Feedforward: A Step Towards a Co-Created, Engaging Classroom

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ABSTRACT

The COVID pandemic caused major disruption to the higher education environment. Especially hard hit was the student experience in the class. This study examines the use of feedforward to assess the pulse of the learning environment and the likelihood that instructors adjust their teaching methods and tools to provide a more engaging and satisfying classroom experience. This study also looks at the relation between feedforward results and end-of-semester teaching evaluations.

INTRODUCTION

Faculty in higher education are familiar with the use of course evaluations to provide 'feedback' about courses that have already ended. A practice less commonly used to evaluate procedures, teaching methods, and professor ability is 'Feedforward'. This involves soliciting input from students over the course of a semester to identify areas within the course design that are working or not working for learners. Introducing this method of assessment recognizes students as co-partners in the learning process and can provide meaningful suggestions to instructors who are willing to be flexible and responsive in their course design. As noted by Cathcart, Greer, and Neale (2014),

> *"Evaluation is thus not simply used for reporting purposes, or for the benefit of future cohorts, but in a way enhances real-time learning and maximises the opportunities for students to influence and take ownership of their learning, in order to best meet their particular needs." (p. 798)*

The pandemic caused by COVID-19 and the various significant changes it has brought to delivery of educational experience at all levels including Higher Education makes the role of feedforward even more critical and timely to ensure students get an enriching learning experience amidst all the uncontrollable and unexpected life changes happening around them.

LITERATURE REVIEW

According to Geddes, Cannon, & Feinstein (2015) students enrolled in higher education enter this learning environment with a personal set of resources, capabilities and goals. These authors suggest that there is a connection between teaching and learning borrowing a concept from marketing known as service dominant logic (SDL) (Vargo & Lusch, 2004). SDL proposes that goods are the unit of exchange between the seller and the buyer and that customers are the co-producer of value in the marketplace. Consumers, as participants in the process, have the ability to move sellers to produce products that provide a better 'fit' to their needs (Sheth & Parvatiyar, 2000). When this concept is applied to the education setting, we are examining the relationship between instructor and student when the student becomes a co-creator of their educational experience.

The traditional role of instructors is that of provider of content and coordinator of skills development. Standard practices in the classroom often result in nonresponsive participants and a less-than-optimum level of learning. Geddes, et al. (2015) suggest that a transformational view of the teacher-student relationship should be adopted. This service-centered approach calls on institutions of higher education to recognize that the value of the educational experience for their students can be maximized when the 'creation' process is shared. Healey, Flint, and Harrington (2014) offer examples such as the flipped classroom, community service, and internships to suggest that students benefit from being active participants in their education. They conclude that as the level of engagement increases for students the greater their level of learning.

One of the common means of assessing the degree to which a learner's educational experience was valuable is to administer an end-of-semester course evaluation. This is usually an anonymous survey that students complete during the last weeks of instruction and prior to the final exam. This may offer useful information to the instructor about what worked or did not work in a course but it provides no opportunity to make adjustments to improve the learning environment or experience since the term has ended. One solution to this challenge is to administer what is known as a feedforward survey, a mid-semester assessment of instructor effectiveness, course components and teaching methods.

For those institutions and instructors who view student learning as a partnership between themselves and learners, real-time

feedback has extraordinary value (Cathcart, Greer, & Neale, 2014). Adjustments can be made mid-course to teaching methods, tools, and procedures to more closely align the goals of the course to those of students. In a study of faculty and student attitudes toward mid-semester feedback, 90% of faculty interviewed and 71% of students surveyed felt learning might or would increase if instructors received feedback at the mid-semester point (McGovern & Osguthorpe, 2011). Instructors who view feedforward surveys as a method of improving practice and giving students a voice in their education, this assessment tool "…enhances real-time learning and maximizes the opportunities for students to influence and take ownership of their learning…" (Cathcart, et al, p. 798).

RESEARCH QUESTION

Past research indicates that feedforward surveys can benefit both students and instructors in creating a more engaging learning experience. The proposed research is aimed at confirming this proposition by analyzing feedforward survey results in an attempt to answer the following two questions:

- Can feedforward surveys help in creating a more engaging learning environment for students?

Can outcomes of feedforward surveys help in predicting end-of-course teaching evaluations for instructors?

METHODS

This study is aimed at gathering responses from students about their current experiences in class through a feedforward process with two main objectives – (a) to ascertain if feedforward surveys are helpful to instructors and students in creating a more engaged learning environment and (b) to see if there is a relationship between the feedforward responses and the end-of-course evaluations that students provide instructors.

As a first step of the study, we review instruments that are used to gather feedforward responses (Dartmouth College and Duquesne University). This review provides a variety of possible approaches to gather feedforward responses from students. Questions vary between open ended questions and closed ended. Closed-ended questions vary based on the types of response options – from simple nominal scale (Yes/No response) to ordinal scale (3-4 point response) to Likert scale response (strongly agree to strongly disagree). But the nature of topics addressed in these feedforward instruments are fairly consistent. They focus on course experience and delivery by the instructor and not the content of the course.

Informed by these existing surveys, we create a feedforward survey to capture student responses about their experience at our university by focusing the questions on student experiences and course delivery by the instructor rather than the content of the course. In order to minimize cognitive load on students and to enable them to respond truthfully as well as get higher response rates, closed-ended questions were used for the most part. The response options to these closed-ended questions were restricted to a 3-point ordinal scale (with some questions having a 4th – Not Applicable). A few open ended questions were included to provide qualitative feedback to the instructor to adjust course delivery, going forward.

The survey instrument covered two broad areas – (a) course delivery by the instructor in various formats (time management, preparedness, accessibility etc.) and (b) students' information (major, course name, instructor, hours spent on course and on outside work etc.) All surveys were designed to be anonymous. The 2020-21 academic year was fully virtual with the 2021-22 academic year being mostly in person. The 2021-22 period also provided more flexibility to instructors in terms of mode of instruction. This necessitated some adjustment to both questions and responses.

Data was collected by administering the survey to all students enrolled in a course offered by the business school at a small private university in the US Northeast. The initial feedforward survey was administered twice in the 2020-21 academic year (once each in the fall semester and the spring semester). A revised survey was administered twice in fall 2021 (at week 5 and week 10 – currently ongoing).

RESULTS AND DISCUSSION

Data is still being collected and analyzed. The results and discussion will be presented at the ABSEL 2022 Conference.

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