Abstract

The purpose of this paper is to study the impact that timing, frequency, and format have on the overall quality of student feedback. Data was collected using a combination of student surveys and student and teacher interviews, and is further examined through the lens of existing instructor feedback research. Results obtained indicate that students are rationale, and consequently, more willing to provide quality feedback early in a course when they believe that their efforts are most likely to improve their own classroom experience. Teachers relying solely on end-of-the-semester feedback techniques tend to yield less accurate comments from students and are unable to modify their teaching techniques in the current semester, potentially missing an important opportunity for improvement. Instructors can also capitalize on the willingness of students to provide valuable feedback earlier in a course by soliciting feedback using a variety of methods. A careful combination of multiple choice, short answer, and open ended questions can increase the probability of receiving useful responses. Finally, our research results indicate that most students prefer 2-3 feedback opportunities each semester. This suggests that there is a limit to the number of times we can expect students to provide useful remarks and reinforces the importance of carefully designing feedback formats in order to optimize each occasion.

Introduction

Joseph Lohman writes, “When to evaluate teaching is relatively clear” in Mastering the Techniques of Teaching (Lohman 1995). However, the authors of this paper believe that the question of when to evaluate teaching is a matter that instructors must, in fact, consider carefully, particularly when evaluation includes the use of student feedback. The age-old adage “timing is everything” may very well be applicable when soliciting student feedback. As an extension of this topic, we also explore another important but
less researched question: how often should teachers solicit student feedback throughout a semester? Given the unique classroom environment at West Point, specifically the small class size and relatively personal teacher-student relationship, we also seek to confirm that the generally accepted student feedback techniques and formats used for larger classroom settings remain valid in our own distinctive setting. We intend to use the results of our research to suggest instructor feedback techniques that will yield the most accurate and applicable information to instructors. In turn, better feedback data will allow for development of improved teaching style and information delivery.

**Background and Overview**

Although there has been extensive research conducted on the importance of gathering student feedback, the purpose of this paper is to focus on particular components of feedback that are frequently overlooked. Specifically, how does the frequency, timing, and collection method utilized for receiving feedback from students impact the overall quality of feedback? Currently, some universities utilize an end-of-term feedback collection system that consists of nearly 50 questions. Should this method be used as a stand-alone assessment, or should instructors seek feedback from their students multiple times throughout the semester?

**Summary of Results**

While we were unable to consider every aspect concerning the impact of timing, frequency, and format of student feedback, our research efforts did yield several noteworthy points. Survey results suggest:

- Most students (nearly 66%) would like an opportunity to provide feedback as early in the semester as possible (prior to the first major exam if feasible), in conjunction with later times in the semester.
- Nearly 83% of students thought instructors should seek feedback more than once a semester.
- Students prefer a brief (1 – 7 questions) survey format.
- More students (approximately 70%) prefer the opportunity to provide unstructured feedback through short answer questions (often in addition to other feedback question formats).

**The End-of-the-Semester Feedback Technique**

Research indicates that most universities rely on an end-of-the-semester method for obtaining student feedback. Oftentimes, instructors provide their students with a Scantron sheet on the last day of class to answer 25 - 50 questions regarding their course. At the United States Military Academy, students are required to fill out an on-
line assessment form for every class they attend at the conclusion of the semester. This online assessment frequently contains nearly 50 questions. Only a small percentage of instructors request feedback from their students outside of this term-end method.

There are several problems with this current feedback technique. First of all, it serves as a barrier for students; the feedback form is one more task they must complete before they can leave class that day or before they can depart campus for the semester. As a result, students fill out the instructor feedback forms very quickly, rarely commenting on key issues and frequently omitting accurate feedback. Sydney Sampleton, an administrative assistant at Kansas State University, conducts this feedback technique with multiple classes at Kansas State. “Most students fill out the sheet so fast, they couldn’t possible read all of the questions. They just want depart the classroom after a long day.” Several students interviewed at West Point stated that they quickly fill out these feedback forms so they can meet that requirement and head home for the break. As a result, students do not provide accurate and useful feedback to their instructors.

Another problem with the term-end feedback system is that instructors do not incorporate their students’ feedback into their classes. For example, if the majority of students feel they learn best through group problems, this feedback does not even reach the instructor until the semester is complete. At that point, it is obviously too late to incorporate more group work into the current course. Next, after speaking with colleagues in various academic departments, we find that many instructors do not even read the feedback comments until a month after the forms are completed, and in fact, some do not ever read feedback comments. Reviewing data a month after it is collected, instructors are likely to find that the details of the previous semester may no longer be fresh in their minds, and it is more difficult to interpret the results. Further, many instructors leave immediately after finals for a break of their own and do not even have access to feedback results for at least three weeks. At that time, instructors are already busy planning for their next course.

The final problem we will discuss concerning the course end feedback system is the format. With nearly 50 questions, it is extremely difficult to obtain accurate information for every question. There are simply too many questions to ask. Just like class, students become bored answering the questions and attempt to answer them very quickly, therefore omitting quality information. In addition, the questions frequently take on a multiple-choice format, which only allows for a few possible answers.

We believe instructors should place a higher emphasis on obtaining feedback from their students. Instructors can incorporate feedback from their students to improve their teaching techniques in the classroom and improve their students’ educations. In addition, nearly 50 questions of strictly multiple choice questions will not yield
constructive comments from your students. In the remainder of this paper, we will examine when and how students provide instructors the most accurate and useful feedback, allowing instructors to improve their teaching techniques and more effectively teach their students the subject matter.

Research Methodology

The sample population for our research included approximately 490 cadets enrolled in SS 201 (Principles of Economics) during the spring semester of 2008. Each cadet was given a brief (5 question) questionnaire (Exhibit A). Results from the questionnaires were augmented through interviews with a random sample of cadets and instructors. These interviews utilized qualitative questions to explore cadet and instructor opinions on student feedback surveys and results, and responses were then compared against results from the survey.

Additionally, we conducted both primary and secondary research to examine existing feedback methodologies utilized in other universities. We interviewed and surveyed current instructors about their experiences providing feedback to their instructors in graduate school. We reviewed current research and publications that discuss methods of obtaining feedback. Finally, we compare the quality of the results obtained from feedback collection methods utilized as compared to the data collected using the computer generated end-of-term feedback system.

Research was conducted, and results interpreted, based on the foundational assumption that student feedback is collected and used only in an effort to improve future teaching, and not as a rating tool to be used by a supervisor.

Timing of Request for Student Feedback

Determining when to collect is key to obtaining accurate and useful information. As discussed in the previous section, utilizing only end-of-semester feedback is too late for your current students to benefit from the process, and often does not yield much benefit for future classes. There are numerous studies connecting teaching effectiveness with the ability of a teacher to accommodate students’ preferred learning style, which instructors can do better when they understand student preferences. While existing studies provide various suggestions for understanding learning style preferences, perhaps the most straightforward way is to ask the students themselves by way of student feedback.

Most students (nearly 66%) would like an opportunity to provide feedback as early in the semester as possible (prior to the first major exam if feasible), in conjunction with later times in the semester. In fact, students will provide accurate and useful feedback as early as a few weeks into class. In our Principles of Economics classes, we requested
feedback after 8 lessons (Exhibit B), which took place at the end of three weeks of class time. We received very constructive feedback from the students. Most students answered every question, and took the time to provide detailed responses. This should not be a surprise to instructors, as this reflects one of the basic economic principles – people respond to incentives. Students understand that the feedback comments they provide can shape the remainder of the course, and they place a great deal of thought into their responses. The results – constructive and timely feedback instructors can immediately implement into their course – help students learn more effectively and improve their educational experience.

Even after the first feedback period is complete, instructors have several other opportunities to obtain constructive comments from their students. In fact, an overwhelming 45% of the students we surveyed and interviewed stated they would like to give accurate and useful feedback to their instructors after the first 4 weeks of classes, at the mid-point of the semester, and at the conclusion of the semester. Thus, instructors could utilize as many as three different opportunities each semester to improve his/her teaching style and the learning environment for the students.

**Frequency of Student Feedback Requests**

As discussed, one of the most common methods for college instructors to obtain student feedback is through an end-of-semester survey. Over 80% of instructors interviewed do not conduct any additional feedback collection techniques outside of the semester-end method. Only obtaining feedback once per semester could prevent instructors from implementing teaching improvements in their courses on multiple occasions.

The question then becomes, how often can instructors reasonably expect to obtain accurate and useful feedback from their students? Table A, below, summarizes the responses we received from nearly 500 Principles of Economics students.
Our survey results suggest that students are willing to give constructive feedback to their instructors several times a semester. 69% of students prefer to give feedback 2-3 times, while 14% of students prefer 3-4 times a semester. If instructors obtain feedback utilizing appropriate methods, we recommend seeking feedback three different times during the semester: 1) after approximately eight lessons; 2) at the mid-point of the semester; and 3) at the end of the semester.

Length of Student Feedback Requests

One of the most significant problems we noted with feedback requests is that the forms often contain too many questions. As with any questionnaire, the quality of feedback tends to decrease as the surveyed person continues on to more questions. “I noticed students taking their time with initial questions, but speeding up towards the end of the survey as they approached more questions and wanted to move on to other responsibilities,” Ms. Sampleton of Kansas State University noted. When reviewing short answer questions utilized within the longer feedback forms distributed in the authors’ classes at West Point, we frequently observed longer responses at the beginning of the questionnaire, and shorter, less constructive responses at the end of the questionnaire.

In order to obtain accurate responses, instructors should limit the number of questions on feedback requests. A limited number of questions will keep students more engaged when providing responses, increasing the probability of useful comments. Table B, below, summarizes the number of questions for which students feel they will provide accurate responses.
Over 70% of students queried believe they will provide constructive feedback for no more than 7 questions, while 27% believe they will provide the same for 8-14 questions. We recommend asking approximately 7 questions on feedback requests. See Exhibit B for a sample feedback request meeting these criteria.

Format of Student Feedback Forms

To complete our discussion on obtaining feedback, we need to discuss the style of questions instructors should utilize on the feedback request forms. There are several question styles available, to include multiple choice questions, scaled responses (for example, 1 = strongly disagree…5 = strongly agree), and short answer questions.

Over 90% of the semester-end feedback forms we analyzed rely very heavily on multiple choice and scaled response questions. These question styles are easy for the instructor to interpret, as the results are frequently compiled using Scantron grading devices. However, these questions limit possible student responses and may cause instructors to miss a critical area for improvement.

In order to obtain the most accurate comments from students, we believe instructors should use a combination of these methods. Any given feedback request could contain multiple choice, scaled response, and short answer questions. Nearly 60% of the students we surveyed prefer to complete questionnaires containing these three types of questions. This combination of question types in a given survey will increase the value of student feedback.

Summary

We believe that the implications of our research are clear for all teachers. Students are rational, and consequently, more willing to provide quality feedback early in a course when they believe that their efforts are most likely to improve their own classroom
experience. Teachers relying solely on end-of-the-semester feedback techniques tend to yield less accurate comments from students and are unable to modify their teaching techniques in the current semester, potentially missing an important opportunity. Instructors can also capitalize on the willingness of students to provide valuable feedback earlier in a course by soliciting feedback using a variety of methods. A careful combination of multiple choice, scaled responses, and short answer questions can increase the probability of receiving useful responses. Over 70% of students queried believe they will provide constructive feedback for no more than 7 questions, while 27% believe they will provide the same for 8-14 questions. Finally, our research results indicate that most students prefer 2-3 feedback opportunities each semester. This suggests that there is a limit to the number of times we can expect students to provide useful remarks and reinforces the importance of carefully designing feedback formats in order to optimize each occasion.

References


Theall, M. “Faculty Evaluation” http://www.podnetwork.org
Exhibit 1: Student Questionnaire

This questionnaire is intended to help instructors understand how to obtain the best and most effective feedback from you and other students. Please answer the following questions accurately about how and when you give your instructors the most useful information regarding the effectiveness of their teaching methods.

1) I think instructors should ask their students for feedback _____ time(s) a semester in order to incorporate the recommendations into their teaching methods.
   a) 1
   b) 2-3
   c) 3-4
   d) 5 or more

2) Which of the following statements best explains when you think instructors should obtain feedback from students in order to effectively incorporate recommendations into their classes?
   a) After about 4 weeks of classes.
   b) At the mid-point of the semester.
   c) At the end of the semester.
   d) All the above.
   e) After 6 weeks of classes and at the end of the semester.
   e) All the above and at least one additional time.

3) How many questions do you feel instructor feedback surveys should contain in order to maximize the amount of information obtained and get accurate and thorough answers from you on each question?
   a) 1-7 questions
   b) 8-14 questions
   c) 15-21 questions
   d) 22 or more questions

4) What format of questions do you think instructors should utilize on their feedback forms in order to obtain the most accurate information from you?
   a) Multiple Choice
   b) Survey style (ex: select 1 for strongly disagree, ..., select 5 for strongly agree)
   c) Short Answer Questions (space provided for you to write anything you desire)
   d) Both multiple choice and short answer
   e) Both survey style and short answer

5) What additional comments would you like to provide instructors on how to best obtain and incorporate student feedback into their teaching styles?
Exhibit 2: SS201 Feedback after Lesson 8

1. What is the teaching method that you have found most useful thus far in the course (board problems, desk problems, Aplia, team debates, lecture, etc)?

2. What do you like best about the course?

3. What do you like least about the course?

4. What do you like best about the instructor and his teaching style?

5. What do you like least about the instructor and his teaching style?