

USING RICH MEDIA TO FACILITATE DIALOGICAL FEEDBACK PROCESSES

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Abstract

This paper explores how rich forms of digital media can be used to enhance assessment and feedback design in an online or blended delivery subject. This innovative design facilitates dialogical feedback processes by leveraging digital recordings created by educators and students. The aim of this design is for educators to explicate their evaluative thinking using sustainable methods, and for students to reflect and respond to the educators with regard to their assessments. The results indicate that rich media can effectively be used to engage students in asynchronous feedback discussions regarding assessment tasks, which may lead to improvements in future work.

Introduction

In order to enrich their learning, higher education students need to develop evaluative judgment; that is, the ability to make educated decisions about the quality of their performance on assessment tasks (Boud & Molloy, 2013). Furthermore, students can more easily improve their performance on future tasks when they are able to ask questions of the educator who provided feedback on their work (Nicol, 2010). One way to help students achieve these objectives is by providing them with clear opportunities to engage in dialogue with educators.

Research suggests that feedback should be more than just an educator providing one-way commentary on student performance, but rather an ongoing conversation in which educator and student work to co-create meaning (Nicol, 2010; Yang & Carless, 2013). By doing so, students can calibrate their expectations against the opinions of someone known to have a deeper level of experience in the relevant area, and clarify misconceptions about their work (Boud, Lawson, & Thompson, 2013). These notions support conversation theory (Pask, 1976); that is, the idea that learning is enhanced when individuals are able to externally represent their knowledge about a topic by engaging in conversation with another participant (i.e., a teacher, peer, or the learner themselves). Indeed, Laurillard (1999) argues that for learning to truly occur, individuals must justify and communicate a “theoretical representation of [a] particular action” (p. 114) with a teacher and through their own internal dialogues.

Dialogical feedback typically conjures images of students partaking in individual face-to-face discussions with their lecturers. The reality is,

however, that very few universities have adequate academic staff levels to provide this option to all enrolled students. As such, one-on-one consultations are generally only offered as an optional extra, and are restricted to designated consultation times. While this approach is understandable due to teacher labour, it can be problematic for students who lack knowledge of educator expectations and are unable to construct meaningful interactions (Bloxham & Campbell, 2010). This approach also raises equity issues (Sadler, 1989), as only certain students may be able to take advantage of consultation times (e.g., those who have sufficient amounts of free time available on campus). Moreover, it is simply not viable for educators to offer individual face-to-face consultations with students in massified courses and subjects that are delivered online. Thus, students completing these sorts of subjects are given little or no opportunity to participate in personalised communication about their learning.

While these challenges are significant, they are certainly not insurmountable. It is possible that rich forms of media, such as digital audiovisual recordings, could be used to facilitate sustainable and equitable discussions between educators and students. Digital recordings (e.g., videos and screencasts) are already recognised as a useful means of providing assessment feedback, as they allow for the provision of detailed comments in a concise format (Denton, 2014; Orlando, 2016; Ryan, Henderson, & Phillips, 2016). In studies that have examined the advantages of using digital recordings to deliver unidirectional feedback comments (i.e., educator to student), the process has been found to be as efficient, or even more efficient, than marking up electronic documents or writing handwritten comments on assessment tasks (Borup, West, & Thomas, 2015; Knauf, 2016; Morris & Chikwa, 2016).

Students also tend to appreciate receiving digitally recorded feedback comments; in comparison to text, they are perceived to be easier to understand (Bourgault, Mundy, & Joshua, 2013; Turner & West, 2013), more supportive (Borup et al., 2015; Gould & Day, 2013), and more personal (Knauf, 2016; West & Turner, 2016). This may be because audio and visual recordings allow educators to convey rich cues like tone and expression (Cavanaugh & Song, 2014; Henderson & Phillips, 2015). Also, students tend to believe that digital feedback recordings reflect a greater investment of time and effort by the educator than text comments (Anson, 2015; Chew, 2014), even though the opposite is generally true (Knauf, 2016).

Despite the growing body of research advocating the affordances of digital recordings as feedback, few studies have investigated their utility to support dialogical feedback processes. This pilot study explored this possibility by measuring students' engagement and perceptions toward digital recordings as a modality to deliver dialogical feedback. To achieve this aim, video and screencast recordings were used to facilitate dialogue between lecturers and students in a mixed delivery postgraduate Education class.

Method

This section outlines the feedback design and research method used in this study. Ethics approval was received from the University's Human Research Ethics Committee before data collection took place.

Participants

The participants involved in this study were 39 Master of Education and Master of Teaching students enrolled in a subject focused on the instructional design of online learning environments. This subject was offered by the Education Faculty of a large Australian university.

All 39 students were given the choice to take part in a dialogic feedback activity with their lecturer, but only 11 (28%) did so. All students, regardless of whether they completed the feedback activity, were then invited to complete an online survey. Of these, 51.3% (n = 20) elected to take part. Data from one respondent was removed, as this student did not provide usable answers to the open response questions. Of the final sample of survey respondents (n = 19), the majority were female (77.8%) and considered English to be their first language (83.3%). Forty two percent received feedback from Lecturer 1, 32% received feedback from Lecturer 2, and 26% received feedback from Lecturer 3.

Materials

A short online survey was used to collect data relating to the dialogical feedback exercise. The survey comprised a total of nine items, of which three were closed-ended demographic questions (gender, whether their first language was English, and which of the three lecturers had created their feedback recording for Assignment 1). Also included was one 5-point Likert-type item that asked students to rate their level of agreement that the feedback they had received for Assignment 1 had an impact on what they did for Assignment 2 (strongly agree – strongly disagree). This was followed by one open response question asking students to explain their chosen level of agreement. The survey also included one binary closed-ended question (yes/no) asking whether students had been involved in the dialogical feedback activity. This question was followed by one of two filtered open response questions: the first asked students who had engaged whether they found it helpful, and the second asked students who failed to engage why this was the case.

Procedure

The subject was taught by three lecturers, of which two (Lecturer 1 and 2) had numerous years' experience creating digital feedback recordings, and one was attempting it for the first time (Lecturer 3). Lecturer 3 was also an early career educator who was teaching this subject for the first time, while Lecturers 1 and 2 had been teaching this subject for several years.

Students enrolled in this subject were asked to complete two formal assessment tasks: the first was an annotated bibliography that was due in Week 5 of the semester, while the second was an essay or negotiated project that was at the end of Week 11. The feedback design used in this study was based on the idea that digital recordings could be used to enable and enrich multiple feedback loops amongst educators and students between submission of the first and second assessment tasks.

The first step in the design was the creation of digital recordings (either video or screencast recordings) by the three lecturers after students had submitted Assessment Task 1. These recordings were sent to students in Week 8, and provided information relating to each student's performance in the task. The recordings followed a structure that had been utilised by the researchers in previous years (Henderson & Phillips, 2014), which specifically focuses on providing students with substantive comments relating to areas that they can strengthen in their future work.

Within the Assessment Task 1 feedback recordings, the lecturers offered each student a personalised provocation. Essentially, this entailed inviting students to record a short video or audio file responding to a nominated area of improvement that the lecturer had raised within the recording. Lecturers specifically encouraged students to outline how the feedback they had just received would change the way they would undertake work for Assessment Task 2. Students were also invited to discuss their ideas for Assessment 2, which allowed the lecturers to provide a follow-up video either honing or validating these ideas. In this way, the feedback loop was enhanced through continued dialogue.

In the week immediately following the end of semester (Week 13), students were invited to complete an online survey that was hosted on Qualtrics. Participation in the survey was voluntary, and no incentive was offered.

Results and Discussion

Of the 39 students enrolled in the subject, 11 (28.2%) provided a response to the provocation provided by their lecturer. In 9 out of the 11 (81.8%) cases, students' responses formed the basis of ongoing dialogue with lecturers about the impact of the Assessment Task 1 feedback on Assessment Task 2. Students' response artefacts were generally multimodal, incorporating a combination of either video and text, or audio and text. However, two students elected not to include a digitally recorded component, choosing instead to post text based responses in a general discussion forum on the web-based learning management system associated with the subject.

The majority of the 19 survey respondents (73.6%, $n = 14$) either agreed or strongly agreed that the feedback they received about Assignment 1 had an impact on what they did for Assignment 2. When asked to explain why they had agreed, 9 out of 14 students mentioned that the lecturer provided specific examples of where they could have strengthened their work. As a result, it was easy for these students to understand how to action the feedback and improve their second assignments. For example, one student wrote "In [Lecturer 1's] Assignment 1 video feedback he clearly outlined where I could improve for Assignment 2. I used his feedback to then inform several of my Assignment 2 choices." Another remarked, "[Lecturer 1] gave really useful feedback regarding the content, structure and writing style of my work. He also commented on referencing points. These were useful in structuring my work for Task 2."

The results outlined above are in part influenced by the fact that lecturers were specifically focusing on providing students with usable feedback for Assessment 2. However, these results also highlight the affordances of digital recordings. For example, by speaking rather than writing, educators have the ability to effectively convey a large amount of detail in their feedback to students. Moreover, students' understanding of the information can be improved through the inclusion of non-verbal cues, such as tone, pace, and expression (Ryan et al., 2016). Screencasts are particularly beneficial in this regard, as educators can adopt a split screen approach whereby students can simultaneously view their own work and the educator's face, while also hearing their voice. This can further aid student understanding, as educators are able to highlight exactly which part of the work they are referring to, at the exact moment that they are speaking about it (Henderson & Phillips, 2015).

The survey results also revealed that the effectiveness of the feedback activity was due to more than just the modality of the feedback. For example, one respondent mentioned that it wasn't the initial feedback *per se* that had had an impact on Assessment 2, but the subsequent dialogue with their lecturer which provided them with a clearer sense of how to improve. This is illustrated in the following comment, "The feedback I received for Assignment 1 encouraged me to share my thinking about Assignment 2 with [Lecturer 2]. I did this and got subsequent feedback which I incorporated. So, the process of the feedback impacted assignment 2 -- probably more so than specific advice given in the Assignment 1 feedback." This quote supports conversation theory (Laurillard, 1999; Pask, 1976), and strengthens the argument that dialogical feedback can help students beyond what they experience when feedback is unilateral.

With regard to engagement in the dialogical feedback process, 57.9% (n = 11) of respondents indicated that they had discussed the feedback they received on Assignment 1 with one of their lecturers (e.g., by recording a response video). Of these, seven provided follow up survey responses stating that they had considered this process to be helpful or useful. Unfortunately, there were only a few cases where respondents elaborated on their open-ended responses to explain why they felt this way. Three students noted that the act of verbalising their responses had deepened their reflections on their own work, while two others remarked that dialogue with the lecturer had helped them shape their next assignment. These results highlight how the process of engaging in dialogical feedback allows students to verbally articulate their ideas, which can consequently help them shape and strengthen their arguments. Indeed, it may be the case that this process enables students to externalise their inner dialogue of knowledge construction, thus supporting deeper learning (Laurillard, 1999).

Scholars recommend that students should participate in dialogue with educators both before and after submission of assessment tasks (Bloxham & Campbell, 2010). However, in reality, most student experiences of communication with their lecturers or assessors are limited to text-based comments received after submission of assessment tasks (e.g., handwritten comments, digital annotations, comment banks, or generic rubrics). Nicol (2010) refers to these types of feedback as "impoverished and fractured

dialogue” (p. 503), and argues that educators should instead be aiming to have direct, personalised interactions with students. Likewise, Ajjawi and Boud (2017) argue that feedback should be viewed “not as a set of unilateral comments, but as a social act, a dialogue” (p. 253). As the results provided here illustrate, engaging students in a dialogue can be extremely useful for students, even when that dialogue is asynchronous in nature.

The act of engaging in dialogue can also increase the level of rapport between educators and students. This is advantageous for students, as it can increase motivation to achieve in the subject (Sass, 1989). There was evidence of this effect in the survey responses; for example, one student noted that the dialogical feedback activity had heightened the personal connection between themselves and their lecturer. This outcome may also reflect the nature of rich media, as previous research has observed that digitally recorded feedback can strengthen relationships between educators and students. Educators can convey empathy and warmth more easily using audiovisual media than they can through written comments (Henderson & Phillips, 2015), and students feel that recordings reflect a greater deal of effort than text comments (Anson, 2015). This makes digitally recorded feedback particularly appealing in situations where the affective relationship between students and educators may be lacking, such as massified or online courses (Borup et al., 2015).

It should be noted that not all of the respondents provided positive comments about the dialogical feedback activity. Students who disagreed (15.8%), or felt neutrally (10.5%), that the feedback had an impact on their subsequent work provided several different reasons why this was the case. For example, two students mentioned that they already had a clear sense of what they were doing for Assignment 2, while another mentioned that external pressures had interfered with their ability to impact on Assignment 2, stating, “I had so many constraints on my project that realistically I did what I could.” Three other students were somewhat critical of the feedback comments they received on Assignment 1; noting that they were “hard to decipher,” that they were not “completely relevant to the second assessment,” and that there was “too much focus on marginal errors.” While these comments may be a symptom of the students’ degree of proficiency in evaluative judgment, it also may be because each of these students received feedback from Lecturer 3, who was both new to teaching the subject and providing feedback in a digital recording.

The perceived effectiveness of digital recordings can potentially differ according to various contextual factors, such as those related to the educator providing the feedback (Phillips, Henderson, & Ryan, 2016). As Lecturer 3 was just beginning to have higher education teaching experiences, the lecturer may have lacked confidence regarding the content of the feedback and the medium being used to record it. Such findings highlight two potential considerations for future research. First, researchers should explore whether digital feedback recordings are more likely to increase student engagement and understanding when the feedback is provided by educators who are experienced and confident in their delivery of information. Second, scholars should not only focus on the impact of modality when attempting to understand students’ perceptions of recorded feedback (Ryan et al., 2016), but

also the influence of external factors, including the experience level of educators and their familiarity with digital recording processes.

The timing of the dialogical feedback activity was also a negative aspect noted by some students. For example, respondents who failed to discuss the feedback with a lecturer generally indicated that this was due to a lack of time. For example, one student wrote “[I] get distracted with other [subjects] that I’m trying to divide my focus on,” while another stated, “I ran out of time trying to fit everything in, especially with something that was going to take time to figure out how to do it a video or voice recording and then uploading it.” Yet another noted, “. . .at the time the video was sent, there was a lot going on and I was already in preparation mode for the second assignment.” Based on these observations, it may be worthwhile planning the dialogical feedback occasion to occur several weeks before a subsequent assessment task is due. This would also aid students in their thinking processes before they have committed significant amounts of time to the task, and avoid issues associated with time restrictions and competing demands.

Conclusions

This study evaluated the use of rich forms of media, such as video and screencast recordings, to support dialogical feedback processes in a mixed delivery higher education subject. The results clearly highlight that audiovisual recordings allow educators to convey rich and detailed information using multiple simultaneous cues. This can help students to understand and use the feedback, due to the increased specificity of comments and higher perceptions of rapport.

Furthermore, dialogical feedback processes can aid students in honing their ideas and arguments for future assessment tasks. The very act of verbalising and justifying ideas to a more knowledgeable other (e.g., a lecturer) can help to strengthen learning and evaluative judgment. However, the articulation and reframing of ideas by the educator is also similarly important. Arguably then, this process is most effective when educators and students participate in multiple occasions of dialogue.

Although the results of this study were generally positive, educators should continue to be cautious when using rich media to provide feedback. At this stage, more work is needed to explore the implications of teaching experience in this process, and how level of training in the recording method and structure can mediate the effect and outcomes. Further thought also needs to be extended to the timing of feedback occasions. In this study, the initial feedback recordings were provided three weeks after submission of the first assessment task and three weeks before submission of the second. However, this timing was not suitable for all students; some had already commenced working on the subsequent assessment task and were confident with their progress, while others were preoccupied with competing demands. It therefore appears essential to provide the initial feedback early enough that students are still in the process of shaping ideas for a subsequent piece of assessment and have the capacity to deal with other impending deadlines.

Overall, this study indicates that rich media can be used to support asynchronous dialogical feedback processes, and that such exercises can be useful and engaging for students. While there are various factors that may account for these outcomes, the richness of the media is of particular importance.

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