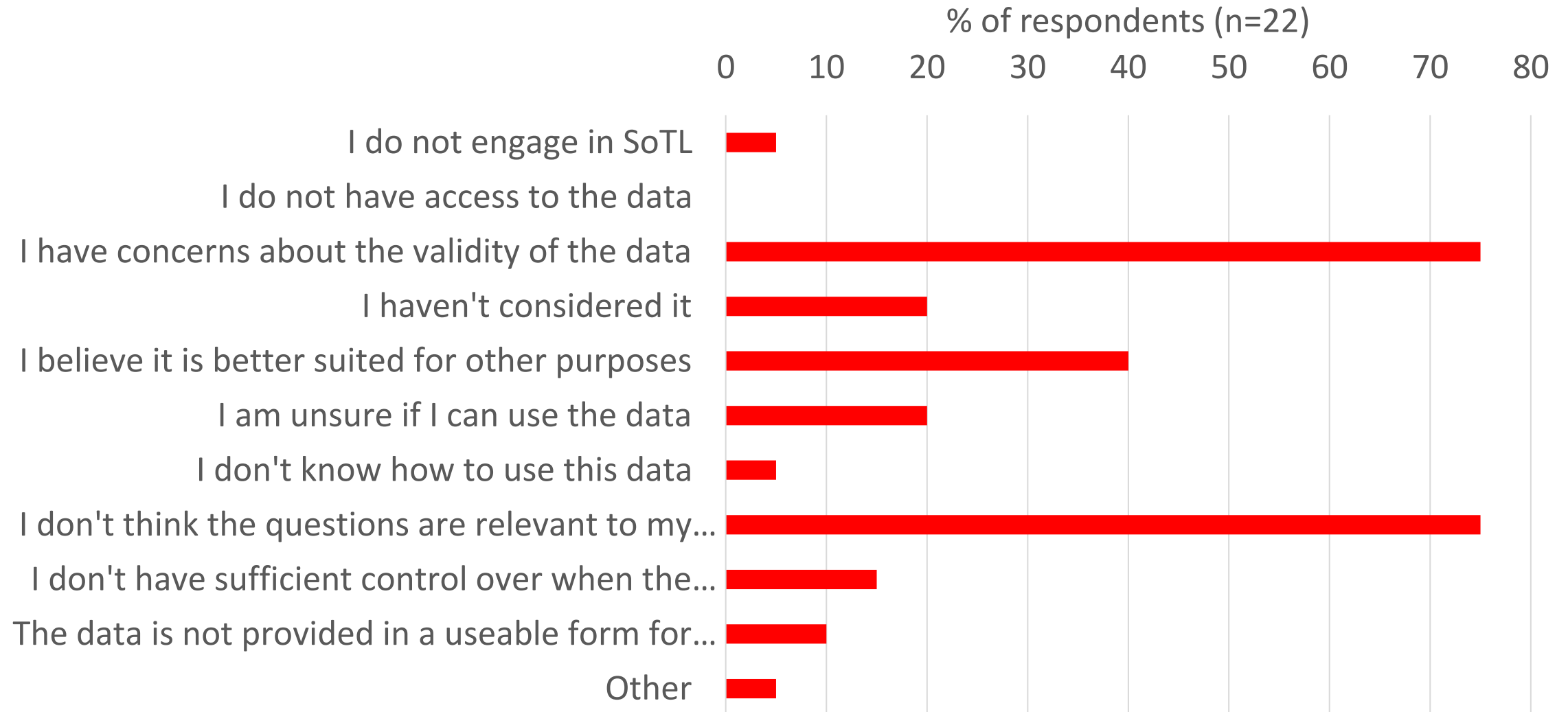


Used in combination with other data sources

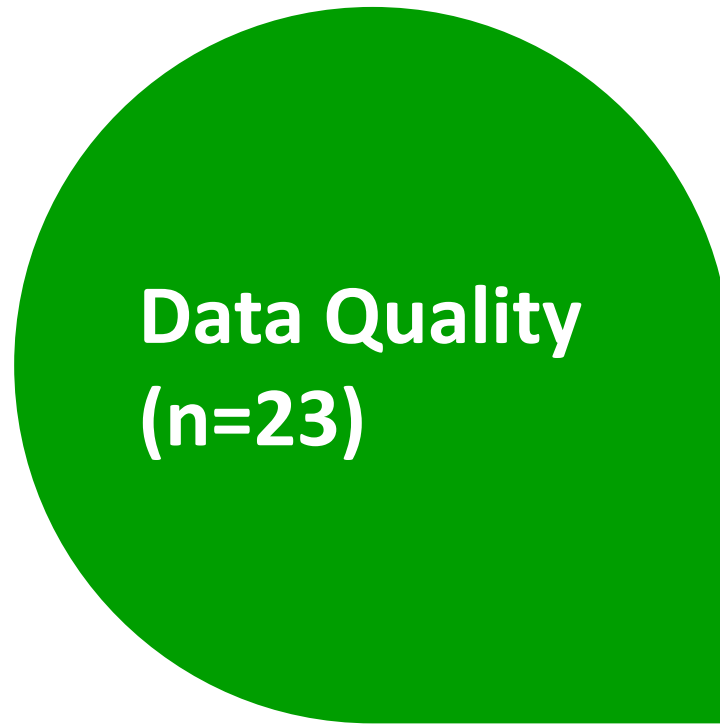
- 91 % of those who said they use the data as research indicated that they use it in combination with other sources (n=20)

Student Work	12
Other Surveys	11
Student Interviews and Focus Groups	10
Course Materials/Teaching Artifacts	5
Institutional Data Sets	5
Classroom Observations	4
Other	22
(inc. concept inventories, LMS data, external feedback, faculty interviews, informal discussions, enrollment data, in-class formative assessment, pre-post tests)	

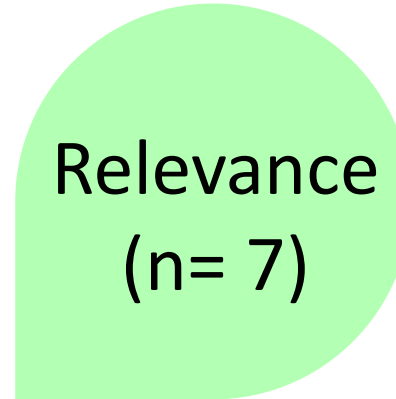
Why not use data as part of formal research?



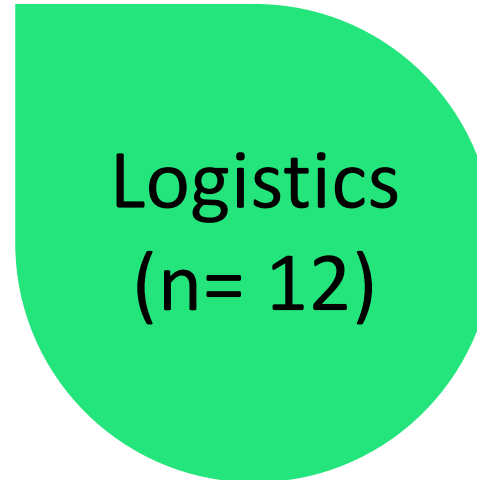
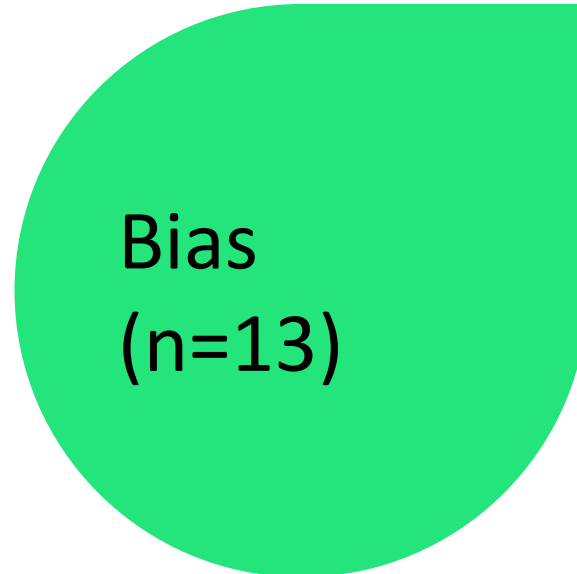
“Student response rates are so low that I do not consider the data to be accurate or representative”



“It's neither the most useful nor the most valid measure of most of what I'm interested in measuring”



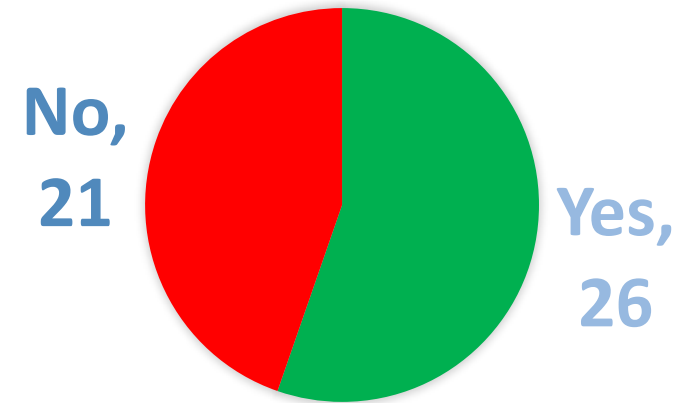
“There is a common sentiment that they are biased against female and racialized faculty. This sentiment causes some faculty to dismiss them completely.”



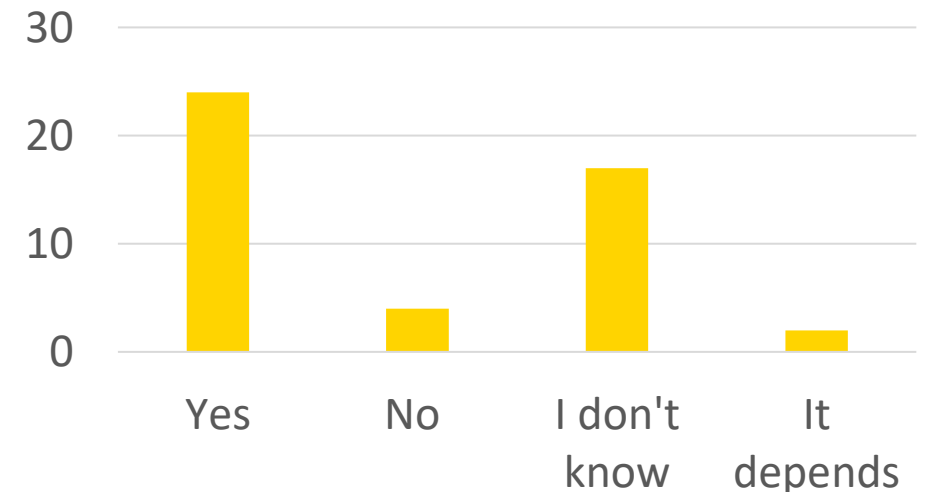
“limitations around when/where I can use the data”

Additional Challenges and Opportunities

To your knowledge, are instructors at your institution able to personalize some questions on their student evaluation questionnaires?



Are you required to receive institutional ethical board approval when using your SRI and/or course data for research purposes?





Consider the types of information provided to you by your institution from student evaluations. Is there any data that is not provided that would make it more likely for you to use the data in research?

- **Personalized** questions (n = 7)
 - *“Personalized questions specific that are disciplinary specific.”*
- Ability to **link** to “other” data (e.g., student grades, student/instructor demographics) (n = 6)
 - Concerns around equity, diversity and inclusivity and the bias of SRIs and student privacy
 - *“demographic data would help understand the representativeness of the sample but is difficult to maintain student privacy.”*
- Make **comparisons** across courses, departments, institutions (n = 5)

Potential best practices when using student evaluation data as research on teaching and learning?

Three major themes we found in their responses:

- Transparency/Informed Consent (n=13)
- Triangulation (n=9)
- Ethical procedure (n=8)

Summary

- Valuable data source toward reflective practice
- Used in research from course to institutional level, most often in combination with other data sources
- Barriers to use from institutional level (e.g. access) but also due to significant concerns around validity and bias
- Suitability of data to answer research questions?
 - Types of questions being asked don't align to research questions
 - More appropriate for reflective practice
 - Open-ended questions seen as valuable source of data for research

Limitations and Future Directions

- Limited responses to survey (further data collection in the fall)
- How is the data being applied to answer research questions?
- Scoping review found more than we had anticipated

Thank you!

- Bruno Roy
- Centre for Learning and Teaching
- Liaisons and Participants in Survey

The logo for bluenotes group, featuring the word "bluenotes" in a blue sans-serif font and "group" in a smaller, grey, lowercase script font below it, all on a dark blue background.

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group



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