

IMMERSIVE FEEDBACK PREFERRED BY BUSINESS COMMUNICATION STUDENTS

Tena Crews
Kelly Wilkinson

Abstract

Objective: This study investigated students' perceptions and preferences of the most effective method of assessment to provide immersive, meaningful feedback on writing assignments. Students were asked to rank, hence determine which type of information provided them the best feedback to improve their writing skills. **Background:** Learning can be amplified when the assessment process incorporates immersive feedback consisting of visual, auditory, and handwritten presentation. A multi-sensory approach not only reinforces learning, it personalizes the assessment process, engages students and helps ensure the learning and assessments respond to multiple student learning styles. **Method:** Undergraduate business communication students were surveyed to determine their perceived most effective method of assessment on writing assignments. **Results:** The results indicated not only students' familiarity with handwritten feedback, but also their preference for a process which incorporates immersive feedback consisting of visual, auditory, and handwritten presentation. **Conclusions:** With assessment discussed throughout higher education as indicators of learning, students can sometimes be left out of the conversation. This research determined that students preferred the more immersive feedback including the auditory, visual, and handwritten feedback. Students also indicated this type of feedback will enhance their writing skills. **Application:** This study provides techniques to grade and provide students with impactful feedback that not only has the ability to improve student grades but it deepens student-teacher relationships.

Introduction

Providing immersive feedback through assessment to augment and reinforce the learning process helps educators provide appropriate and meaningful feedback. It is disappointing that much of the formative assessments collected to improve learning goes “unused or used in ways that undermine learning and educational improvement” (Hickey, Ingram-Goble, & Jameson, 2009, p. 188). Immersive feedback may be provided in both formative and summative formats to meet the pedagogical needs of the course. Immersive feedback provided for value-added learning. Engaging students and providing immersive feedback through assessment enhances student learning and provides an opportunity for success in the classroom.

Learning can be amplified when the assessment process incorporates immersive feedback consisting of visual, auditory, and handwritten presentation. A multi-sensory approach “not only reinforces learning, it personalizes the assessment

Dr. Tena Crews is a professor of Integrated Information Technology and interim chair of the Department of Retailing at the University of South Carolina, SC.

Dr. Kelly Wilkinson is the director of the Center for Instruction, Research, and Technology at Indiana State University, IN.

process, engages students and helps ensure the learning and assessment respond to multiple student learning styles” (Wilkinson, Crews, & Kinley, 2008, p. 75). This research study provided business communication students an opportunity to provide their input as to the most effective assessment method to provide immersive feedback on writing assignments. It is hoped this assessment method will assist students in understanding why they are making writing mistakes and assist them in being successful in the course.

Huba and Freed (2000) defined assessment as:

the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning. (p. 8)

The University of Southern California’s Center for Excellence in Teaching (2007) Web site noted:

to assess derives from the Latin verb ‘assidere’, *to sit by* (originally, as an assistant-judge in the context of taxes). Hence, in ‘assessment of learning’ we ‘*sit with the learner*’, and that implies that it is something that we *do with* and *for* our students rather than *to* them (para. 1).

In an essay by Parini (2008), he stated that he tries to “. . .emulate. . . , sitting beside my students in my office, “correcting” their work,” (p. 3). The research process described in this manuscript emulates these definitions of assessment as the researchers are investigating the benefits of immersive assessment to assist in the improvement of students’ writing skill and success in a business communication course. The immersive assessment utilized in this research study is more engaging and centered on the students’ learning.

Literature Review

Over the years, there has been discussion pertaining to whether or not students’ writing abilities has declined. One result of the belief that writing abilities are on the decline is the movement toward writing-across-the-curriculum programs. Such programs have been established in a variety of educational levels as it has been noted that the ability to write is important no matter what discipline students may study (Faigley & Miller, 1982). Postsecondary business communicators have noted what seems to be a decline in writing skills in their students. However, Jameson (2007) found “the proportion of students with solid writing and reading abilities has held fairly steady but remained small during the past 25 years” (p. 17). Why do educators indicate writing skills are on the decline? The answer is in the fact that “the proportion of high school graduates who enroll in higher education has soared. Thus, more students with weak verbal abilities are entering college” (Jameson, 2007, p. 17).

It is essential for business communicators to develop effective methods of teaching and assessment to improve the writing abilities of these students. However, McEwen (2003) noted the responsibility of improving business students' writing skills lies not only with the business communication professor, but is a collective responsibility of all professors through all courses. Teaching writing in various contexts is essential to skill development.

Business communicators must assist students in improving their present writing skills and also take into consideration their future writing needs as many students may seek acceptance into graduate degree programs. Business students seeking a master's degree will more than likely take the Miller Analogies Test (MAT) as an entrance exam. This aptitude test includes an analytical writing section. Taylor (n.d.) notes the MAT's assessment "emphasis on communication skills—particularly the importance of writing clearly about analytical topics—is noteworthy" (p. 111). Therefore, the opportunity to practice writing about quantitative topics is deemed mandatory for graduate students.

The needs of business must also be taken into consideration when helping students improve their writing. One can peruse the want ads in newspapers or online employment sites and recognize the need for written and oral communication skills. No matter why writing skills need to be improved, it is important to review how assessment in the classroom can improve written communication skills.

Huba and Freed (2000) noted eight characteristics symbolic of learner-centered teaching. Of these eight, the following characteristics reference the goal of this research for assessment or feedback: learners are actively involved and receive feedback; learners become increasingly sophisticated learners and knowers; professors coach and facilitate, intertwining teaching and assessing; and learning is interpersonal, as all learners—students and professors—are respected and valued. These components help establish more immersive feedback and engagement.

It is important to note that students must find value in the feedback. Academics continually complain that students don't value feedback; they only value the grade (Weaver, 2006). This can be true if students aren't "trained" on the importance and the use of feedback. Studies have shown that when students are aware of the purpose of feedback and are taught how to use the feedback, to learn, grades improved (Maclellan, 2001; Wojtas, 1998).

Using technology as a tool may be the way to virtually "sit with the learner" to improve writing skills. A case study completed by Denton, Madden, Roberts, and Rowe (2008) found students who received electronic feedback considered the information more important than students who responded to handwritten feedback on their assignment. This is an important finding as the immersive feedback research described in this manuscript included feedback provided to students electronically. This study also enhances the business education literature in the area of audio/visual assessment. The term immersive has both traditional and modern definitions. The traditional definition of immersive is that it "pertains

to immersing or plunging into something” (World English Dictionary, 2011). The idea of using technology to immerse students in feedback provided to them comes from the idea of engaging students with visual, auditory and handwritten feedback to connect the comments provided to the students to the learning process.

The modern definition of immersive pertains to digital immersion. Immersion “carries the connotation of being particularly engrossing” (Wikipedia, 2011, para 1). The intent is that a student’s senses reach a sufficient belief that the digital environment is natural (Wikipedia, 2011). This definition shows immersion will engage students more with this type feedback and with the instructor.

Need

Relationships with students are important regarding assessment and feedback. As students are connected to each other in a variety of media that immerses them in a world that ties them digitally to each other, how do educators use that technology to tie them to the content of a course and to the instructors? This study addresses the need to investigate the types of technology that will allow students to connect with the educator and allow the educator to develop strategies that will engage students to retain the feedback given to them.

Purpose

The purpose of this study was to investigate students’ perceptions and preferences of the most effective method of assessment to provide immersive, meaningful feedback on writing assignments. Students were asked to rank, hence determine which type of feedback provided them the best feedback to improve their writing skills. This study involved undergraduate students in a business communication course required by all majors in the college.

A researcher-designed, online questionnaire, based on previous research, provided examples of a writing assignment assessed four different ways, was used to gather the data. Students were given the same example writing assignment (written analysis of a book) that had been “graded” using all assessment types. As written analyses are used in business communications to assess students writing; students must analyze information, provide concise documentation and include a reference, it was determined to be an appropriate example for the research. The four types of assessment include:

- a. handwritten comments on the writing assignment (HW)
- b. use of track changes on the writing assignment (TC)
- c. use of audio and video techniques so students could hear and watch the professor grade the writing assignment as she explained the changes being made on the document via the use of a keyboard and desktop computer (i.e., highlight information, key information, edit text, etc.) (AV-Desktop)

- d. use of audio and video techniques so students could hear and watch the professor grade the writing assignment as she explained the handwritten edits being made on the document via a tablet PC (AV-Tablet).

Methodology

Research Participants

Students in undergraduate business communication courses in a large southeastern university served as participants for this study. The business communication course was required for all majors, and all students in all sections (six) of the business communication course in the college served as participants. All business communication courses were held in computer laboratories. However, during the collection of data during one class period, the Internet was not available; therefore, data via the online survey could not be collected. Consequently, students in five sections of business communications courses participated ($n=186$). The online survey consisted of eight questions for each type of modality and was approved through the university's Institutional Review Board (IRB). The surveys were anonymous as the students completed them online and no identifying information was collected.

Instrumentation and Procedure

The researcher designed online survey included examples of written assignments assessed in each of the four assessment methods. For consistency in the collection of data, one researcher went to each class session to complete the following: provide students with an IRB letter describing the research and providing students with an option not to participate if they so chose; show four assessment types one at a time to the class as a whole; answer questions students may have; provide students with the survey URL and ensure all students in the computer lab could access the online survey; and ask students to participate and complete the survey. The participants completed the survey during the allotted class period and the data was automatically submitted. The data was submitted anonymously to a database via the online survey. After each assessment type was demonstrated to the class as a whole, students took approximately 20 minutes to complete the online survey.

Figures 1 and 2 display the writing assignment and two of the assessment types including handwritten comments and track changes.

These assessment types were shown to participants via the classroom projection system and a hard copy was also provided to each participant. The other two types of assessment included auditory and visual feedback and were viewed via the classroom projection system using a Camtasia recorded file in Flash format and heard through the classroom speaker system. After viewing all four assessment types (HW, TC, AV-Desktop, AV-Tablet), participants completed the survey

by first ranking the assessment types from 1, most helpful to 4, least helpful. Participants were also asked to identify if they strongly agreed, agreed, disagreed, or strongly disagreed with each of the following statements for each of the four types of assessments. This type of assessment:

- a. will improve my writing skills.
- b. will help me understand why I am making mistakes in my writing.
- c. will help me be successful in this course.
- d. will help create a relationship with my instructor.
- e. provides positive feedback.
- f. would be effective in Podcast format.
- g. would be effective for traditional in-class courses.
- h. would be effective for online courses.

Jackson's Adventures with Technology
by Candice _____
English 101 – Fall 2008
Mr. Sampson

CRITICAL ANALYSIS AND SUMMARY

The main ideas in this book ^{were} presented logically and as Jackson's adventures continued, I was surprised at how much I was interested in the happenings. The first adventure introduced me to a new technology-type term called "Social Bookmarking." This term is [?] when a person saves personal bookmarks on the Internet so that others can get to them as well. Then, the others can also put more bookmarks there so other can use them too.

I thought the 2nd technology adventure was interesting too. It involved Jackson using a portable device to listen to his instructor's lecture. I think it was neat ~~that sometimes the instructor would use video~~ and Jackson ^{Rewrite} could watch and listen to the video ~~and sometimes the instructors would just talk~~. I think this was great because it gave Jackson the opportunity to take his lessons with him. He could watch and listen anywhere he had his portable device.

Overall this book provided many examples of how use technology in many different ways. It also provided me with many new ^{terms} and I like to learn new ^{terms}. At the end of the book, the author provided this quote, "Remember, technology is only a tool. You are the brains behind the tool" (Jackson, DeLayne, 2008). This sums [?] up the main idea in the book because no matter what technology I use or what new terms I learn, I am still the one responsible to use my knowledge and the technology appropriately.

PERSONAL REACTION STATEMENT

I agree with the majority of statements and ideas that the author stated. The way the uses of technology were explained opened my eyes to new ways to experiment with technology so that it meets my needs. In the past I have used technology as it ^{was} taught to me, but ^{now} I know I can expand my knowledge by using the technology to meet my needs. Learning new technology will help me manage my time more effectively and help others do the same. This is one huge benefit that came from me reading this book.

REFERENCE

Jackson, DeLayne (2008). Jackson's Adventures With Technology. Precious Publishing, New York, NY.

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Figure 1: Writing Assignment With Handwritten Comments Assessment.

Jackson's Adventures with Technology

by Candice (Last Name)
English 101 – Fall 2008
Mr. Sampson

CRITICAL ANALYSIS AND SUMMARY

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Comment [xxxx1]: Do not use I so much. Rewrite: You use the word I too much throughout the document.
Comment [xxxx2]: Try rewording sentences to reduce the use of I. Possible rewrite: continued, the events were exciting and interesting.

I thought the second technology adventure was interesting too. It involved Jackson using a portable device to listen to his instructor's lecture. I think it was neat that sometimes the instructor would use video and Jackson could watch and listen to the video and sometimes the instructors would just talk. I think this was great because it gave Jackson on the opportunity to take his lessons with him. He could watch and listen anywhere he had his portable device.

Comment [xxxx3]: Rewrite - confusing

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Comment [xxxx5]: Move to the end of the personal reaction statement. This should be last.

PERSONAL REACTION STATEMENT

I agree with the majority of statements and ideas that the author stated. The way the uses of technology were explained opened my eyes to new ways to experiment with technology so that it meets my needs. In the past, I have used technology as it was taught to me, but now I know I can expand my knowledge by using the technology to meet my needs. Learning new technology will help me manage my time more effectively and help others do the same. This is one huge benefit that came from me reading this book.

Comment [xxxx6]: Confusing - rewrite

REFERENCE

Jackson, DeLorme (2008). *Jackson's Adventures With Technology*. Precious Publishing, New York, NY.

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Figure 2: Writing Assignment With Track Changes Assessment.

A neutral category was not included to provide for a forced choice situation to determine if the modalities enhanced learning or would be effective in various learning environments. Basic demographic information was also obtained through the online survey from participants. The demographic information included gender, age, and grade classification.

Findings

The purpose of this study was to investigate students' perceptions and preferences of the most effective method of assessment to provide immersive, meaningful feedback on writing assignments. Students were to determine which type of feedback provided them the best feedback to improve their writing skills. The following findings report students' perceptions and preferences of the most effective method of assessment to provide immersive, meaningful feedback on writing assignments. The majority, 55%, of participants were male, and 45% of the participants were female. The sample group included traditional students with 41.38% juniors,

52.74% seniors, 5.5% sophomores, and 0.55% freshmen. The participants ranked handwritten feedback as the least helpful assessment type. Audio and video with handwritten feedback through the use of a tablet PC was ranked as the most helpful and second most helpful assessment type. Track changes was ranked as the third most helpful. Table 1 provides an overview of the rankings.

Table 1
Students’ preferred assessment type

Method	Most Helpful	2nd Most Helpful	3rd Most helpful	Least Helpful
AV-Tablet	48.92%	30.11%	14.52%	6.45%
AV-Desktop	29.03%	23.12%	24.73%	23.12%
TC	16.67%	19.89%	31.18%	32.26%
HW	16.67%	23.66%	25.27%	34.41%

In rating the specific benefits for audio and video assessment with handwritten feedback through the use of a tablet PC assessment type, approximately 97% of the participants chose strongly agree or agree for improving writing, helping participants understand why they are making the mistakes in writing, and noting the assessment was positive. Approximately 95% of the participants chose strongly agree or agree that this assessment type would help them be successful in the course, and approximately 91% chose strongly agree or agree that this type of assessment would also help build a relationship with the instructor. Approximately 94% of the participants chose strongly agree or agree that this assessment type would be effective for online courses, yet less (88%) chose strongly agree or agree that it would be effective in a traditional classroom or podcast format (84%). Overwhelmingly, the participants chose the audio and visual type of assessment with handwritten feedback using a tablet PC as most beneficial to their learning as shown in Table 2.

Although students perceived auditory and visual feedback to provide more in-depth assessments, comments provided by students indicated their familiarity with handwritten feedback, and they also prefer to have their papers returned. Students preferred to have the paper with handwritten comments printed and in front of them as they watched and listened to the auditory and visual assessment. This is similar to providing students with access to a PowerPoint presentation which they can print and have in front of them during an online or traditional lecture. Providing students with their paper gave them an opportunity to take notes for further learning and understanding while they listened and watched the immersive feedback as it was provided to them.

Conclusions and Implications

With assessment discussed throughout higher education as indicators of learning, students can sometimes be left out of the conversation. This study determined that

Table 2
Audio and visual assessment with handwritten feedback through the use of a tablet PC

	Improve Writing	Under-stand Why	Be Successful	Relationship	Positive Feedback	Effective Podcast	Effective in Traditional Course	Effective in Online Course
Strongly Agree	58.56%	61.88%	49.17%	46.41%	51.93%	42.54%	43.33%	53.89%
Agree	38.12%	34.81%	45.86%	44.20%	44.75%	41.44%	45.00%	40.56%
Disagree	1.66%	2.21%	2.76%	7.18%	2.21%	13.81%	10.00%	4.44%
Strongly Disagree	1.66%	1.10%	2.21%	2.21%	1.10%	2.21%	1.67%	1.11%

students preferred the more immersive feedback including the auditory, visual, and handwritten feedback. Students also indicated this type of feedback will enhance their writing skills. Thus, the conclusion is that immersive, meaningful feedback provided through assessment is ultimately a connection the students make between the professor and the assignment. This step in the assessment process is crucial. Students are not always adept at interpreting handwritten comments or may not be able to read handwritten comments. The use of auditory and visual feedback with the proper technology is essential to facilitating the understanding of comments and corrections provided on the document.

There are several software packages that allow for this type of enhanced assessment (i.e., Camtasia, Captivate, Adobe Connect Professional, and Jing). Students may view and listen to the assessment more than once to improve their writing skills. Also, if the professor sees the same mistakes in future writing assignments, he/she can instruct the student to view the assessment again. Based on student feedback, the immersive feedback consisting of handwritten comments via a tablet PC along with auditory and visual feedback is an improvement over the standard marking on paper. However, students continue to want a marked paper in addition to the auditory and visual feedback. The tablet PC provides professors with the technology to do both without grading a paper twice. The tablet PC or other such technology may be a time saving device for business communication instructors.

Professors will need to be able to multitask as they provide handwritten comments via a tablet PC, provide verbal feedback, and use a software package to capture the screen and voice. It is noted that professors may also need to educate students on how to use the assessment feedback appropriately to enhance learning. Students need to understand that when professors give back a paper, it allows them to reflect on their writing and concentrate on the feedback to improve. Rather than simply earning a grade, it is more important to learn from the immersive assessment process with handwritten and visual and auditory feedback.

Learning can be amplified when the assessment process incorporates visual, auditory, and handwritten feedback. This research study provided business communications students an opportunity to give their input as to the most meaningful relevant feedback, hence immersive, on writing assignments. The one immersive feedback technique noted by students, which included visual, auditory and handwritten feedback helped them understand why they are making writing mistakes and assist them in being successful in the course.

Future research should include investigating this type of assessment for any subject in which instructors need to review students' written work or any other work which can be viewed electronically. Further research regarding this subject should include a research study on the amount of time involved in using such technology and a study on grade improvement over a semester using specific assessment techniques using technology versus traditional handwritten assessment.

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