SCREEN-CAPTURE AND AUDIO RECORDING AS AN ALTERNATIVE FEEDBACK APPROACH IN FRESHMAN WRITING CLASSES

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Abstract

As the importance of feedback on student learning is well established, in English classes instructors are particularly concerned with how to provide feedback on student writing assignments. Feedback is traditionally paper-based; it may be highly structured (i.e., scoring rubrics and keywords) to loosely structured (i.e., instructor commentary). Selecting new and more effective approaches for provision of feedback merits further exploration. This paper explores shifting to screen-capture and audio feedback in video form for freshman writing classes, with a particular interest in student perception of this approach along with impact on student performance and the possibility of facilitating extensive feedback.

Introduction

The importance of feedback on student deliverables as part of the learning process is well established. However, selecting effective approaches for provision of feedback is a task open to further research. In English writing classes, instructors are particularly concerned with approaches for providing feedback on student writing assignments.

Ideally, feedback on student writing not only focuses on spelling, grammar, and mechanics, but also on style and content that may require extensive discussion. Therefore, feedback may be highly structured (i.e. scoring rubrics and keywords) to loosely structured (i.e. instructor commentary). Although, traditionally, feedback on student writing has been in written, paper-based form, with the development of information and communication technology (ICT) tools and their integration into education, the use of screen-capture and audio recording software for providing video feedback on student writing has come to light as a non-traditional option. With this approach, the instructor records the correction and annotation process for a written piece of work in video form along with audio commentary. This is achieved by having the screen-capture software record all mouse movements, highlighting, and modifications taking place on the computer screen with added voice recording of the instructor's oral comments. Limited literature currently available on this specific feedback approach shows that it has been received positively by both students and instructors (Stannard, 2008).

For writing instructors, finding an effective approach for providing feedback on student writing is an important prerequisite to enhancing student learning; instructors continually find this challenging, "Regardless of their training or education, many find it difficult to provide students with effective feedback. Despite the seemingly simple nature of the task, many instructors have voiced concern over how to effectively communicate this information to their students" (Stern & Solomon, 2006, p.23).

At intermediate and advanced levels, providing feedback on the style and content of student writing is usually necessary, making the focus of feedback on writing non-simplistic i.e. not only spelling, grammar, and mechanics. Bearing this and the growing accountability of instructors and institutions to provide evidence of student achievement and improvement (particularly with respect to institutions undergoing accreditation self-studies) in mind, selecting effective approaches for provision of feedback merits further exploration.

To that end, this paper explores shifting from traditional, written, paper-based feedback to the use of screen-capture and audio recording software for providing video feedback on student writing in freshman writing classes, with a particular interest in student perception of this approach along with impact on student performance and the possibility of facilitating extensive feedback which may at times be loosely-structured.

Literature

The literature on which this paper is built is discussed in this section. The topic areas include the importance of feedback, content of effective feedback, and approaches to providing feedback. Advantages of technology-assisted feedback are brought to light with several studies indicating a student preference for this approach (Hattie & Timperley, 2007; Yeh & Lo, 2009; Stannard, 2008; Ghosn Chelala & Al-Chibani, 2012; Al Chibani, Ghosn Chelala, & Hindi, 2011). An ongoing search for more effective ways of providing feedback is apparent, comprising discussions of tools that may be used to provide feedback as well as desired feedback content to aid student learning.

Importance of Feedback

With an emphasized focus on accountability of educational institutions toward student performance, the importance of assessing whether the feedback instructors give students actually assists in learning and achieving objectives is ever-more pronounced; according to Stern and Solomon (2006), "Accrediting bodies now require universities to provide evidence of successful university-wide initiatives, programs, and student learning" (p.22). For students, faculty feedback on a paper serves as a road map — a way to measure where they have come from, where they have gone, and where they can go in the future (Konold, Miller, & Konold, 2004; Murphy, 2000; as cited in Stern & Solomon, 2006, p. 24). It is a way for students to determine what they need to do to reach their learning objectives (Stern & Solomon, 2006).

Content of Effective Feedback

Regarding feedback content, Hattie and Timperley (2007) stated that feedback should contain several content areas to be effective: it should answer student questions about what the goals are, what progress is being made toward the goal, and what needs to be done to progress more – "feed up, feedback, and feed forward" (Hattie & Timperley, 2007, p. 86). Furthermore, it was shown that effective feedback provides cues and is in line with goals/objectives (Hattie & Timperley, 2007). Apart from that, feedback may be given differently by different instructors: it may be highly structured (i.e., scoring rubrics and keywords) to loosely structured (i.e., instructor commentary), or a mixture. Therefore, based on the content required for effective feedback that can assist with learning, when given in a traditional way, a vast amount of writing may be required to communicate feedback, which could be made less tedious by changing the feedback approach (Stannard, 2008).

Approaches to Providing Feedback

Given the importance of feedback in assisting students to progress and achieve goals, selecting effective approaches for provision of feedback is paramount. Moreover, research suggests that "students are often confused by the feedback they receive or that which they cannot decipher" (Bellah, 1995; Billings, 1998; Brooks, 2000; LaFontana, 1996; Sommers, 1982; "Writing Matters," 1997–2005, as cited in Stern & Solomon, 2006, p.24). "Even conventional editing symbols are not always meaningful to students —either because students do not know what they mean or they need explanation as to why their writing merited the mark" (Giffin, 1982; Richardson, 2000; Straub, 1997; as cited in Stern & Solomon, 2006, p.24).

Researchers are now looking away from the traditional, paper-based forms of feedback towards other communication tools. Frazee (2008) noted the shift from face-to-face coaching to e-coaching, given the ongoing progression in technology development granting easier access to resources and the possibility of flexible and individualized learning. In fact, with respect to feedback, according to Hattie and Timperley (2007), research has shown that computer-assisted, video, and audio-based feedback is considered effective. For example, in Yeh and Lo (2009), an online annotator system for error detection and correction showed encouraging results. In general, the use of digital computing and networking tools is in line with student preferences (Ghosn Chelala & Al-Chibani, 2012; Al Chibani, Ghosn Chelala, & Hindi, 2011).

One particular development of information and communication technology (ICT) tools and their integration into education is the use of screen-capture and audio recording software for providing feedback on student writing in a non-traditional way. Research on the relatively new use of screen-capture software with audio recording as a form of feedback can be found in Stannard (2008). With this approach, the instructor can highlight or point at parts of the writing and record it

as a video by capturing what is happening on the screen while commenting orally through a microphone. Since, ideally, feedback on student writing not only focuses on spelling, grammar, and mechanics, but also on style and content which may require extensive discussion, video feedback by screen-capture and audio "offers a chance for greater clarity of the corrections since information can be expressed verbally as well as visually" (Stannard, 2007 as cited in Stannard, 2008, p.17). According to Stannard (2008),

> Early tests have shown that feedback is much more extensive too. A 2-minute video feedback recording could provide the equivalent of about 400 written words or a whole sheet of A4 feedback. Furthermore, traditional written form paper-based feedback doesn't address different learning styles, including visual and oral. (p.17).

Procedure

The sample and method followed to implement trials of video feedback provision through screen-capture and audio recording using Jing, a screen-capture and audio recording software available online, which led to the findings in the paper are described in this section.

Sample

The selected class was a freshman writing class with a focus on paragraph and essay writing. A sample of n=11 (N=56) students was selected to receive feedback through videos created by the instructor using the screen-capture tool Jing, and audio. Student grades were recorded and improvement of drafts compared. Loosely-structured discussions were also held with students to allow them to describe their perceptions of the new feedback approach.

Method

Students in the trial group were provided with video feedback using the screen-capture and audio recording software Jing available online for free. The remainder of the students received traditional, written, paper-based feedback. The procedure was followed for drafts of three writing assignments. All instructor feedback followed the rubric already assigned by the Department of English.

For the trial group, while using Jing, the instructor would go through the paper on the computer screen and point out areas that needed review as well as make corrections while recording oral comments and explanation through a microphone. The overall grade would be communicated at the end of the video. The web link to the recording was then sent to the student to be watched at the student's convenience.

Grades for first and second drafts of all assignments were noted. In loosely-structured discussions, students in the trial group described their perceptions of receiving feedback through Jing. Their comments were noted to be grouped into general themes.

Findings

The results with respect to overall student perceptions, performance, and efficacy of the Jing trials for feedback in freshman English writing classes are described in this section.

Student Perceptions of Screen-Capture Feedback Using Jing

Novelty and motivation.

Through loosely-structured discussion, the students indicated they were interested in receiving a new form of feedback, especially since it was a type of video feedback where they could see their paper and listen to the instructor's audio recording at the same time. In general, students were in agreement that they liked using computer technology in their courses.

Clarity of feedback.

Students indicated that the type of display which involved selection or pointing to the area of the paper in question with annotations and corrections in a video setting was particularly helpful. Essentially, students liked the fact that they could see the instructor actually making corrections and hear the instructor's thought process through the audio commentary, which helped them understand why modifications needed to be made. In addition, students agreed that not having to decipher the instructor's handwriting or editing symbols avoided unnecessary frustration.

Organization.

Another advantage mentioned is that in order to maintain feedback on their writing for future reference, students don't have to keep stacks of papers. The video could be saved on their computer making it easy to organize. Files could then easily be retrieved for review. Furthermore, the nature of video feedback offered the possibility to facilitate student focus on the most important parts of the feedback and the more wordy parts, especially opinion, overall impression, and clarification of concepts. The instructor provided these in a conversational tone that appealed to the students and as a whole piece rather than bits here and there that are difficult for the student to associate with each other.

The Impact of Screen-Capture Feedback Using Jing on Student Performance

Although the sample size was too small to be conclusive, the available results do not indicate that students receiving feedback through Jing achieved superior performance improvement to those receiving traditional, paper-based feedback. Both groups improved, with the group who received Jing feedback encountering a 13.39% improvement in grades, and the others having an average improvement of 17.44%. That being said, initial grades of 6 out of the 11 students receiving feedback through Jing were high, potentially leaving little room for improvement.

Problems and Inconveniences

At times, the video link would not open which was frustrating for the students and the instructor. Internet outages are also a local problem; so, in the absence of a working Internet connection, the students could not retrieve the feedback and the instructor could not send the web link or save a video. Furthermore, students were obliged to bring laptops to class if the class is not equipped with computers; however, most students do have laptops or tablets and often bring them to campus anyway. Finally, feedback requires ample preparation on the part of the instructor to fit smoothly into the 5-minute free Jing session, unless payment is made for the full version.

Conclusion

This paper explored shifting from a traditional, paper-based feedback approach to a screen-capture and audio recording approach by using Jing in freshman English writing classes. A particular interest in student perceptions of this approach, the impact of this feedback approach on performance and the possibility of the approach to facilitate extensive feedback that may at times be loosely-structured were taken. Trials were attempted to see if using Jing to provide feedback, as opposed to traditional, written, paper-based feedback, would be received positively by students and instructors, be effective when providing extensive feedback, and be significant in enhancing student writing performance. Findings indicate positive perceptions of the approach, and overall advantages with respect to efficacy of its use, but performance of students receiving feedback through Jing does not appear superior to that of other students within the given sample possibly due to initial high grades of the students in the trial group. This merits further study with a larger sample to adequately assess the effect of the approach on performance improvement. Another area for future work may include standardization for best practice in screen-capture video feedback.

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