

INSTRUCTOR FEEDBACK AND THE ONLINE STUDENT: MEASURING SATISFACTION

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Abstract

Much attention has been given to the topic of assessment and feedback in online classrooms. Feedback can lessen the feelings of isolation students experience in the online learning environment. According to Kasprzak (2005), personal and individual comments can provide students with reassurance and confidence in their work. While few would argue the value of feedback, instructor time constraints are the challenge. On average, face-to-face instructors expend up to 14.77 minutes per week, per student, evaluating course work. In comparison, online instructors spend a median of 48.72 minutes per student, per week (Van de Vord & Pogue, 2012). In another study, audio-visual feedback was found useful, but this type of feedback took twice as long for the instructor to complete. As a result, this study determines levels of student satisfaction for two types of feedback; individualized feedback only, and individualized feedback as well as general group feedback, as evidenced by student evaluation of instructors on four inter-related questions. However, the results of our study show only one significant difference in satisfaction levels in the online classroom, when students were provided with group feedback as well as individual feedback.

Introduction

The purpose of this study is to determine the variance of satisfaction levels with two different types of online student feedback. The first type of feedback will be individual feedback only; the second will consist of both individualized feedback and group feedback. It is the expectation of the authors that individualized and group feedback will achieve greater online class satisfaction.

Literature Review

Moore's Transactional distance theory (1972) maintains the development of the distance transaction is influenced by three factors: the dialogue developed between the teacher and learner, the structure that refers to the degree of structural flexibility of the program, and the autonomy that alludes to the extent of learners control over learning procedures. The focus of this research will be on the first influencer: the dialogue between teacher and learner.

This dialogue can occur either through email exchanges and discussion boards in online classes, although the focal point for this discussion will be the dialogue between teacher and

learner through assignment completion, as evidenced by feedback provided to the learner. Moore (1972) perceives dialogue as an element connected with the quality of the communication, rather than the frequency of the communication, surmising high quality feedback can equate to quality communication, both of which are necessary to facilitate a productive online learning environment.

Feedback to students is critical to the success of online students. Feedback can lessen feelings of isolation and enhance the faculty relationship. In Smith's Model for Effective Distance Learning (1991), student involvement is the foundation for all distance teaching activities. Involvement can be attained by providing specific feedback, individualized for each student. Because many online students feel isolated, personal and individual comments can do much to give online students reassurance and confidence (Kasprzak, 2005). Feedback can also enhance the faculty relationship, which we believe can improve the success of the student. In a study conducted at Anadolu University, 75 percent of students felt they feel more connected to their faculty, and feel more comfortable with the class content if they are provided feedback (Hismanoglu, 2009).

The most effective type of feedback for improving learning is specific to the individual student (McCracken, Cho, Sharif, Wilson, & Miller, 2012), but no doubt is labor intensive. On average, face-to-face instructors expend up to 14.77 minutes per week, per student, evaluating course work. In comparison, online instructors spend a median of 48.72 minutes per student, per week (Van de Vord & Pogue, 2012). One possible suggestion for online course feedback was providing audio-visual feedback to each individual student. While students found it useful, this type of feedback took twice as long as text-only feedback (Mathieson, 2012). Possible modalities, besides audio-video, include comments on discussion boards; comments on tests, quizzes, assignments, and papers; and administration of live feedback sessions, using various collaboration tools and general feedback emails to students. Within each of these modalities, the extent to which feedback is provided is of interest to the online instructor. Within these options, we believe a few stand-out in terms of balancing the benefits of individualized feedback and time constraints.

Research Questions and Hypothesis

This study will aim to answer the following research question:

Do students attain a higher level of course satisfaction when provided with both individual feedback and general class-wide feedback on assignments (in the form of an email announcement to the entire class)?

It is our expectation and hypothesis the students will attain a higher level of satisfaction with both individual and group feedback.

Study Design

In two ADMG385 courses (Business Communication: section A02 and A04), Fall quarter, 2012, at Central Washington University, students will receive assignment feedback in one of two methods: The control group will receive specific, individual feedback only. The treatment group will receive specific, individual feedback, and general group feedback via an online announcement and email. Individual feedback will include at least two specific strengths and weaknesses, on each of their assignments. General feedback will include at least four strengths and weaknesses the instructor saw generally throughout the class.

The University requests students participate in the Student Evaluation of Instruction (SEOI's) at the end of every quarter, specific to each instructor and section taught. Four specific questions will be used from the SEOI to measure areas of possible satisfaction:

#2: Instructor seemed genuinely concerned with whether students learned.

#5: Instructor was actively engaged in class.

#10: Instructor provided useful feedback on student work.

#11: Instructor provided timely feedback on student progress.

The investigators will analyze the control group and treatment group responses using a one tailed T-test.

Results

The table in appendix A lists sample feedback given to individual students in both the A04 section and A02 section, as well as the feedback given via an announcement and email to students in the A02 (treatment) section. Also included in the appendix are the dates of feedback given to students. All feedback was provided within 24 hours of the assignment due date.

An independent sample t-Test (one-tailed) was conducted to determine the difference of

Table 1: t-Test for Question Two Responses (Instructor seemed genuinely concerned with whether students learned)

t-Test: Two-Sample Assuming Unequal Variances		
QUESTION Two		
	A02	A04
Mean	4.857142857	4.6
Variance	0.131868132	0.884211
Observations	14	20
Hypothesized Mean Difference	0	
df	26	
t Stat	1.110380607	
P(T<=t) one-tail	0.13849953	
t Critical one-tail	1.705617901	
P(T<=t) two-tail	0.276999059	
t Critical two-tail	2.055529418	

Table 2: t-Test for Question Five Responses (Instructor was actively engaged in class)

t-Test: Two-Sample Assuming Unequal Variances		
Question Five		
	A02	A04
Mean	4.933333333	4.55
Variance	0.066666667	0.892105
Observations	15	20
Hypothesized Mean Difference	0	
df	23	
t Stat	1.730845783	
P(T<=t) one-tail	0.048437711	
t Critical one-tail	1.713871517	
P(T<=t) two-tail	0.096875422	
t Critical two-tail	2.068657599	

Table 3: t-Test results for Question Ten Responses (Instructor provided useful feedback on student work)

t-Test: Two-Sample Assuming Unequal Variances		
QUESTION Ten		
	A02	A04
Mean	4.857142857	4.65
Variance	0.285714286	0.871053
Observations	14	20
Hypothesized Mean Difference	0	
df	31	
t Stat	0.819054944	
P(T<=t) one-tail	0.209503736	
t Critical one-tail	1.695518742	
P(T<=t) two-tail	0.419007471	
t Critical two-tail	2.039513438	

Table 4: t-Test Results for Question Eleven Responses (Instructor provided timely feedback on student progress)

t-Test: Two-Sample Assuming Unequal Variances		
QUESTION Eleven		
	A02	A04
Mean	4.857142857	4.7
Variance	0.285714286	0.852632
Observations	14	20
Hypothesized Mean Difference	0	
df	31	
t Stat	0.62587475	
P(T<=t) one-tail	0.267989183	
t Critical one-tail	1.695518742	
P(T<=t) two-tail	0.535978366	
t Critical two-tail	2.039513438	

satisfaction levels between students who received individual feedback only, and individual as well as group feedback.

When comparing the results from question two, there was no significant difference between A02 and A04, $t(26)=1.11$, $p=.13$. Similarly, the results from question ten showed no significant difference between the two feedback groups, $t(31)=.819$, $p=.21$. Question eleven also showed no significant difference between feedback levels, $t(31)=.626$, $p=.27$.

For question five, there was a significant difference between A02 and A04, $t(23)=1.73$, $p=.048$. As a result of the t-Tests, the author's do not fully accept the null hypothesis; group feedback and individual feedback, versus individual feedback only, makes a significant difference in the levels of student satisfaction related to perceived instructor engagement. Therefore, the authors reject the hypothesis that students attain a higher level of satisfaction, with both individual and group feedback, when only academic achievement/assignment outcome is the focus. When positive perception of an engaged, or active, instructor is the focus, the results support the utility of commenting on assignments both individually, and as a class.

Possible Study Errors and Limitations

Internal validity issues may stem from the four questions chosen, and whether or not they actually reflect student satisfaction with feedback. Lack of variation in responses could have caused errors, since many of the responses on a 1-5 scale were a 5, with minor variation from the high score. In addition, possible bias when answering the questions because of social desirability, feelings toward the instructor, or expected final grade could have affected the study. In addition, the response rate for A02 was 61percent, and the response rate for A04 was 83percent, which could have skewed the results.

External validity limitations include the generalizability of the study. The two populations studied may not be adequately generalized among the population of students.

Discussion and Conclusions

Although the results show there was only one significant difference between satisfaction, and the two types of feedback given (Instructor was actively engaged in class), the authors believe this does not imply individual and group feedback should not be provided. Any type of feedback provided is of utmost importance, especially in the online classroom. As the authors chose to

investigate, the types of feedback and time limitations must be in balance to achieve the greatest student satisfaction.

Therefore, if the instructor's main concern is for comprehension and student learning, then the impact of the group/class-wide feedback is limited, and non-significant. Conversely, if a concern for a class of students' perception of an instructor's level of engagement is in question, or a priority, then including class-wide feedback is indicated. As applied to two possible instructor scenarios; the newly hired tenure-track or adjunct, or the instructor struggling with poor student evaluations in the area of engagement, both situations would support the veracity of using both individual and class-wide assignment specific feedback, in an attempt to improve levels of student satisfaction.

Recommendations for Further Research

Since feedback is the cornerstone of connectedness between the instructor and the student (Hismanoglu, 2009), perhaps individual feedback (as opposed to group feedback) is otherwise viewed by the student as the most significant point of connectedness—and group feedback is less important to the student when studying levels of satisfaction with the learning of the material. In addition, the quality of feedback provided on individual assignments may be more important than the frequency of feedback, as suggested by Moore, (1972). The authors note, one area of possible design study would be to provide only group feedback to one group (as opposed to individual and group feedback), but this course of action could undermine the educational process, and be viewed as unethical. However, with careful design, this could be an area of further research.

The study may show that in order to achieve higher satisfaction, the instructor must significantly improve the modality of the feedback via means such as video or audio, as suggested by Mathieson (2012), rather than using group feedback as a method of improving student satisfaction with online courses.

Future studies might include use the testing of audio, video or other types of feedback to achieve higher satisfaction levels. As noted, (Mathieson, 2012), audio/video takes twice as long as text-only feedback, so this method may not be viable from a time perspective nor result in significantly higher satisfaction levels to justify the additional time on the part of the instructor. This is another area for further research.

A more time-efficient method, which merits further investigation, might include use of the discussion board and/or live collaboration sessions as an alternative to video feedback. The value may result in higher satisfaction levels, but also most efficient use of time (compared to individual video feedback) on the part of the online instructor.

Future areas of study might also include a larger sample, including several courses and different instructors to look at the value of individual and group feedback.

The importance of student satisfaction in online classrooms is of utmost importance to all online instructors. Understanding how we can better serve students, and increase satisfaction levels through feedback, is an important topic for further discussion and research.

References available upon request

Appendix available upon request