

Instructor-Selected Questions: Using Student Feedback to Improve Teaching Practice & Student Learning

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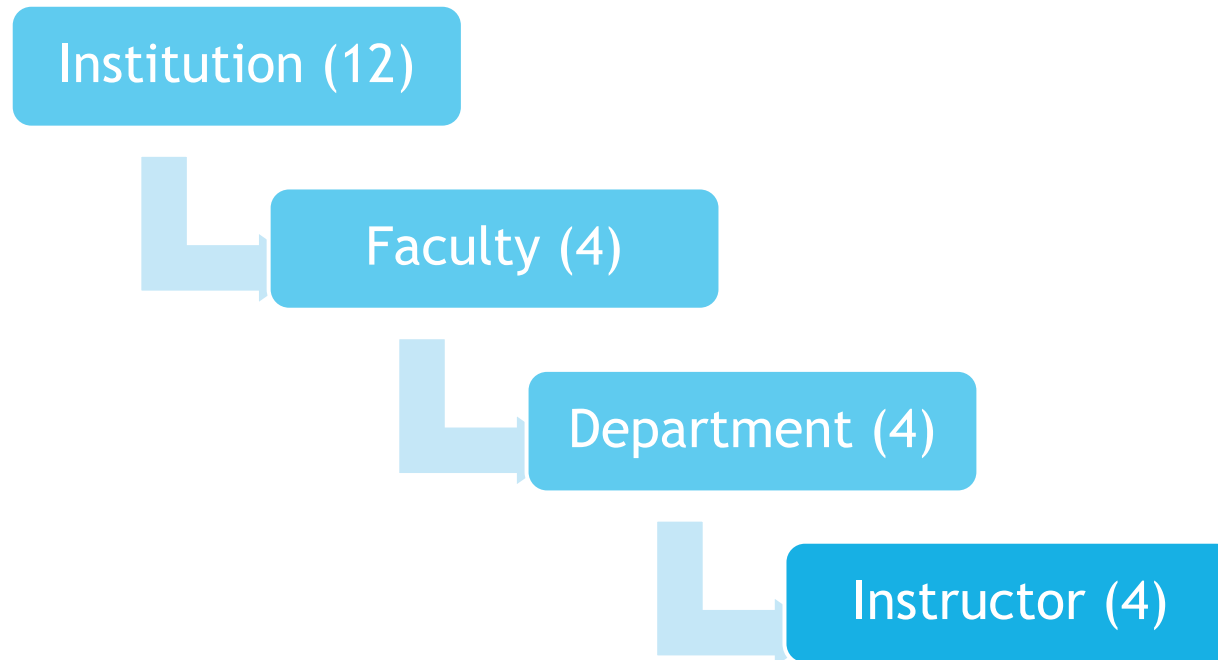
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Objectives

- ▶ Describe our study
- ▶ Share results
- ▶ For instructor-selected questions:
 - ▶ Generate ideas about what to ask
 - ▶ Identify benefits and challenges associated with their use.
 - ▶ Initiate dialogue about ways to move forward in developing best practices

Context

- ▶ SFU uses a cascading framework to determine the evaluation form questions



Big Question

What insights can we gain by analyzing student feedback to
the instructor-selected questions?

HSCI 130 (Foundations of Health Sciences)

- ▶ Large class course, delivered by a weekly 3- hour lecture and 1- hour tutorial.
- ▶ The five main topics are:
 - ▶ constructions of health and disease varied across cultures and historical periods
 - ▶ terminology used in health science to describe and measure patterns of health illness and disease in public health
 - ▶ social determinates of health in relation to public policy
 - ▶ specific health science issues
 - ▶ overview of the Canadian health care system and its role in addressing health, illness and disease today.
- ▶ Analyzed data from 8 offerings from 2016-2019

Response Rate & Instructor-selected Questions

		Fall 2016	Spring 2017	Summ 2017	Fall 2017	Fall 2019
Q1	How did the instructor create an environment conducive to your learning?	✓	✓	✓	✓	✓
Q2	How did taking this course influence your own health and well-being	✓	✓	✓	✓	✓
Q3	Would you recommend this class to a friend? If so, why? If not, why not?	✓		✓	✓	
Q4	In your opinion, what was the most interesting material in the course Why?		✓			
Q5	Please identify the specific areas of the course that you found most interesting?	✓				
Q6	How did the instructor help create a sense of community in the course?					✓
Q7	Describe the activities and/or assessments that were most useful in helping you learn in HSCI130.					✓
Q8	What message would you give to future students taking HSCI130 with Dr. Ro.		✓			
	Total number of responses	278/333	150/206	79/89	263/311	252/294
	Response Rate	83%	73%	89%	85%	86%

Data Analysis

- ▶ Instructor-selected questions were open-comment
- ▶ Two main analyzes
 - ▶ Sentiment
 - ▶ Thematic
 - ▶ Visualization: word clouds
- ▶ NVivo 12
- ▶ We also analyzed the data by linking responses with demographic variables

Sentiment Analysis

- ▶ Conventional approach of using coding scheme of positive, negative, and neutral did not work because questions were phrased with the expectation that students agreed with the premise.
 - ▶ How did the instructor create an environment conducive to your learning?
- ▶ Instead, we defined it as
 - ▶ Agreement: a response that agrees with the essence of question
 - ▶ Disagreement: a response which was skeptical about or strongly objected to the nature of the question
 - ▶ No response: included symbols that could not be interpreted as meaningful

Thematic Analysis

- ▶ Examined reasons for agreement/disagreement
- ▶ Pattern of verbal data with the most frequency formed subcategories.
- ▶ Created graphs demonstrating the top 100 most frequent words.

Results

Focus on three questions in this presentation:

- ▶ How did the instructor create an environment conducive to your learning?
- ▶ Name useful activities and describe how did they help?
- ▶ How did taking this course influence your own health and well-being?

How did the instructor create an environment conducive to your learning?

Sentiment Analysis

	Agreement	Disagreement	No response
Fall 2016	52%	0%	48%
Spring 2017	27%	0%	73%
Summer 2017	58%	0%	42%
Fall 2017	59%	0%	41%
Fall 2019	36%	1%	62%

How did the instructor create an environment conducive to your learning?

Thematic Analysis

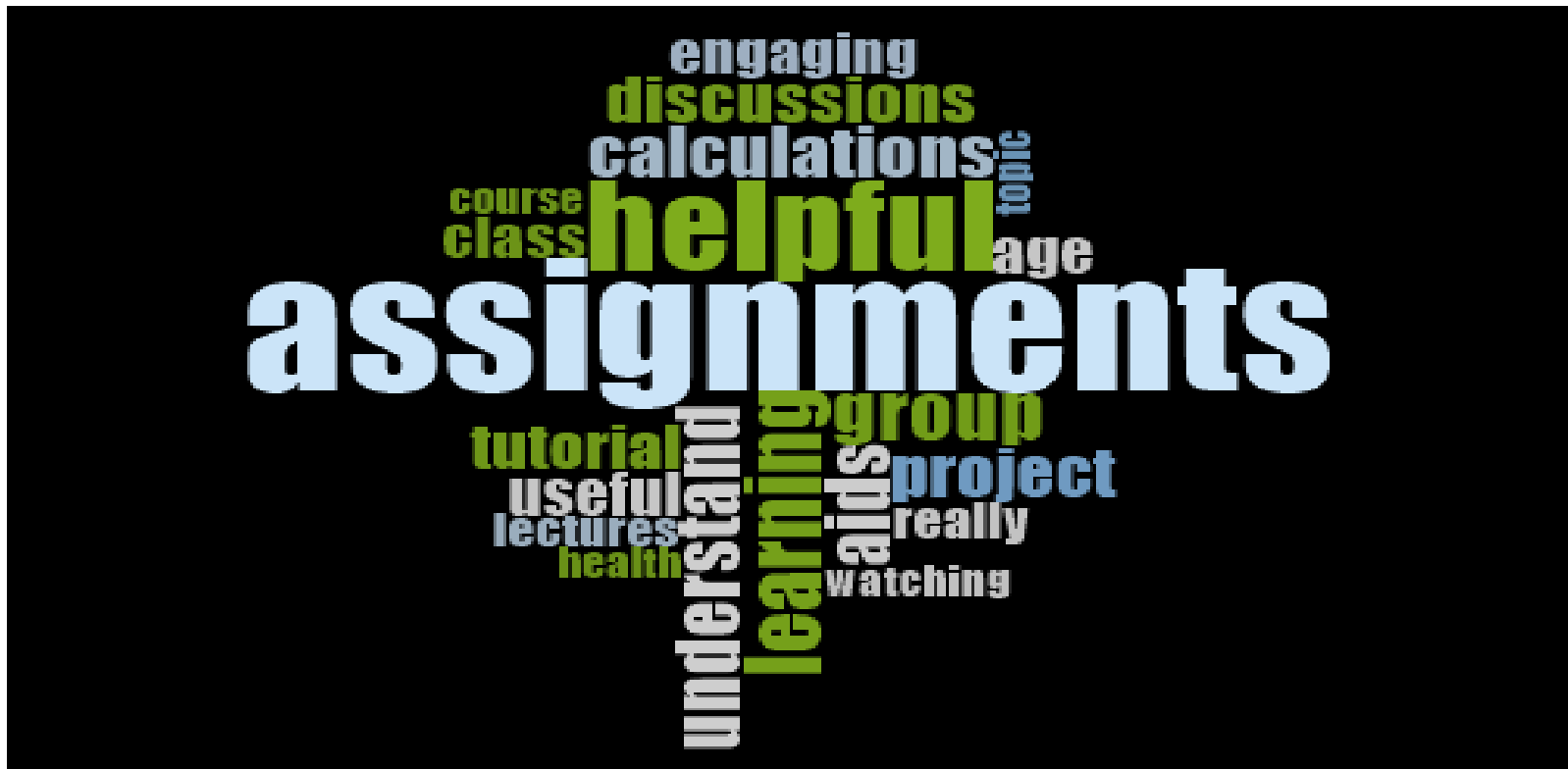
Theme	Example comments
Open environment (instructor encouraged discussions and questions)	<ol style="list-style-type: none">1. open discussions2. through assignments and discussions in class3. Encouraged open discussion and questions4. We were able to discuss freely of our opinions and ask questions of what we did not understand and she provided very clear answers and explanation discussion in the class
Instructor approachability	<ol style="list-style-type: none">1. Dr Tucker is one of the most understanding professor She really made me fall in love with health sciences.2. She was very approachable and seems very interested and invested in our learning as well as her teaching

Describe the activities and/or assessments that were most useful in helping you learn in HSCI130.

Thematic Analysis

- ▶ Students found assignment #2 extremely useful
- ▶ Some were surprised by course load
- ▶ Some were confused by assignment and activities goals (repetition and overlaps)

Describe the activities and/or assessments that were most useful in helping you learn in HSCI130.



How did taking this course influence your own health and well-being?

Sentiment Analysis

	Agreement	Disagreement	No response
Fall 2016	39%	5%	56%
Spring 2017	57%	1%	42%
Summer 2017	54%	2%	44%
Fall 2017	50%	2%	48%
Fall 2019	68%	6%	26%

How did taking this course influence your own health and well-being?

Thematic Analysis

- ▶ Challenges of health behaviour change
- ▶ Understanding of health (healthy vs. not sick)
- ▶ Understanding of health (determinants of health)
- ▶ Stress and coping
- ▶ No influence
- ▶ Health consciousness
- ▶ Prevention
- ▶ Development of disease

University-level questions

Question	Domestic			International			p-value
	N	Mean	SD	N	Mean	SD	
The course instructor explained concepts clearly.	1140	3.96	1.063	239	4.01	1.000	0.538
The course instructor explained grading criteria clearly.	1130	3.88	1.110	236	4.03	1.019	0.065
The course instructor created a respectful learning environment.	1128	4.31	0.907	237	4.25	0.945	0.404
The course instructor was approachable when students asked for guidance.	1134	4.09	1.068	236	4.16	0.944	0.405
The different course parts/activities (lectures, labs, tutorials, online forums, discussions, etc.) were connected.	1136	4.07	0.887	242	4.08	0.932	0.844
Course materials (textbook, readings, handouts, assignments, etc.) improved my understanding of the course content.	1131	3.60	1.085	241	3.81	1.031	0.006
The assessments in this course (tests, assignments, essays, etc.) allowed me to demonstrate my understanding of the course content.	1133	3.83	1.001	240	3.89	1.090	0.417
Course activities (lectures, discussions, group work, labs, etc.) were engaging.	1129	3.85	1.031	236	4.06	0.948	0.004
Overall, the quality of my learning experience in this course was...	1138	3.84	0.961	241	3.81	0.914	0.731
I attended class...	1128	4.64	0.596	236	4.67	0.529	0.398

Conclusions

Course

- ▶ Instructor engagement and discussion are positive aspects of course.
- ▶ Some students may be unclear about how each activity or course material contributes to the course learning goals
- ▶ Work load may be higher than students expect
- ▶ International students feel they learn more from course materials and that course activities are engaging than domestic students.

Conclusions

SETs

- ▶ Change positive wording of questions to be more neutral to better capture student sentiment:
 - ▶ How did the instructor create an environment conducive to your learning?
 - ▶ How could the instructor improve the environment to make it more conducive to your learning?
- ▶ Follow-up with a question about workload vs. student expectations on the next SET

Reflections

How did the questions influence what I came to know about my teaching?
(example: facilitate learning vs. hindering learning)

How can I use the results to improve my teaching?
(example: peer feedback mechanisms in HSCI481)

How does the selection of instructor questions influence the data received on the final section of SETC asking about any additional comments?
(example: HSCI481 with 4 quantitative instructor questions vs. mix of quantitative and qualitative questions)

Emerging Issues & Challenges

- ▶ How to share my analysis of the results of individualized reports in teaching portfolio?
- ▶ How does the inclusion of personalized questions influence student responses to the other sections on SETs?
- ▶ How should the qualitative feedback on SETs be analyzed and included in the reports?