ICED 2020 proceedings:

Students helping students to provide valuable feedback on course evaluations

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Abstract

One of the purposes of the course evaluations or student evaluation of teaching (SET) tool is to help instructors enhance the teaching and learning experience in their courses. However, student feedback can often be more unconstructive than useful because students are usually asked to evaluate instruction with little or no formal training. The project described in this paper aims to improve the quality of student responses to open-ended questions by partnering with students who demonstrate to their peers the importance of SET and how to compose potent answers for instructors. For the project brief instructional videos were developed and delivered to over 23 classes before students completed the SET. A mixed methods approach was used to analyze the collected data. The study provides a future-ready professional development opportunity for students and faculty, and makes the rubric and videos available for other institutions to use.

1 Introduction

The University of California-Merced Center for Engaged Teaching and Learning opened in 2008, and started to sponsor the Students Assessing Teaching and Learning (SATAL) program soon afterwards. This is a student-faculty partnership program that engages undergraduates in assessment at the program and classroom level (Signorini & Pohan, 2019). The Students Helping Students project began in 2016, after receiving a POD Network grant to implement a peer-led presentation on the importance of the SET instrument and on how to leave detailed and useful feedback for instructors. Based on the positive impact of the preliminary phase of this project, as described in Signorini, Abuan, Panakkal, Dorantes (2019), the peer-led presentation was turned into a series of seven- and three-minute videos.

The investigators enlisted the participation of writing instructors, and SATAL undergraduate interns developed and recorded the instructional videos, which were delivered in the participating classrooms. To find out whether or not this initiative was successful, the following questions guided the study:

- 1. Does the usefulness of student feedback that students provide to their instructors on course evaluations or student evaluations of teaching (SET) improve after participating in a peer-led video presentation about SET?
- 2. Do students find the peer-led video presentation and the feedback rubric useful in composing potent responses for their instructors?

2 Literature review

The question of the validity of SET procedures and practices had led centers for teaching and learning (e.g., TEval), higher education associations (e.g., the American Association of

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University Professors) and many researchers to seek and design new tools to replace them since the mid-to-late 1990s (Berk, 2006, 2005; Clayson & Sheffet, 2006; Rhem, 2020; Wieman, 2015). However, it is clear that without a unified and strategic effort to achieve this, SET are here to stay. Fortunately, student-assisted teaching approaches that focus on how and why students learn (Barr, 1995) are becoming increasingly common across the globe.

Students have been included in pedagogical planning as "co-creators" of teaching approaches, course design, and curricula, and as pedagogical consultants (Bovill, Cook-Sather, & Felten, 2011; Cook-Sather, et al., 2019; Cook-Sather, Bovill, & Felten, 2014) and student ambassadors (Peseta, et al., 2016). More and more staff and faculty have also been engaging students as partners, which differs from just collecting the student perspective on pedagogical practices.

Research by Clayson (2009) and Price et al. (2010) suggests that instructors need to specifically teach students about the feedback process, why it is important, and how it is related to course evaluations. This is important not only for improving response rates but also for soliciting more thorough answers to the open-ended questions on SET. If instructors do it, it may on the one hand result in more actionable feedback from students, plus higher response rates. On the other hand, it also presents a clear ethical dilemma. If students are the agents who prepare other students for completing the SET, instructors should be able to expect more actionable responses that can be applied to significant course adjustments while also nurturing student abilities in assessment.

3 Methods

This study used a mixed method approach where quantitative and qualitative data were collected, analyzed separately, and reported in the results (Creswell and Creswell 2018). Undergraduates from the SATAL team developed and recorded seven- and three-minute videos on the importance of the SET instrument and on how to leave detailed and useful feedback for instructors using a rubric (see Appendix). The following table represents the study's implementation of the seven- and three-minute videos.

Group	Pre	Mid	Final	
Semester(s) Fall 2013 –		Fall 2018 - Spring 2019	Fall 2018 - Spring 2019	
	Spring 2015			
SET responses	205 (10 courses)	250 (13 courses)	112 (10 courses)	
Peer-led video	Noneshown	7-min video shown mid-	3-min video shown	
presentations		semester	before final	
			evaluations	
SET timing	Final, online	Mid-semester, paper	Final, online	

Table 1: Study timetable

The seven-minute video was delivered in 13 classes in AY 2018-2019, midway through the Fall 2018 and Spring 2019 semesters, and the three-minute video at the end of the Fall 2018 and Spring 2019 semesters, immediately before students completed the end-of-semester SET. The mid-semester SET were used for formative assessment only and comprised the "Mid" group. The "Final" group was composed of official SET completed online at the end of the Fall 2018 and Spring 2019 semesters. Students in their courses completed a Mid and a Final SET immediately after the video presentations. Mid SET were completed on paper, while Final SET were completed online.

A total of 567 SET responses were gathered from 33 writing classes taught by six volunteering instructors during the academic years 2013-2014 through to 2018-2019. The SET responses consisted of three open-ended questions from the official SET currently used by the writing program:

Q1. "How would you describe your writing ability now compared to the beginning of the semester?"

Q2. "Identify and evaluate aspects of this course that have been especially helpful to you."

Q3. "Describe aspects of this course that you would change if you had the opportunity."

SET collected from 10 classes prior to AY 2018-2019 were used as controls (the "Pre" group). Participating faculty defined helpful feedback and designed a rubric accordingly (Appendix).

Faculty underwent a norming session prior to rating the quality of student responses to these questions in their own SET as "H" (highly useful), "S" (somewhat useful), or "N" (not useful). Courses were matched across groups; each instructor submitted rated SET for at least two sections of a given course in the Pre group and another two in either the Mid and/or Final groups. Each section included up to 20 students.

Data were analyzed for group differences in the quality of feedback provided, in aggregate and by question and course division (upper or lower). Pearson's chi-square or Fisher's exact test were used to calculate significance as appropriate. A bias-corrected form of Cramer's V was used to calculate effect size from frequencies.

To assess net change in feedback quality, scored sums were calculated by weighting responses such that highly useful responses ranged from 70-100% useful, somewhat useful from 1-69%, and not useful as 0%. H responses were weighted at 0.85, S responses at 0.35, and N responses at -0.2.

Findings were robust to a wide range of weights, of which the weights above represent the mean. The negative weight of N responses represents the negative utility of reading and sorting through SET that provide no actionable feedback. The percent change in scores was used to measure effect size.

Participating faculty and students' perceptions of the experience were collected through post surveys.

4 Results

SET improved on all questions from Pre to Mid based on aggregated data. However, controlling for class division² reveals that this improvement was not uniform. Class division was a highly significant and moderately strong predictor of feedback quality, with upper division² students providing more useful feedback (p < .001, V = .212). Additionally, upper division students' SET improved significantly from Pre to Final (p < .001, V = .424), but not from Pre to Mid, except on Q3, where they improved moderately (p < .027, V = .242).

Lower division³ students improved slightly from Pre to Mid on Q1 and Q2, but not from Pre to Final on any of the questions or in aggregate. Their responses did not improve on Q3 in either the Mid or Final conditions.

A total of 276 students, or 70%, rated the video as highly effective and effective. Upper and lower division students rated their skill development equally. However, only students in UD courses performed better in their SET responses. Most of the students found the provided rubric useful (88%, or 345 students).

² Class division stands for the student standing year. ²Upper division students stands for year 3 and 4 students while ³lower division students stands for year 1 and 2 students at a 4-year institution.

Most students (318, or 81%) recommend that the video be delivered in other courses. A total of 174 students, or 44%, mentioned that they prefer a peer-led video to a faculty-led video, while 86, or 22%, have no preference in this regard.

Based on the faculty survey results, participating faculty would recommend the video to other instructors, and upon analyzing students' comments, faculty identified concrete ways to enhance their courses for content and instruction.

5 Implications

- The peer-led video is a very effective training tool as-is when administered in UD courses just before final course evaluations.
- UD students have been exposed to more college teaching, and thus to a greater variety of course structures and activities. This could explain the exceptionally large difference in feedback quality between UD and LD students on Q3, which is the only question that requires students to draw upon experiences from outside the course. Q3 could be revised for LD students in the future.
- The difference in treatment response between divisions may be because the video gives them a mental model to integrate skills and knowledge that UD students already possess. However, LD students may not possess the same foundation and thus would not show the same improvement. Tailoring the video to LD students might elicit more useful feedback from them.
- Multiple exposures to the video content may improve feedback from LD students, since it models good examples for them to follow.
- Peers could be significantly more effective at helping fellow students understand the purpose of SET and why it is essential to complete them and compose thoughtful answers to open-ended questions and therefore potentially improve the validity of SET.
- Faculty agreed that the study recognizes students' role in the SET process in achieving more quality and useful answers to open-ended questions.

6 Conclusions

This project not only benefited faculty, who gathered actionable feedback to adjust their courses, but also the students in their classes, who received direct instruction on how to provide valuable course feedback. Presentation feedback surveys and course evaluation responses show that this presentation was, overall, highly successful in explaining to students the importance of course evaluations and in demonstrating how to compose useful quality feedback. The intervention indicated that responding to SET is a skill that needs to be modelled and explicitly taught by peers rather than instructors through examples, practice and repetition. Other institutions are welcome to implement these free asynchronous resources, which are located at https://cetl.ucmerced.edu/SATAL_Video.

Acknowledgements

I would like to acknowledge the POD Network for their grant program, which funded this project. I would like to thank all participating faculty for volunteering their classes, and SATAL interns who collected and analysed the study data. Special thanks to Mariana Abuan, who contributed to the development, implementation and reporting of this study.

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Appendix: Rubrics

Instructors collected and rated the usefulness of student comments according to the following criteria:

Highly Useful	I clearly understand the experience the student is having, what I am doing well, or what I could do better. I know what I should continue doing in this class, and exactly what I can do to improve my course and/or instruction. Any improvements that need to be made are plausible and are within my control.		
Somewhat Useful	at I have a general or vague idea of what is going well or what I should change to improve my course, but it is not completely clear. I can make a change to my course or instruction, but I may not get the result this student is looking for. I may not have the ability to completely make this change.		
NotUseful	I don't know what I can do to improve my course at all based on this answer. It tells me nothing about my class or pedagogy. I can't tell if the student is having a positive learning experience or negative experience, and/or exactly why. I have no control over making this change.		
0	No response.		

Students receiving feedback training were given the following instructions and rubric:

You are welcome to address any aspect of the course you wish, but I would particularly appreciate your feedback about the following:

- Giving and attending to feedback
- Analyzing readings
- Developing a topic
- Composing an argument and integrating evidence
- Crafting an essay

How to Provide Valuable Feedback on Course Evaluations

	Criteria	Highly Useful	Somewhat Useful	Not Useful
1.	Offer commentary on attributes of the learning environment.	"I find the instructor very caring and that motivates me to try harder in this class"	"The instructor cares about my learning."	"My instructor's hair is cool."
2.	Answer all parts of the question focusing on description rather than judgment.	"My writing ability now is better than at the beginning because now I am more confident in my work and writing based on the feedback I received from instructor and peers."	"It improved a lot. I noticed that my critical thinking ability has improved a lot."	"Hard class."
3.	Attribute positive or constructive feedback to specific aspects of the course. Use examples that support your answer to the question.	"Before this class I was every unsure on how to do a research paper, now that I have taken the class I am more confident in my writing skills. I understand how to format a research paper correctly and how to follow MLA."	"Instructor sometimes describes things unclearly, but I always ask questions if I am confused about anything."	"Research projects are stressful"
4.	Focus on the course and the quality of instruction given regarding the course learning outcomes.	"I loved the projects, in particular group discussions were very important to understand the readings."	"Peer review, presenting, and office hours helped me with learning."	"I wish that Cat Courses told us when assignments are due"
5.	Offer suggestions that are relevant and plausible to the course or instruction and why you think they would help your learning.	"If I had the opportunity, I would include more journal writings or just open ended writing assignments so students could grow more."	"I wouldn't change anything."	"This class is too early."