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'Take away from the dry sixties style marking': lecturer and student perceptions and experiences of audio feedback

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Providing audio feedback to assessment is relatively uncommon in higher education. However, published research suggests that it is preferred over written feedback by students but lecturers are less convinced. The aim of this paper is to examine further these findings in the context of a third year business ethics unit. Data was collected from two sources. The first is a series of in-depth, semi-structured interviews conducted with three lecturers providing audio feedback for the first time in Semester One 2011. The second source of data was drawn from the university student evaluation system. A total of 363 responses were used providing 'before' and 'after' perspectives about the effectiveness of audio feedback versus written feedback. Between 2005 and 2009 the survey data provided information about student attitudes to written assessment feedback (n=261). From 2010 onwards the data relates to audio (mp3) feedback (n=102). The analysis of the interview data indicated that introducing audio feedback should be done with care. The perception of the participating lecturers was mixed, ranging from scepticism to outright enthusiasm, but over time the overall approach became positive. It was found that particular attention needs to be paid to small (but important) technical details, and lecturers need to be convinced of its effectiveness, especially that it is not necessarily more time consuming than providing written feedback. For students, the analysis revealed a clear preference for audio feedback. It is concluded that there is cause for concern and reason for optimism. It is a cause for concern because there is a possibility that scepticism on the part of academic staff seems to be based on assumptions about what students prefer and a concern about using the technology. There is reason for optimism because the evidence points towards students preferring audio feedback and as academic staff become more familiar with the technology the scepticism tends to evaporate. While this study is limited in scope, questions are raised about tackling negative staff perceptions of audio feedback, the effects of audio feedback on student learning, and the characteristics of effective audio feedback that are worthy of further research.

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Go to Program

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Introduction

Effective feedback is a valuable learning tool, and widely recognised as playing a key role in teaching and learning (Bloxham and Boyd, 2007; Hughes, 2011; Ramsden, 2003). However, it is often seen as being an onerous and sometimes frustrating task by academics (Bailey and Garner, 2010) and not always used appropriately (if at all) by students (Price, Handley, Millar and O'Donovan, 2010). One of the most important aspects of student assessment feedback is that it is 'effective' (eg provides constructive criticism on how to improve) and 'credible' (given by an able lecturer) (Poulos and Mahoney, 2008).

Research interest in the role of feedback in learning continues to grow, particularly regarding how to provide effective feedback (eg Nicol and McFarlane-Dick, 2006). However, little attention has been paid to the relative effectiveness of different modes of feedback. Lunt and Curran (2010) and Merry and Orsmond (2008) compare electronic (mp3) audio feedback with written feedback. Although, the sample size in both these studies is small, they do raise some interesting questions worthy of further research, particularly in the areas of efficiency, quality

and acceptance by staff and students. These and other studies that examine audio feedback suggest that it minimises problems associated with timeliness, quality and detail (eg. de la Harpe, Mason, Wong, Harrisson, Sprynskyi, and & Douglas, 2009; Northcliffe and Middleton, 2007; Savin-Baden, 2010).

There is a relatively low number of published studies into audio feedback. This is most likely due to the fairly modest level of its use in universities. However, given that the existing evidence in the literature points to audio as being a preferred method for providing feedback, it is important to undertake more research. Firstly to further assess this finding and secondly to establish problems and potential benefits for improving learning outcomes. To this end this study focuses on the perceptions of academics and students about the effectiveness of audio feedback compared to written feedback in a third year undergraduate business ethics unit.

The assessments in the unit consist of two case studies in which the student must make decisions about how they would respond to a given situation. The first is designed to assess students' understanding of, and ability to apply, ethical theories that underpin differing ideas about deciding the right thing to do (ie libertarianism, deontology, utilitarianism and virtue ethics). This assessment has both summative and formative elements. It is summative in the sense that it assesses students' understandings of the foundational elements of the unit. It is also formative in that the feedback is designed to provide guidance on how students can improve for their next more complex assignment. The second assignment is summative in that it assesses students' understandings of the unit as a whole.

Feedback is given by applying rubrics that serve as a basis for determining the grade and lecturer comments. Lecturers record their feedback using the audio recording software package Audacity (2011). The recording is then converted to mp3 format and uploaded with the grade into the Blackboard electronic learning management system where it is accessed by students. Lecturers receive training in how to use the systems and are given access to audio feedback provided to students in earlier semesters by the unit coordinator.

The nature and format of the feedback fits well with the pedagogy of the unit. The approach adopted is that one cannot 'teach' business ethics in the traditional sense of the word. The emphasis is not on content or reaching any 'correct' answers to particular questions. Instead classes are informal and dialogical in which students engage in problem solving activities, discussion, debate, role plays, etc. As the classes progress students explore values such as being critical (for example looking beyond what is there, testing out one's own assumptions, etc) using conceptual tools and techniques that then provide the means for examining and acting on ethical issues. For example, students are introduced to testing their own assumptions through examining heuristics, tacit knowing and bias. Through case study, students challenge first the perceptions and decision of characters in the case, then each other's and then finally their own. The results of this approach are transformative for both academic staff and students. For academic staff it poses the challenge of how to transform the curriculum and what we do in order to bring about improved student engagement. For students it is the challenge of being asked to approach issues and problems conceptually and think critically – to become more deeply engaged.

Given this approach to teaching and learning, the need for audio feedback is clear. Providing written feedback is problematic because assessing in this unit is more about judging the extent to which students achievements fitted within a set of expectations as set out in the rubrics rather than attempting to 'measure' achievement, and the importance of context and value positions (Yorke, 2011). Indeed assessment in this case is for learning as well as of learning (Hughes, 2011).

Method

To investigate the lecturer experience, a series of three semi-structured in-depth interviews were conducted with three lecturers undertaking audio-feedback for the first time during Semester One, 2011. Two of the lecturers were male and one was female. They each had between two and five years' teaching experience. The cultural backgrounds of the lecturers were diverse (Chinese, South Asian and mainland European) and they had differing communication styles and accents. The first interview focussed on their expectations of giving audio feedback as opposed to written feedback and any challenges they thought would be encountered. The second interview was conducted after their first experience of providing audio feedback. This interview focussed on how they went about giving feedback and their general experience. The third interview was taken at the end of the semester after two assessments had been assessed. This interview focussed on gaining their general perceptions of giving audio feedback over a whole semester. The interviewees were given assurance of confidentiality and anonymity, and their interviews were audio-recorded and transcribed.

The interview transcripts were analysed using a process of thematic analysis (Miles and Huberman, 1994). Responses of participants were then compared and contrasted. Initial codes were developed that referred to the similarities and differences between the interviews, and codes were categorised to reflect the experiences and perceptions of participants. Further, coding and categorisation were cross-checked by the researchers to ensure consistency.

With regard to student perceptions that are reported in this paper, data were extracted from responses provided by 363 students to the University student evaluation system. The data provided useful 'before' and 'after' student perceptions about the effectiveness of feedback in general. In particular, the data spans a period that captures student views for different cohorts both before and after the introduction of audio as a feedback medium. Between 2005 and 2009 the survey data provided information about student attitudes to written assessment feedback (n=261). From 2010 onwards, audio (mp3) feedback was used (n=102). The type of assessment remained the same thus controlling for the effect of assessment style. In the survey students were asked to respond to a series of questions using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The questions about assessment in the survey were:

Feedback on my work in this unit helps me to achieve the learning outcomes.

The assessment tasks in this unit evaluate my achievement of the learning outcomes.

The results were presented as percentage agreement and a comparison made between these to determine whether any significant change of student perceptions occurred after the introduction of audio feedback.

At the end of the survey, students were asked to make comments about positive aspects of the unit and how the unit can be improved. Comments about assessment were extracted to provide additional dimensions to the quantitative data.

Results

The lecturers participating in this study had not provided audio feedback to student assessment before. They had, however, provided general verbal feedback to students in class or spoken to individual students when necessary. In the initial interviews conducted before their first experience of providing audio feedback, each participant demonstrated quite different expectations. Participant A was quite sceptical:

> My feeling is that students would prefer to have a hard copy. They like to have notes.

Participant B was positive but concerned about spoken communication because:

> Everybody has an accent. Sometimes no matter how clearly you speak, some students have problems with receiving the communication. I am going to be as polite and diplomatic as possible because when you are writing it is totally different.

Participant C was comfortable with the notion of providing audio feedback:

> There is a trend over the last two or three years, more and more students. record [the] lecture. I think this (audio feedback) is a good addition to it. It is going to be great on the bus or whatever.

These differing reactions are not surprising given the relative newness of audio feedback. Savin-Baden (2010) points out that it is generally disliked by academics because of the perception that it is time-consuming and is really no different from written feedback in terms of improving student performance. In contrast, Lunt and Curran (2010) found that academics staff had a positive attitude. The results in this study seem to bear out the mixed results apparent in the literature.

These concerns were reflected in the challenges that each lecturer anticipated. Participant A was concerned about the validity of audio feedback:

> You really need to rely on whether they (students) actually take it seriously. Do they listen to the feedback and then come back to class and ask questions? I think students prefer written feedback because it's in front of them and they can bring it to class.

Participant B saw it as a fairly straight-forward process.

> We are just shifting from written to audio feedback.

Similarly, Participant C observed,

> The only challenge I see is administrative. The first time is always difficult. Once you figure it out it's easy. I don't see a challenge in the actual giving [of] feedback, nor do I see challenges for students.

When asked about the potential benefits, the differing perspectives of the participants were evident. Participant A thought that benefits simply related to the notion that:

> Students are more tech savvy now.

Participant B saw the benefits somewhat more broadly:

> It will be the same as if I have written something but I'm speaking that thing. But the ease of doing things maybe [will be better].

Participant C saw the benefits in a similar way but also expressed the view that audio feedback improves the standard of feedback:

> I think it's going to be easier. It's lovely to read papers and to write comments but it's always the dreading part because after a while your hands get sore then you start summarising things briefer and briefer. With the voice it's different.

The second interviews revealed that the process for giving the audio feedback adopted by each participant varied a little. Participant B began by trying to 'script' their feedback. However, they later changed this approach:

> Initially I thought that I should use 'track changes' and mark the assignment and give the feedback. Then I thought it will be too laborious. I started with that and then I reverted to reading the assignment and then putting the assignment and grading criteria in front of me and looking at both and giving my feedback.

Participants A and C both made notes around which they framed their feedback:

> At first I thought I would not be making notes because it would save some time and then I realised "Oh I don't know what I'm saying! (laughs)" … So I ended up making some notes so I know what I'm supposed to say. (Participant A)

> I looked at the papers and wrote comments and marked them … Then I did the recording. (Participant C)

This idea of making notes extends Lunt and Curran's (2010) finding that lecturers should have a set of criteria to work from to ensure consistency. In this study the lecturers did have this provided, however they also found that having a set of notes for each student also assisted them.

The interviews conducted after the participants gave audio feedback for the first time suggest that their experience did not always accord with their expectations. For Participant A, they discovered that in spite of at first thinking that students preferred written feedback to audio feedback, stating that:

> I was worried about [pause] did they hear what I was saying? At least no complaints.

In the case of Participant B, their concern about communication was also allayed by experience. For them, audio feedback:

> Is a very interesting and unique method and I like it.

But then found the main challenge to be technical in that they had to download a software package LAME from the internet in order to convert Audacity files to mp3 format. However it did not present a problem because:

> It's not hard. I searched how to do from Audacity into LAME. It's just one click. Audacity gives you suggestion and you do it one time and it's smooth.

In contrast to their initial confidence Participant C found that:

> I felt stupid for the first five (assignments)! It was very uncomfortable speaking to a microphone and how I was going to start. After the first five you get a certain rhythm. After the sixth or seventh I became very confident. It's really funny – after a while you get really excited about doing this.

Participant C also faced some initial technical problems with students being unable to access their audio files from the learning management system. But they worked around this by emailing them directly to students. It was subsequently discovered that this was related to the naming convention being applied to the mp3 files that had caused the problem.

Such problems have not been reported in the literature. However, de la Harpe, et al. (2009) do discuss technological issues but not in the same context as this study.

The perceptions of the participants about the overall benefits of providing audio feedback became much clearer to them after their experience. Participant A remained fairly sceptical stating:

> The audio feedback and written feedback is pretty much the same.

Participant B also preferred written feedback because students are able to bring written feedback to the lecturer for further discussion which cannot be done with audio files. However when asked about what happens when students wanted further discussion about audio feedback, they stated:

> No, that's interesting. No one has approached me yet. Maybe they were satisfied and didn't need to talk about it.

However, they found that providing audio feedback was less onerous than they expected:

> I think it actually did save time because after all you speak faster than you write.

This corroborates Lunt and Curran's (2010) comparison of marking times for two lecturers using audio and written feedback. They found that the process of giving audio feedback was a generally easier and more efficient than either by writing or typing.

The analysis of the data also produced some unexpected issues. Firstly, there was the degree of detail that could be provided. Participant A stated that audio feedback was not as detailed as written feedback:

> I don't usually go into too much detail when I'm using audio feedback because I talk from the top of my mind.

It also seems that the style of feedback is somewhat different in that as Participant B states that unlike written feedback:

> In audio feedback you can't go through line by line. If someone has not put a reference at point A in audio feedback you will say 'your in-text referencing was not correct'.

This is similar to the findings of Merry and Orsmond (2008) who argue that it is sufficient to point out verbally the points in an assignment to which the comments refer.

Participant C felt that using audio resulted in more thorough feedback because they went through each assignment making notes then went through each one again as they recorded their feedback:

> I marked the assignments twice, but it didn't take me any longer than marking them once on paper.

The analysis indicated that audio feedback is qualitatively different to written feedback in that it allows for a broader discussion of assignments rather than 'red ink' specific marking. As participant A states:

> It doesn't mean that the tutor can't give more reflective and critical feedback using the audio feedback system but they need to be mindful of that possibility.

The themes of marking the assignment twice and providing reflective and critical feedback are taken up by Participant B but in a different way. They saw audio feedback as perhaps creating more space for discussion because:

> When [a student] will come back and say, 'What did you say about my assignment?'. I won't be able to remember so it will be just like revisiting the assignment all over again. I will say, 'Bring your assignment, I really need to read it'.

Finally, Participant B alluded to issues of finding appropriate space to record feedback. While written feedback can be provided sitting in an office, at home or in any public situation, audio feedback requires a relatively quiet background so as to alleviate interference with the voice recording:

> I knew I had time [and space] constraints. So it's an important point – like how and where.

Overall the strongest common theme themes were that of needing practice to become more competent at giving audio feedback. One participant suggested specific training, which is interesting in that there is little pressure from new lecturers to provide training in giving written feedback. This might indicate the request for training is more technical in nature. This is point is supported by the technical problems encountered by the participants during their first experience of providing audio feedback (e.g. having the correct software installed, getting the file naming correct and the time taken to upload feedback).

Now that lecturer expectations and experiences have been examined, it is useful to compare these with student perceptions and experiences of audio feedback, spanning the period over which audio feedback was introduced to the unit.

Student experience

The survey data reveals a noticeable change in student attitudes to assessment after the introduction of audio feedback. The results here suggest that not only does the use of audio improve student perceptions of feedback it also improves student attitudes to the assessment itself (Table 1). The effects of these changes are more evident when compared to survey responses to other questions in the survey that remained fairly constant (+/- 5%)

Table 1 Student perceptions of feedback before and after the introduction of audio

	2005-2009 Average agreement (Before audio feedback)	2010 Average agreement (After audio feedback)
Feedback on my work in this unit helps me to achieve the learning outcomes	86.2%	93.5%
The assessment tasks in this unit evaluate my achievement of the learning outcomes	85.6%	93%

Interestingly, responses to the question: **The learning resources in this unit help me to achieve the learning outcomes** also showed a similar increase from an average of 85.5% agreement before the introduction of audio feedback to an average of 92% agreement afterwards. Considering that the introduction of audio feedback was the only major change in the unit in 2010, this result is worthy of further research. Perhaps the students in some way equate feedback as a learning resource.

The were no negative comments about feedback from students and several students included a comment about audio feedback in the space available for positive aspects of the unit, for example:

> Unique form of assignment feedback.
>
> The vocal feedback given on BB (Blackboard) on each of the major assignments.
>
> I enjoyed the unique format of evaluation and comments for assignments.
>
> Excellent use of online tools such as the recorded assignment feedback.

Student responses also suggest that audio is preferred to written feedback, for example:

> I really liked the audio feedback, I took a lot more in listening to it then I would have done just reading it.
>
> The feedback of the assignment though mp3 is fantastic. This allow [sic] the teacher give more detail feedback, not just a few words on the cover page.
>
> Thank you for giving me verbal feedback via the mp3 file response to my assignment. It is more informative than the red pen approach and feels more personal to my learning experience.

More detailed comments also suggest that audio feedback was found to be useful and informative and provided evidence to students that their lecturers took time to read their work:

> The feedback was also great, as well as the way in which it was given (audio). I found it really helpful.
>
> Feedback for the assignments were terrific, they were in depth, detailed and clear which allowed me to better understand where I need to improve. The mp3 was a very useful tool and shows that [the lecturer] had really spent a great time on each student's piece of work.
>
> Gave very good and thorough feedback on assignments. Feedback I received from the first assessment allowed me to improve my marks (going from a pass to getting a distinction).

For students, receiving audio feedback was a positive experience and they placed more value on audio than they did written feedback. This supports the conclusions of Lunt and Curran (2010) and Merry and Orsmond (2008). This view is in contrast to some of the perceptions expressed by lecturers in this study there was really little or no difference between audio and written feedback, and that students actually preferred written feedback.

In reflecting on Poulos and Mahoney's (2008) conclusions that effective feedback has three characteristics (Perception, Impact and Credibility) it seems that introducing audio feedback has a positive effect on all three of these. Students seem to see audio feedback in a more positive light than written feedback and as a result it has more impact and credibility to them. Indeed while there is debate about the usefulness of using audio feedback, the effectiveness of written feedback is also not fully established (Bailey and Garner, 2010).

This analysis suggests that introducing mp3 feedback might be a fairly difficult task in that small (but important) technical details must be paid attention to, and lecturers need to be convinced of its effectiveness and that it is not necessarily more time consuming than providing written feedback. It seems that the main issue is one of confidence in using the technology, especially the challenge of recording one's own voice. For students there seems to be a clear preference for audio feedback. As Participant C pointed out:

> Take away from the dry sixties style marking. The students can connect with the [audio] feedback.

Conclusion

Although the data in this study was collected from different sources and at different times, it lends support to the findings of previous research into audio feedback suggesting that it has the potential to be one solution to the problem of providing effective feedback quickly and efficiently. Data indicating that students are more accepting

than their lecturers present challenges for the academic community and reasons to be optimistic. It is a challenge given the scepticism on the part of some academic staff reported by Savin-Baden (2010) and apparent in this research that seems to be based on assumptions about what students prefer and a concern about using the technology. It is also a cause for optimism because the emerging evidence points towards students preferring audio feedback and as academic staff become more familiar with the technology much of the ambivalence tends to evaporate.

Rigorous research into audio feedback is certainly in its infancy. This study is limited to a single unit of study in one university. More research needs to be undertaken particularly regarding academic staff perceptions of audio feedback, the effects of audio feedback on student learning, the characteristics of effective audio feedback and how students use it. Other areas of interest include the relative effectiveness, quality and nature of audio versus written feedback and the way academics 'voice' feedback in the different media.

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