

Online Feedback and Student Perceptions

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Abstract

This study focused on students' reactions to handwritten and typewritten electronic feedback. Students submitted work electronically as part of an online course for which Blackboard was the learning management system. The instructor used a TabletPC to provide handwritten feedback on student work and the review tool in MSWord to provide typewritten feedback. Results indicated students had more positive reactions to the handwritten feedback as opposed to the typewritten feedback.

Introduction

Instructors of higher education courses have been utilizing online course delivery systems for many years, implementing blended or full course delivery in an online format. These applications occur in a variety of content areas such as literacy (e.g., Thomas, King, & Cetinguc, 2004), science and math (e.g., Kortemeyer, Hall, Parker, Minaei-Bidgoli, Albertelli II, Bauer, & Kashy, 2005; Meisner, Hoffman, Strickland, Christian, & Titus, 2000), nursing (Loving, 2000) and foreign language (Brinsmead, 2000). Much attention has been paid to the effectiveness of the online applications themselves (e.g., Harmes & Barron, 2001; McDonald, Yanchar, & Osguthorpe, 2005), while many studies focus specifically on the issue of feedback to and from students (e.g., Mason & Bruning, 2003; Azevedo & Bernard, 1995; Mahesh, 2000).

Feedback may be especially important in graduate level courses that utilize complete or partial online components. It has certainly been the authors' experience that students tend to articulate feelings of distance and detachment to instructors during their involvement in the courses. The fact that many graduate students are not *natives* (Prensky, 2001) in the technology arena could play a role in these attitudes; using technology is a new endeavor for them and a departure from the traditional educational approaches with which they are accustomed. However, one of the primary reasons for feelings of detachment may be due to the actual nature of the electronic interactions and feedback, which are so integral to a course of this type. Students who are accustomed to instructors' oral or written feedback on their work may view electronic typed feedback as impersonal, causing a feeling of distance. As a result, these students may feel that the technology is an inadequate way to learn. Interestingly, many researchers have concluded that it is the instructor's pedagogical methods that most influence student engagement and learning; the technology merely enables those pedagogies (Durrington & Yu, 2004; Valdez, McNabb, Foertsch, Anderson, Hawkes, & Rakk, 2004). The assumption that the actual style of electronic feedback affects students' attitudes is the basis for this study. Specifically, students' attitudes toward traditional typewritten feedback and Tablet PC-enabled handwritten feedback were compared.

Method

Participants

Participants were 16 students in a graduate course in which one of the components was electronic feedback. In some cases, the instructor provided responses to assignments and/or projects in the traditional typewritten format. Randomly, the instructor provided responses in handwriting using a Tablet PC, a tool cited as an innovative approach in providing feedback (e.g., Cicchino & Mirliss, 2004; Thomas, King, & Cetinguc, 2004). The primary question of the study asked whether students viewed the feedback, as well as the course and the instructor, differently based on whether that feedback was in a traditional typewritten or handwritten format. A Likert-scale survey was used to ascertain if any differences occurred in their views of the type of feedback itself, while open-ended questions were asked to discover any differences in participants' views of the course and the instructor based on the type of feedback.

A survey used by O'Sullivan, Hunt, and Lippert (2004), which was intended to gauge course participants' perceptions of immediacy in electronic formats, was consulted during construction of the survey utilized by the current study. On the present survey, students were asked, for example, how *inviting*, *engaging*, or *friendly* (as opposed to *uninviting*, *detached*, or *unfriendly*) the typewritten feedback was. The same questions were asked about the handwritten feedback. The open-ended questions asked specifically about the impact the type of feedback had on participants' attitudes about the instructor and about the course. Finally, an open-ended question asked participants about their feelings about each of the feedback styles. (See Appendix for the entire survey.) Figure 1 shows a typical handwritten response to a student's work, while Figure 2 shows typewritten feedback that was given to a student.

Figure 1. An example of a handwritten response to student work.

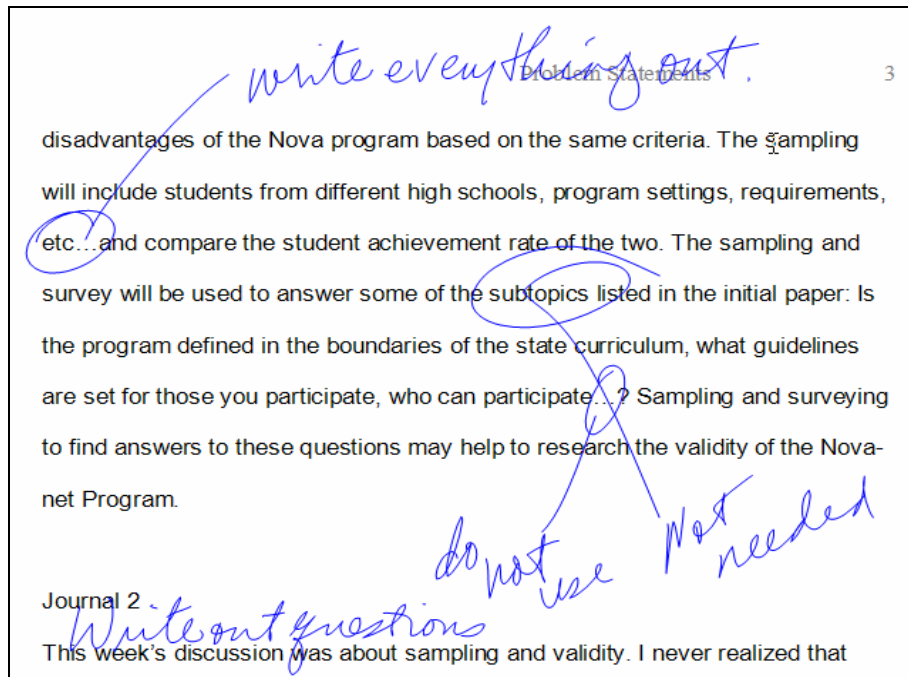


Figure 2. An example of a typewritten response to student work.

The purpose of this **study** is to investigate the relationship between student achievements in elementary schools and late start times. All sixty-seven districts in the State of Florida will be contacted and a questionnaire sent to the individual schools. The questionnaire results will determine which schools have later start times, and which schools have changed their start times within the last five years. After determining the schools using simple random sampling, a survey will be sent to the administrators of schools that have always started early, schools that start late, and schools that have changed their hours. The survey will include questions about student achievement, behavior problems, and parent support. The **mixed (method)** of measurement will be used and will include, FCAT scores, NRT scores, and overall school behavior. Some of the information, including federal gains and school scores, can be obtained through the Florida Department of Education website. (School Scores, 2005)

Comment [COE4]: What type?

Comment [COE5]: Put this above.

Comment [COE6]: Where is the qualitative part? Is the survey open-ended?

Results

On the Likert-scale questions, participants overwhelmingly indicated that they had more positive responses to the handwritten feedback as opposed to the typewritten feedback. For example, participants were much more likely to indicate their response to handwritten feedback as *accessible* (as opposed to *inaccessible*) than to typewritten feedback. On each of the 10 adjective pairs used on the Likert scale, the differences between responses to typewritten and handwritten feedback were significant, with the handwritten feedback receiving more positive scores. See Table 1 and Table 2.

Table 1. Means for responses to typewritten feedback and handwritten feedback

	Typewritten Mean	Handwritten Mean
Inviting	4.29	6.00
Disclosing	4.56	5.69
Open	4.29	5.82
Kind	5.00	5.94
Close	3.94	6.24
Engaging	4.47	6.41
Accessible	4.53	6.12
Expressive	3.79	6.43
Friendly	4.71	6.41
Warm	4.47	6.29
Good	5.12	5.94
Valuable	5.12	6.00
Fair	5.44	6.13
Positive	5.12	6.00

Additionally, the mean for the overall scale for typewritten feedback was 4.34, while the mean for the overall scale for handwritten feedback was 6.08.

Table 2: Differences (as indicated by t-tests) between participants' responses to typewritten and handwritten feedback.

Paired Items typed/handwritten	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. 2-tailed
Inviting	-1.706	1.829	.444	-3.845	16	.001
Disclosing	-1.125	1.668	.417	-2.697	15	.017
Open	-1.529	2.004	.486	-3.147	16	.006
Kind	-.941	1.638	.397	-2.369	16	.031
Close	-2.294	2.144	.520	-4.412	16	.000
Engaging	-1.941	2.436	.591	-3.286	16	.005
Accessible	-1.588	2.647	.642	-2.474	16	.025
Expressive	-2.643	2.468	.660	-4.006	13	.001
Friendly	-1.706	2.285	.554	-3.078	16	.007
Warm	-1.824	2.270	.551	-3.312	16	.004
Good	-.8235	1.38000	.33470	-2.460	16	.026
Valuable	-.8824	1.36393	.33080	-2.667	16	.017
Fair	-.6875	1.44770	.36192	-1.900	15	.077
Positive	-.8824	1.45269	.35233	-2.504	16	.023

In addition, a comparison of the entire scale yielded the same results, with a significance level of .011.

The open-ended questions suggested an overarching theme of an increased level of personal connection to the instructor through the use of the handwritten comments. When asked how the type of feedback impacted their attitude toward the course, the majority of students felt a positive impact from the handwritten comments. One student wrote, "I felt more involved and as if I was attending class after reading the handwritten feedback." Another student shared, "I think that the writing made the person more real to the distant learner and made me feel that I mattered." In comparing the two styles of feedback a student stated, "The handwritten feedback made me feel like my work was valued and I felt connected and encouraged. The typewritten was impersonal and felt like a computer probably graded my work, not a person."

In answering the second open-ended question regarding the impact of the style of feedback on student attitudes toward the instructor, several students shared strong perceptions of feeling closer to the instructor. One student stated, "I don't know why, but the handwritten feedback seemed more personal and I feel like I better understood her thoughts." Another participant said, "The feedback gave me the indication that the instructor cared about my classwork and was trying to help me grow as a student and learner." Several students referred to the instructor's warmth and caring, "I felt that the instructor was a much warmer person and had true caring about her students"; "I could identify with a caring person behind the words with the handwritten comments more than with the typed feedback."

The final open-ended question asked students to share their thoughts and feelings about the two styles of feedback. The students shared their preferences; some valued the handwritten, others liked the typed, and some had no preference. Several students repeated the impact that the

handwritten comments had on them: “The handwritten feedback was so much more personal even if it said the same thing. It also made me feel like my assignments were worthwhile so I tried harder. The typed feedback, like I receive in all other classes, is cold and might as well be generated by a computer. I feel like a number and not a person”; “I felt that the handwritten feedback was more personal and that it added a special touch to the online class”; “Typed is fine, but it is not as friendly feeling.”

Discussion

This study has obvious implications for educators utilizing components in their courses that include electronic feedback. Students indicate they feel a sense of involvement with the instructor and the course as a result of the handwritten feedback. One might speculate that handwritten feedback feels more familiar to students since their experiences have most probably included handwritten comments on hard copies of assignments and other course engagements. Familiar experiences are more comfortable, at least initially, for most people. Also worthy of speculation, however, is the idea that a comment, written in the instructor’s hand (and thus very personal and unique) makes it easier for the student to feel involved in the course, to even feel more connected to the instructor. This has been widely referred to as social presence. As students feel an attachment to their instructor and their peers, they tend to be more satisfied with their educational experience, and are more apt to be successful (Garrison, Anderson, & Archer, 2000; Anderson, Rourke, Garrison, & Archer, 2001; Shea, Fredericksen, Pickett, & Pelz, 2003; Shea, Swan, Chun, & Pickett, 2005).

An unexpected, but pleasant, outcome emerged as the instructor found herself feeling more connected to the students when she was handwriting comments on their work than when she was typing comments. While the comments were similar in content and many times exact replications of one another, the actual kinesthetic involvement in providing handwritten feedback was experientially different for the instructor. Using the TabletPC to handwrite comments resulted in a more affective experience for the instructor. Although the focus of this study was to examine the effect of typewritten versus handwritten format on the students, this unanticipated result suggests further study.

There are some interesting questions that arise from the results of this particular study. Would undergraduates respond differently than the graduate students in this study? If there is a difference, would it be because undergraduates may be *native* students or is it more likely to be a result of where undergraduates are in their careers? Would a larger sample of graduate students yield a different result? It may be interesting to use a larger sample and match students in two different sections of the same course applying handwritten feedback to one group and typewritten to the other. These and other questions would be excellent topics for further investigation.

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Appendix

During the semester you received both typed and handwritten feedback on your work. The following questions refer to the style of the feedback you received. Please answer honestly. Thank you for your participation.

For this set of items please indicate your response to the *typed* feedback by clicking the appropriate number between each pair of adjectives.

1. Uninviting	1	2	3	4	5	6	7	Inviting
2. Non-Disclosing	1	2	3	4	5	6	7	Disclosing
3. Closed	1	2	3	4	5	6	7	Open
4. Unkind	1	2	3	4	5	6	7	Kind
5. Distant	1	2	3	4	5	6	7	Close
6. Detached	1	2	3	4	5	6	7	Engaging
7. Inaccessible	1	2	3	4	5	6	7	Accessible
8. Non-expressive	1	2	3	4	5	6	7	Expressive
9. Unfriendly	1	2	3	4	5	6	7	Friendly
10. Cold	1	2	3	4	5	6	7	Warm

For this set of items please indicate your response to the *handwritten* feedback by clicking the appropriate number between each pair of adjectives.

1. Uninviting	1	2	3	4	5	6	7	Inviting
2. Non-Disclosing	1	2	3	4	5	6	7	Disclosing
3. Closed	1	2	3	4	5	6	7	Open
4. Unkind	1	2	3	4	5	6	7	Kind
5. Distant	1	2	3	4	5	6	7	Close
6. Detached	1	2	3	4	5	6	7	Engaging
7. Inaccessible	1	2	3	4	5	6	7	Accessible
8. Non-expressive	1	2	3	4	5	6	7	Expressive
9. Unfriendly	1	2	3	4	5	6	7	Friendly
10. Cold	1	2	3	4	5	6	7	Warm

I found the *typed* feedback to be:

1. Bad	1	2	3	4	5	6	7	Good
2. Worthless	1	2	3	4	5	6	7	Valuable
3. Unfair	1	2	3	4	5	6	7	Fair
4. Negative	1	2	3	4	5	6	7	Positive

I found the *handwritten* feedback to be:

5. Bad	1	2	3	4	5	6	7	Good
6. Worthless	1	2	3	4	5	6	7	Valuable
7. Unfair	1	2	3	4	5	6	7	Fair
8. Negative	1	2	3	4	5	6	7	Positive

Open-ended questions:

1. What impact did the style of feedback (typed or handwritten) have on your attitude toward the class?
2. What impact did the style of feedback have on your attitude toward the instructor?
3. What are your thoughts and feelings about the two styles of feedback that you received?